## TENSE AND MODALITY IN FRENCH VERBAL MORPHOLOGY\*

# Yining Nie University of Toronto

#### 1. Introduction

Like most Romance languages, French has two forms for expressing future reference: a synthetic construction (1a, 2a) and a periphrastic construction (1b, 2b).

- (1) a. Elle **partir**<u>a</u>. she leave-FUT-3SG 'She will leave.'
  - b. Elle va partir. she go.PRES-3SG leave-INF 'She is going to leave.'
- (2) a. Nous **manger**ons à cinq heures. we leave-FUT-1PL at five o'clock 'We will eat at five.'
  - b. Nous allons manger à cinq heures. we go.PRES-1PL eat-INF at five o'clock 'We are going to eat at five.'

The synthetic future in Romance descended from a Latin periphrastic construction of the form infinitive + *habere* 'have', e.g. *partire habeo* 'I will leave'. According to Roberts & Roussou (2002), *habere* began as a lexical verb but was reanalysed as a modal auxiliary. The infinitive + HABERE construction became used exclusively for future reference, and the modal verb HABERE was reanalysed as a syntactic affix and then eventually as an agreement affix on verb stems already inflected for the future, as shown in the glosses in (1a, 2a).

Some scholars assume that the Romance synthetic future is synchronically composed of a future stem and an agreement affix (e.g. Fleischman 1982; Arregi 2000; Oltra-Massuet and Arregi 2005) and derivationally unrelated to the periphrastic construction. However, there are two striking similarities between the synthetic and periphrastic forms in examples (1, 2). They have the same infinitive-like form of the lexical verb (bolded) as well as the same agreement morphology on the inflected verb (underlined). In this paper, I argue for

<sup>\*</sup>Many thanks to my advisor Elizabeth Cowper and also to Susana Béjar, Bronwyn Bjorkman, Jonathan Bobaljik, Michela Ippolito, Richard Kayne, Neil Myler, and the participants of the Contrast in Syntax Workshop and the Syntax/Semantics Research Group at the University of Toronto for their valuable discussion. A fuller version of this material appears in Chapter 2 of my M.A. thesis (Nie 2015).

parallels between the syntactic structure of the periphrastic future in French (and possibly other Romance languages) and the English WOLL future as proposed by Abusch (1985). Assuming the theory of Distributed Morphology (Halle and Marantz 1993), I furthermore propose that the synthetic and periphrastic future constructions are two different morphological spell-outs of the same modal head (ALLER) + infinitive construction. This analysis has implications for the nature of the mappings between form and meaning in natural languages.

The paper is structured as follows. In §2, I propose an analysis of the French periphrastic future that is isomorphic with the English WOLL future. I then show that the synthetic and periphrastic futures have identical interpretations (§3), and present historical, acquisitional and morphological evidence for a unified ALLER + infinitive structure (§4). §5 suggests how my analysis of the future may be extended to the conditional and perhaps other constructions. §6 briefly concludes.

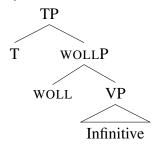
## 2. The periphrastic future

In this paper, I adopt the perspective that future reference is modal rather than temporal. While past time can be represented as a single 'arrow' from the past to the present with a fixed history, the future is indeterminate; we do not know what will happen in the world in the next five minutes or five years. The future has therefore been represented in philosophy as a structure in which different possible paths branch infinitely (McArthur 1974; Werner 2007). Each of these paths can be understood as a possible world in modal semantics (Kratzer 1981). A modal operator quantifies over "an array of alternative worlds, each of them with its own time arrow aligned with the actual world" (Escandell Vidal 2014, 223). Alternative worlds in the past are counterfactual, i.e. contrary to actual fact, while alternative worlds in the present can be conceived of as possibilities (Kratzer 1991). Therefore it can be said that the past and present differ in temporality, but the present and future differ in modality (McCawley 1981; Fleischman 1982).

Several languages have markers of what is traditionally called future 'tense' which research has convincingly shown to fall into non-temporal linguistic categories. In Greek, for example, past and non-past time reference is realised morphologically on the lexical verb, but the future is periphrastic, made up of a particle *tha* + a perfective non-past verbal form. The particle *tha* is in complementary distribution with subjunctive particle *na* and optative *as* rather than other tense markers, suggesting that *tha* is actually a marker of modality instead of tense (Giannakidou 2012). Similarly, the future tense in Tagalog is analysed in Philippine linguistics as 'contemplated aspect', which appear to "lie at the boundary between mood and aspect" (Cihlar 2010, 64 fn. 8).

The independence of modality and tense is the crucial starting point for Abusch's (1985) analysis of *will* and *would* in English, sketched in (3). In English, the modal projection WOLL combines, possibly via movement, with [PRESENT] Tense to give *will*, and with [PAST] to produce *would*. The modal head WOLL is responsible for future reference and is dissociated from Tense and the lexical verb, which surfaces as an infinitive.

## (3) Syntactic structure of will/would

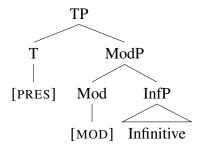


The English WOLL-future is remarkably isomorphic with the French periphrastic future, which also consists of an auxiliary and an infinitival lexical verb, as in (4).

(4) Elle **va** partir. she go.PRES-3SG leave-INF cf. 'She **will** leave.'

Suppose we abstract from English WOLL and head the modal projection using a more general feature encoding temporal modality, call it [MODALITY], which operates at the nexus of the temporal anchor (usually utterance time) and quantifies over the set of possible worlds that project from that anchor. The WOLL-future and French periphrastic future can therefore be represented as (5). The feature [MODALITY] would be spelled out by WOLL in English and ALLER 'go' in French.

## (5) Structure of the English and French periphrastic futures

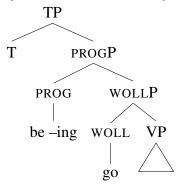


## 3. Two forms, one future

## 3.1 English vs French go-futures

If ALLER and WOLL futures have parallel structures, where does that leave the French synthetic future? Furthermore, English has a 'go' future of its own: the *be going to* construction. In an extension of Abusch's 1985 proposal, Copley (2001, 2009) analyzes the *be going to* future as composed of a progressive operator in a "high aspect" position above the future modal WOLL. *Be going to* therefore differs from ordinary WOLL-futures in two key ways: the modal head is morphologically spelled out as *go* and, crucially, WOLLP is nested within the progressive structure PROGP, as shown in (6).

(6) Syntactic structure of be going to



Copley's PROGP seems to be necessary for English, as a number of diagnostics show that while WOLL-futures are simple verb forms interpreted as perfective by default, *be going to* constructions pattern with other English progressives. There is no evidence for such a PROGP in the French periphrastic future, however.

For example, consider the interesting contrast between the WOLL-future and the *be going to* future found in what Copley calls a 'volunteering' context.

(7) a. Q: Who can make the coffee for tomorrow? A: I'll do it!

b. Q: Who can make the coffee for tomorrow? A: I'm going to do it!

While the response in (7a) sounds like a kind offer of help, the response in (7b) sounds bossy: 'I don't care if you'd rather have someone else to make coffee — it's my job!' Although the minimal pair in (7) creates a contrast in English, their synthetic and periphrastic French equivalents are both acceptable, and in fact synonymous, in (8).

(8) a. Q: Qui peut préparer du café pour demain? A: Moi, je le ferai!
b. Q: Qui peut préparer du café pour demain? A: Moi, je vais le faire!

(8) demonstrates that the aspectual distinction that Copley proposes for English WOLL and *be going to* does not apply in French, whose present and future conjugations do not contrast for aspect. We therefore have no use for the PROGP layer in (14); removal of this layer results in the same structure as that proposed for WOLL. The lack of such an interpretive difference between the synthetic and periphrastic futures is exactly the kind of result predicted by an approach seeking to unify the two constructions.

Results from variationist studies also support unification of the two forms. In their corpus study of spoken Québec French, Poplack and Dion (2009) establish that the synthetic and periphrastic futures are almost entirely interchangeable. They scoured 163 French grammars published between 1530 and the present and tested the linguistic factors that were hypothesised to condition the use of the two future forms. Poplack & Dion observed that of the twenty-two linguistic factors mentioned in French grammars, only four had a statistically significant influence on whether the synthetic or periphrastic future was used. Table 1 summarises their results (Poplack and Dion 2009, 573).

TABLE 1. Variable-rule analysis of the influence of linguistic factors on the selection of
synthetic (SF) and periphrastic futures (PF) in 19th- and 20th-century spoken French.

	19TH CENTURY		20th century	
	SF	PF	SF	PF
POLARITY				
Negative	.99	.01	.99	.01
Affirmative	.37	.63	.31	.69
SPEECH STYLE				
More formal	.64	.36	.81	.19
Less formal	.49	.51	.49	.51
ADVERBIAL SPECIFICATION				
Presence	.65	.35	.59	.41
Absence	.48	.52	.49	.51
TEMPORAL DISTANCE				
Distal	.60	.40	.48	.52
Proximal	.50	.50	.51	.49

Two interesting observations arise from their results. The first is that in the twentieth century, the only linguistic factors that make strong predictions for the choice of future form are (i) whether the clause is negative or affirmative and (ii) the formality of the discourse, rather than the 'traditional' grammatical factors such as temporal distance that are taught in schools. However, neither of these two factors suggest a *semantic* difference between the two future forms, which in turn indicates a lack of contrast in syntactic representation. In addition, the distribution of the futures in the twentieth century differs little from that of the previous century, suggesting that their interchangeability has long been ingrained in spoken French. This lends further credibility to the hypothesis that the synthetic and periphrastic futures are morphological reflexes of the same syntactic structure.

## 3.2 The trend towards periphrasis

The future is not the only inflectional category in which a periphrase has gained ground over its synthetic counterpart in French. It is well-known that the synthetic or simple past was usurped by the periphrastic *passé composé* (composed past), historically a present perfect, as the primary expression of past tense; by the mid-eighteenth century, the synthetic past was confined almost exclusively to written French (e.g. Posner 1997).

Similarly, many English modals have given way to periphrases. In Toronto English, for example, modals of obligation/necessity such as *must*, *have* (*got*) *to*, *got to* and *need to* have almost completely merged to *have to* (Tagliamonte and D'Arcy 2007). Furthermore, the *be going to* future has become the primary expression of the future in various dialects of American English (e.g. Poplack and Tagliamonte 1999). *Go*-constructions in a variety of languages have been on the rise historically. Interestingly, the ANAR 'go' + infinitive construction in Catalan developed as an expression of the past tense rather than the future.

The *go*-past was frequently used in Old Catalan to signal a sudden action or turning point in a narrative (Squartini 1998). In Modern Catalan, the ANAR-past may only refer to hodiernal past events: those that occurred on the same day as the utterance (Jacobs 2011).

In addition, French is not the only Romance language that has seen the rise of the periphrastic future. Sedano's (2006) corpus study on spoken Spanish in a number of Spanish-speaking countries reveals a remarkably similar upward trend in the frequency of usage in the periphrastic *ir a* + infinitive *go*-future in Spanish. For example, in the Dominican Republic, Chile, and Puerto Rico, the synthetic future has been (almost) entirely displaced by the periphrastic future. In varieties that do frequently use both forms, namely Spain, Mexico, and Argentina, the synthetic and periphrastic futures may have different interpretations, particularly with respect to temporal distance. Eventualities in the immediate future were categorically expressed using the periphrastic future (9a), while most occurrences of the synthetic future referred to eventualities in the vague or distant future (9b) (Sedano 2006, 288–289). However, the periphrastic future was still preferred in general.

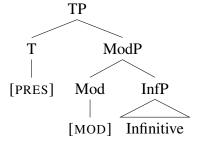
- (9) Immediate vs vague/distant futures
  - a. **Voy a presentar** *a continuación* unas pocas ideas básicas. 'I'm going to present in the following a few basic ideas.'
  - b. Antes o después se extinguirá envuelto en el desprecio.'Sooner or later the shroud of contempt will be extinguished.'

The importance of temporal distance conditioning in Spanish contrasts with the findings reported for French, where temporal distance was shown *not* to be a statistically significant factor in the choice of future forms (Poplack and Dion 2009). Therefore, while the *go*-future is common to many languages, the French *go*-future differs from others in that it has the same distributional and interpretational properties as its synthetic counterpart. This points to a single syntactic structure that can generate their common properties.

## 4. ALLER + infinitive

My central claim in this paper is that the French synthetic and periphrastic futures are spell-outs of the same [MODALITY] + infinitive construction, repeated in (10).

#### (10) Syntactic structure of the French future



While the proposed structure is transparent in the periphrastic future, it is not immediately obvious in the synthetic future, as shown in (11).

# (11) Elle partira.

she leave-FUT-3SG

'She will leave.'

Evidence was provided in the previous section that the two futures are interpreted in the same way. However, in order to demonstrate that the verb in (11) is generated by the structure in (10), I must show that the synthetic future is synchronically composed of an infinitive (bolded) and a modal head, the agreement morphology (underlined) of which indicates its reanalysis as ALLER.

### 4.1 An infinitive in stem's clothing

Fleischman (1982) assumes for French, and Arregi (2000) and Oltra-Massuet and Arregi (2005) for Spanish, that the -r in the future has been reanalysed as a marker of future tense/modality, resulting in two homophonous tense suffixes, one for the future and another for the infinitive. (12) shows that they not only are homophones but also occur in the same position: immediately following the  $\sqrt{\text{ROOT}}$  + Theme Vowel complex.

(12) a. Infinitive 
$$-r$$

$$\begin{array}{c|cccc}
part & i & r \\
leave & Th & [INF]
\end{array}$$

b.	o. Future – <i>r</i>			
	part	i	r	a
	leave	Th	[FUT]	3sg

Like *partir*, the future stem of most verbs is identical to its corresponding infinitive, as shown in Table 2. This is, of course, expected if the future is historically derived from a construction involving the infinitive, whether or not the connection is still synchronic. However, for some irregular verbs the infinitive and the future stem diverge. Table 3 shows that there are sub-regularities in the group of verbs of irregular future stems. Verbs ending in *-oir* in the infinitive tend to have suppletive stems in the future, and verbs ending in *-Vrir* similarly seem to undergo some kind of allomorphy.<sup>1</sup>

TABLE 2. Regular future stems.

Infinitive	Future	Gloss
aimer	aimer-	'love'
parler	parler-	'speak'
finir	finir-	'finish'
ouvrir	ouvrir-	'open'
prendre	prendr-	'take'
battre	battr-	'beat'

<sup>&</sup>lt;sup>1</sup>Given that *ouvrir* – *ouvrir*- 'open' has a regular stem and ends in –C*rir*, it is possible that the irregularity of –V*rir* verbs can be explained as a phonological process of syncope. For the purposes of this discussion, however, all stem irregularities will be treated as morphological.

TABLE 3. I	rregular	future	stems.
------------	----------	--------	--------

Infinitive	Future	Gloss
aller	ir-	'go'
être	ser-	'be'
venir	viendr-	'come'
avoir	aur-	'have'
voir	verr-	'see'
pouvoir	pourr-	'can'
vouloir	voudr-	'want'
courir	courr-	'run'

These morphological exceptions may not be ideal for the hypothesis that the synthetic future contains an infinitive, but neither do they constitute strong evidence against my claim. First of all, both the synthetic and periphrastic futures clearly consist of more structure than just an infinitive; there are person/number suffixes on the lexical verb or auxiliary. As Bobaljik (2012) shows in his cross-linguistic study of suppletion in comparative and superlative forms of adjectives, greater structural complexity often results in allomorphy. Thus suppletion of the infinitival form might be conditioned by a functional head external to the infinitive itself. This head is independently required to host at least tense and person/number agreement on the verb. Secondly, allomorphy must be triggered whether or not the future stem is composed of the infinitive; that is, taking the view of -r as an exponent of future tense does not absolve one of capturing the alternating stem patterns. Therefore the irregular stems in Table 3 do nothing to weaken my analysis.

On the contrary, the historical development and acquisition of future stems seem to support the infinitive hypothesis. While Table 3 lists some verbs ending in *-oir* with irregular future stems, Table 4 gives several other *-oir* verbs which had historically irregular future stems but were regularised based on the infinitive form around the seventeenth century (Fouché 1967, 396). Likewise, both the (current) irregular *verr*– and regularised *voir*– were used in the sixteenth century as the future stem of *voir* 'to see' (Fouché 1967, 410).

TABLE 4. Regularisation of historically irregular future stems.

Infinitive	Future	Gloss
boire	$buvr ext{-} o boir ext{-}$	'drink'
croire	crerr- o croir-	'believe'
suivre	sevr- o suivr-	'follow'
pourvoir	pourverr- o pourvoir-	'provide'
prévoir	préverr o prévoir o	'predict'

The infinitive can emerge synchronically as well. Grégoire (1947), for instance, reports that French children often produce future stems which conform to the infinitive, such as *venirai*, *courir-ons* and *voir-ai* instead of irregular-stemmed *viendr-ai*, *courr-ons* and *verr-ai*.

My interpretation of these historical changes and errors in acquisition is that French learners default to the infinitive when attempting to produce a future form, not realising or ignoring when the stem is suppletive. A possible alternative explanation is that in these cases, children are actually regularising the *future* form rather than producing the infinitive; that is, children are taking the verb root and adding the future suffix -r rather than constructing the infinitive. However, this analysis still incurs the problem of the infinitive and future stem being coincidentally identical in form and distribution. Positing that the future stem is syntactically an infinitive is more economical whilst having the same empirical coverage; thus having a single structure rather than two is not only theoretically more advantageous but likely also easier to learn.

This result would be unsurprising given the well-documented phenomenon of children producing 'root infinitives' in place of inflected forms in many languages (e.g. Guasti 1994; Haegeman 1994; Wexler 1994; Harris and Wexler 1996). French children under the age of three or with SLI frequently produce non-finite forms in place of inflected verbs. In particular, they use infinitives to express futurity and other modal meanings (Hoekstra and Hyams 1998; Paradis and Crago 2000), suggesting that children hypothesise a strong connection between the form of the infinitive and the use of the future. Hoekstra and Hyams (1998) propose that it is the infinitive itself that carries an [– Irrealis] feature and therefore encodes modality. It seems to be the case that the function of modality is transferred over to the modal ALLER when the periphrastic future is learned fully.

Therefore historical and synchronic evidence strongly suggest that both French futures contain an infinitival lexical verb. This infinitive either stays low as in the periphrastic future or moves up to become the verb stem for the synthetic form.

#### 4.2 ALLER as a Modal

The infinitive is just one component of the French future. What is responsible for the non-infinitival portion of the synthetic and periphrastic futures? The periphrastic form is once again helpfully transparent in its structure, consisting of an inflected auxiliary ALLER 'go' and the infinitive of the lexical verb, but the status of the person/number agreement suffixes in the synthetic future is yet to be determined. Common to both futures is the presence of an infinitive, which must be selected by some higher projection. In the periphrastic future, it is [MODALITY] that takes an infinitival complement; this operation over possible worlds is then anchored to the utterance time via [PRESENT] Tense. If it can be demonstrated that the synthetic future has the same Modal head and infinitive, then this would provide a way to unify the two types of futures in French.

In §1, it was shown that the synthetic future was historically a 'have' + infinitive construction. Strikingly, the future paradigm displays evidence of its lineage today. The particular set of person/number endings found in the synthetic future, exemplified in (13a), appears in only one other context: the present tense conjugation of *avoir* 'to have' (13b).

## (13) a. Synthetic future of *partir*

	SG	PL
1	partir-ai	partir-ons
2	partir-as	partir-ez
3	partir-a	partir-ont

#### b. Present indicative of avoir

	SG	PL
1	ai	av-ons
2	as	av-ez
3	a	ont

The congruence of the two paradigms in (13) might suggest that *avoir* is still synchronically present in the synthetic future. However, this outcome would be problematic because it forces one to posit two very different morphological reflexes for [MODALITY] whose selection depends on their surface configuration: (i) a Modal verb ALLER in the periphrastic future and (ii) the agreement endings of AVOIR in the synthetic future.

Notice, however, that the agreement suffixes in (13) are only marginally orthographically different from those of *avoir* in the present, whose 1sG form has an additional -s.

## (14) Present indicative of aller

	SG	PL
1	v-ai <u>s</u>	all-ons
2	v-as	all-ez
3	v-a	v-ont

While -ai /e/ and -ais /e/ normally differ in being tense vs lax in French, (Posner 1978, 241 fn.5) suggests that there is no difference in vowel quality between vais 'go-1SG' /ve/ and ai 'have.1SG' /e/. This means that the discrepancy is only orthographic, and that the phonology and morphology of the present tense of *aller* are identical with that of the *avoir*-like future endings. Therefore it may just as well be said that the synthetic future spells out the agreement endings of ALLER, rather than AVOIR. Compare, for example, the synthetic and periphrastic future forms for *partir* in (15).

(15) a. Synthetic future of *partir* 

	SG	PL	
1	partir-ai	partir-ons	
2	partir-as	partir-ez	
3	partir-a	partir-ont	

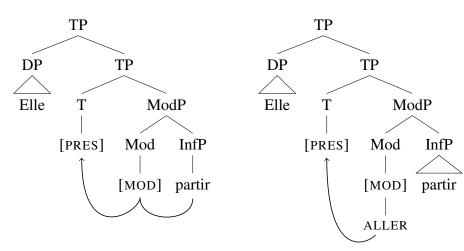
b. Periphrastic future of *partir* 

	1	
	SG	PL
1	v-ais partir	all-ons partir
2	v-as partir	all-ez partir
3	v-a partir	v-ont partir

Not only do both futures share an infinitive but they also share person/number agreement on the inflected verb or modal. Their identity in form and meaning and (almost) complete interchangeability in usage indicate that they have the same syntactic structure.

The difference between the two future forms lies in whether or not the infinitive moves up to the inflectional domain. In the synthetic future (16a), the infinitival lexical verb takes on the role of a stem, moving through the Modal head to Tense where it receives agreement. If the infinitive stays low, there is no available lexical stem to host tense and agreement affixes, so [MODALITY] is spelled out by verb stem of ALLER (16b).

# (16) a. Elle partira.



Elle va partir.

The Vocabulary Item in (17) captures the default nature of the ALLER stem, while (18) spells out the agreement affixes of ALLER, which are always present in the future, whether synthetic or periphrastic.

- (17) [MODALITY] ↔ ALLER stem if no stemApplicable to the periphrastic future only: inserts a verbal stem to host agreement.
- (18) [PRESENT] ↔ ALLER endings / \_\_ [MODALITY]
  Applicable to both futures: spells out agreement on the lexical infinitive or ALLER.

The inflectional pattern governed by (18) suggests that even in the synthetic future, the infinitival lexical verb takes on some property of ALLER when it moves to Mod. While the notion of 'becoming' a different verb may seem puzzling, I believe that this proposal has merit. Consider what aspects of a verb dictate the range of affixes it can receive. It is the  $\sqrt{\text{ROOT}}$  of the verb that determines the choice of Theme Vowel and conjugation class. A complex syntactic object like an infinitive, which is not normally inflected for tense or agreement anyway, has no conjugation class, so there is no way to determine the set of person/number endings it can take. By allowing the infinitive to adopt the properties of the Modal verb ALLER, it essentially becomes a new  $\sqrt{\text{ROOT}}$  with the ability to take the ALLER inflection, as required in both the synthetic and periphrastic futures.

These morphological facts, paired with the evidence given from the acquisition, variation and historical development of the synthetic future, all support a unified ALLER + infinitive structure of the synthetic and periphrastic futures in French.

## 5. Future and past in the conditional

The composition of the French future is also highly relevant for that of the conditional. Like the future, the conditional in (19) contains an infinitive (bolded) and is modal, denoting the set of possible worlds which are compatible with Anna leaving the day after her utterance.

(19) Anna avait dit qu'elle **partir**ait le lendemain. A have-PAST say-PART that-she leave-COND.3SG the next.day 'Anna had said she would leave the next day.'

As with other modals, the temporal accessibility relation of the conditional operator is constrained by Tense. This is also apparent in the shared morphology between the conditional and the imperfect, exemplified with *partir* in (20a) and *aller* in (20b), respectively.

(20) a. Conditional of partir

	SG	PL
1	partir-ais	partir-ions
2	partir-ais	partir-iez
3	partir-ait	partir-aient

b. Imperfect indicative of *aller* 

	SG	PL
1	all-ais	all-ions
2	all-ais	all-iez
3	all-ait	all-aient

(20) shows that the conditional and the imperfect have identical tense and person/number agreement morphology. The combination of an infinitival lexical verb and imperfect affixes suggest that the French conditional has both a Modal and a past tense component.

The morphological facts point to a syntactic structure of the conditional analogous to that of the synthetic future, the only difference being the feature specification of [PAST] in place of [PRESENT] in T. Adapting the proposed unified ALLER + infinitive structure of the French futures to the conditional makes the prediction that the canonical 'synthetic conditional' in (19) may also have a periphrastic counterpart (21).

(21) Anna avait dit qu'elle **allait partir** le lendemain. A have-PAST say-PART that-she go.PAST-3SG leave-INF the next.day 'Anna had said she was going to leave the next day.'

The 'periphrastic conditional' in (21) is composed of ALLER conjugated in the (past) imperfective and an infinitive, in striking parallel to the periphrastic future. Their syntactic structures are given in (22).

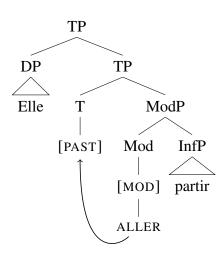
- (22) a. Elle partirait.
  - TP

    DP TP

    Elle T ModP

    [PAST] Mod InfP

    [MOD] partir
- b. Elle allait partir.



Unlike the synthetic and periphrastic futures, however, the two conditional forms do not always have the same interpretation. For instance, the synthetic conditional is permitted in counterfactual conditionals such as (23a), while the imperfective ALLER + infinitive construction in (23b) is not. The same contrast is also found in English.

- (23) a. Si elle était prête, Anna **partirait** demain. if she be-PASR.3SG ready-FEM A leave-MOD-PAST.3SG tomorrow 'If she were ready, Anna would leave tomorrow.'
  - b. \* Si elle était prête, Anna **allait partir** demain. if she be-PAST.3SG ready-FEM A go-PAST.3SG leave-INF tomorrow 'If she were ready, Anna was going to leave tomorrow.'

There could be a number of reasons for the unavailability of the periphrastic conditional in (23b). For example, counterfactual conditionals may have an additional layer of modal meaning not found in other types of conditionals. It is also debated in the literature as to whether the past tense morphology in counterfactual conditionals signals a 'real' or 'fake' past (Iatridou 2000; Ippolito 2013; Karawani 2014). If a semantic analysis turns out to be most appropriate for explaining the contrast in (23), then it may be necessary to alter the proposed structure for either the synthetic or periphrastic conditional form. I leave this as a question for further research.

On the whole, my proposed morphosyntactic analysis of the future and conditional in French predicts that synthetic and periphrastic forms should exist and that, setting aside counterfactual conditionals, they should have the same distribution and interpretation. This prediction seems to be correct.

#### 6. Conclusion

In this paper, I offered evidence for a synchronically unified representation of the synthetic and periphrastic futures in French. I proposed that both futures are composed of a Modal head with the feature [MODALITY], which takes an infinitival complement and is anchored to [PRESENT] Tense. [MODALITY] is spelled out as the Modal verb ALLER in the absence of a lexical infinitival stem. My analysis was then extended to the conditional, which shares a syntactic structure with the future but is temporally specified with [PAST].

My proposal contributes to the broader debate about the nature of mappings between form and meaning in natural languages. I have argued that morphologically distinct constructions may be semantically identical, suggesting that there need not be a 'structural' reason for alternations like the French synthetic and periphrastic futures. This result invites further investigation into other meaning-to-form discrepancies found in French, such as the *passé composé*, as well as across other languages.

### References

Abusch, Dorit. 1985. On Verbs and Time. University of Massachusetts at Amherst: PhD dissertation.

- Arregi, Karlos. 2000. How the Spanish verb works. In 30th Linguistic Symposium on Romance Languages. Gainesville: University of Florida.
- Bobaljik, Jonathan David. 2012. *Universals in Comparative Morphology: Suppletion, Superlatives, and the Structure of Words.* MIT Press.
- Cihlar, Jonathan E. 2010. Compositional interaction of sub-event aspectual markers, –*in* and reduplication, in Tagalog. In *Proceedings of BLS 30*.
- Copley, Bridget. 2001. Be going to as a case of high aspect. In Proceedings of SALT XI, 93–113.
- Copley, Bridget. 2009. The Semantics of the Future. New York: Routledge.
- Escandell Vidal, Victoria. 2014. Evidential futures: The case of Spanish. In *Future Times, Future Tenses*, eds. Philippe de Brabanter, Mikhail Kissine, and Saghie Sharifzadeh, 219–246. Oxford: Oxford University Press.
- Fleischman, Suzanne. 1982. *The Future in Thought and Language: Diachronic Evidence from Romance*. Cambridge, UK: Cambridge University Press.
- Fouché, Pierre. 1967. Morphologie historique du français : Le verbe. Paris: Klincksieck.
- Giannakidou, Anna. 2012. The Greek future: epistemic modality and modal concord. In *Selected papers of the 10th ICGL*, eds. Z. Gavrilidou, A. Efthymiou, E. Thomadaki, and P. Kambaki-Vougiouklis, 48–61. Democritus University of Thrace.
- Grégoire, Antoine. 1947. L'Apprentissage du langage II : La troisième année et les années suivantes. Liége-Paris: E. Droz.
- Guasti, Maria Teresa. 1994. Verb syntax in Italian child grammar: Finite and non-finite verbs. *Language Acquisition* 3:1–40.
- Haegeman, Liliane. 1994. Root infinitives, tense and truncated structures. *Language Acquisition* 4:205–255.
- Halle, Morris and Alec Marantz. 1993. Distributed morphology and the pieces of inflection. In *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, eds. Kenneth L. Hale and Samuel J. Keyser, 111–176. Cambridge, MA: MIT Press.
- Harris, Tony and Ken Wexler. 1996. The optional infinitive stage in child English: evidence from negation. In *Generative Approaches to First and Second Language Acquisition*, ed. Harald Clahsen, 1–42. Amsterdam: John Benjamins.
- Hoekstra, Teun and Nina Hyams. 1998. Aspects of root infinitives. Lingua 106:81–112.
- Iatridou, Sabine. 2000. The grammatical ingredients of counterfactuality. *Linguistic Inquiry* 31:231–270.
- Ippolito, Michela. 2013. Subjunctive Conditionals: A Linguistic Analysis. MIT Press.
- Jacobs, Bart. 2011. Present and historical perspectives on the Catalan *go*-past. *Zeitschrift für Katalanistik* 24:227–255.
- Karawani, Hadil. 2014. *The Real, the Fake, and the Fake Fake: In Counterfactual Conditionals, Crosslinguistically.* Universiteit van Amsterdam: PhD dissertation.
- Kratzer, Angelika. 1981. The notional category of modality. In *Words, Worlds, and Contexts*, eds. Hans J. Eikmeyer and Hannes Rieser, 38–74. Berlin: Walter de Gruyter.
- Kratzer, Angelika. 1991. Modality. In *Semantics: An International Handbook of Contemporary Research*, eds. Arnim von Stechow and Dieter Wunderlich, 639–650. Berlin: Walter de Gruyter.
- McArthur, Robert P. 1974. Factuality and modality in the future tense. *Noûs* 8:283–288.
- McCawley, James D. 1981. Everything that Linguists Have Always Wanted to Know about Logic... But Were Ashamed to Ask, volume 1. University of Chicago Press.
- Nie, Yining. 2015. French morphology and the pieces of verbal inflection. University of Toronto:

- MA thesis.
- Oltra-Massuet, Maria Isabel and Karlos Arregi. 2005. Stress by structure. *Linguistic Inquiry* 4:111–168.
- Paradis, Johanne and Martha Crago. 2000. Tense and temporality: A comparison between children learning a second language and children with SLI. *Journal of Speech, Language, and Hearing Research* 43:834–847.
- Poplack, Shana and Natalie Dion. 2009. Prescription vs. praxis: The evolution of future temporal reference in French. *Language* 85:557–587.
- Poplack, Shana and Sali Tagliamonte. 1999. The grammaticization of *going to* in (African American) English. *Language Variation and Change* 11:315–342.
- Posner, Rebecca. 1978. 'Phonemic overlapping and repulsion' revisited. In *Linguistic and Literary Studies in Honor of Archibald A. Hil, Vol. 1: General and Theorical Linguistics*, eds. Mohammad A. Jazayery, Edgar C. Polomé, and Werner Winter, 235–244. Berlin: Walter de Gruyter.
- Posner, Rebecca. 1997. Linguistic Change in French. Oxford: Clarendon Press.
- Roberts, Ian G. and Anna Roussou. 2002. The history of the future. In *Syntactic Effects of Morphological Change*, ed. David Lightfoot, 23–56. Oxford: Oxford University Press.
- Sedano, Mercedes. 2006. Importancia de los datos cuantitativos en el estudio de las expresiones de futuro. *Revista signos* 39:293–296.
- Squartini, Mario. 1998. Verbal Periphrases in Romance: Aspect, Actionality, and Grammaticalization. Berlin: Walter de Gruyter.
- Tagliamonte, Sali A. and Alexandra D'Arcy. 2007. The modals of obligation/necessity in Canadian perspective. *English World-Wide* 28:47–87.
- Werner, Thomas. 2007. Deducing the Future and Distinguishing the Past: Temporal Interpretation of Modal Sentences in English. Rutgers University: PhD dissertation.
- Wexler, Ken. 1994. Optional infinitives, verb movement and the economy of derivation in child grammar. In *Verb Movement*, eds. David Lightfoot and Norbert Hornstein, 305–350. Cambridge: Cambridge University Press.