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Spanish imperatives: syntax meets morphology

JAMES HARRIS

Massachusetts Institute of Technology

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Contrary to Rivero & Terzi's (1995) claim that morphological mood and logical mood correlate one-to-one in Spanish imperatives, verbs in imperative sentences in all dialects of Spanish have obligatory non-imperative morphology more often than not. For example, the morphology of the verb in the imperative *hágalo* 'do it' is not imperative but subjunctive. A satisfactory account of semantic, syntactic, and morphological mismatches in Spanish imperatives must appeal to a Morphology module of grammar; real explanation is beyond the reach of purely syntactic analysis.

1. Introduction

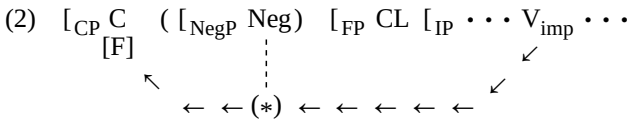
This article is a reply to 'Imperatives, V-movement and logical mood' by María Luisa Rivero and Arhonto Terzi (1995, IVL from now on), published in this journal.[1] IVL investigates the 'syntax of Imperative sentences in languages whose Imperative verbs have a distinctive morphology' (for example, Greek, Serbo-Croatian and Spanish), in some of which (Spanish in particular) 'Imperatives have unique syntactic properties' (IVL, p. 301). IVL identifies two syntactic criteria of Spanish imperative sentences (pp. 303–304): (a) verbs with special imperative morphology (V_{IMP}) are incompatible with sentential negation; (b) V_{IMP} cannot occur to the right of pronominal clitics. These properties are illustrated in (1).[2]

(1)	(a)	**haz** eso / **haced** eso	'do that'
		*no haz eso / *no haced eso	'don't do that'
	(b)	**haz**-lo / **haced**-lo	'do it'
		*lo-haz / *lo-haced	

[1] The present work is a revision of Harris (1995b). The shift in emphasis responds to substantive claims in IVL, which appeared after (1995b) was written. With the conventional caveat, I gratefully acknowledge help from Héctor Campos, Lelia Gándara, María González-Aguilar, Morris Halle, Itziar Laka, José Lema, Pascual Masullo, Rosa Montes, Mercedes Niño-Murcia, Consuelo Pellicer, Margarita Ribas Groeger, Carmen Silva-Corvalán, Margarita Suñer, Esther Torrego, Nicolás Wey-Gómez, two *JL* referees and the participants in the Semanario de Morfología, Universidad Nacional del Comahue, Río Negro, Argentina, in 1995. Special thanks (the caveat still holds) to María Luisa Rivero for detailed comments on an earlier draft.

[2] Additional properties of imperative sentences are given below. In (1), *haz* is second person singular (subject *tú*) and *haced* is second person plural (subject *vosotros/vosotras*). For the reader's convenience I separate clitics from their hosts with a hyphen not used in standard orthography.

IVL's account of this syndrome is summarized graphically in (2).

(2) 

In Spanish and similar languages, [F] is 'a strong V-feature in C [that] encodes the logical mood of imperatives, and the V inflected with Imperative morphology must raise overtly to check it' (p. 304). 'Negated imperatives are impossible because Neg prevents V from reaching C. This happens because Neg (a) heads NegP, a projection standing between CP and IP, (b) cannot incorporate V and (c) constitutes a minimality barrier' (p. 306) blocking the movement of V_{IMP} to C.[3] Clitic pronouns (CL) are 'heads that adjoin to an empty head […] in the functional projection that takes IP as complement' (p. 306), notated as 'FP' in (2). Verb-Clitic 'order arises because [V_{IMP}] bypasses the clitics when it moves to C to license the Imperative feature' (p. 306).[4]

These proposals underlie IVL's assertion that Spanish 'Imperatives are special because their morphological mood correlates one-to-one with their logical mood, and this is why they involve C in a way that gives them a unique syntax' (p. 305). This assertion is inaccurate. Logical and morphological moods in Spanish do not correlate one-to-one. As illustrated in the next section, every dialect of Spanish systematically employs verbs with non-imperative as well as imperative morphology in sentences that are understood as imperatives and that have the syntactic properties that IVL identifies as peculiar to imperatives. This fact undermines IVL's analysis of Spanish and confounds its taxonomy: Spanish has a distinctive imperative verb morphology (V_{IMP}), but imperative sentences use other verb morphology as well, and there is no syntax unique to V_{IMP}.

In this article I develop the view that a motivated explanation of the details of the semantic, syntactic, and morphological correlations and, especially, non-correlations in Spanish imperative sentences is beyond the reach of purely syntactic accounts (and, evidently, of familiar affix-based lexicalist morphological theories as well, for example DiSciullo & Williams 1987; Lieber 1980, 1991, 1992; Selkirk 1982). A satisfactory account must appeal to the formal mechanisms of an autonomous Morphology module of grammar. I examine in some detail those aspects of the Morphology module of Spanish relevant to imperatives.

[3] In non-imperative sentences, Spanish verb morphology is insensitive to clausal negation.

[4] Person/number-marked verbs with other morphology do not raise out of IP and thus remain to the right of clitics, if present.

For simplicity and clarity, the analysis I propose retains as much of IVL's account of Spanish syntax as possible.[5] I must therefore adopt the same general framework as IVL, namely Chomskyan Minimalism (Chomsky 1993, 1994, 1995), to which I couple the theory of Distributed Morphology.[6] Central to the analysis is a simple morphological rule that controls the distribution of overt imperative and subjunctive morphology. This rule – not the syntactic computational system – interprets a single syntactic category as morphologically 'imperative' in one special context but as 'subjunctive' otherwise.

In short, the goal of this reply is to demonstrate that IVL underestimates the role of morphology in Spanish imperatives and to specify the character of this role. In other words, I want to return an interesting, well-motivated morphological ball to syntactic courts like IVL's. This goal is not trivial, but it is specific and circumscribed. I do not undertake to contribute to any aspect of syntax beyond the immediate domain of interest, nor will I examine possible consequences of my analysis for IVL's broader theses. Distributed Morphology provides appropriate mechanisms for natural expression of the generalizations at hand. I do not deny that these generalizations could be reformulated in other theories of morphology; it is up to proponents of such theories to demonstrate their success in this respect.

The remainder of the article is organized as follows: In the next section, I present data treated inadequately or not at all by IVL. Section 3 examines in detail the role of the Morphology module in the derivation of Spanish imperatives. General conclusions are stated in section 4.

2. Empirical foundations

2.1 *Overt morphology in Spanish imperatives*; *all major dialects*

The examples in (3) are valid for all major dialects of Spanish, including the standard Iberian examined in IVL:[7]

[5] The interested reader can consult numerous current works on or relevant to the syntax of Spanish imperatives: Bosque (1994), Laka (1990), Niño-Murcia (1995), Rivero (1994a, 1994b, 1994c), Rizzi (1995), Zanuttini (1991), to mention only a few.

[6] It is irrelevant whether or not I am personally sympathetic to the general goals of the Chomskyan program (in fact, I am). Distributed Morphology is not logically wedded to Minimalism or any other grammatical model to the exclusion of all others. Bonet (1991, 1993), Calabrese (1994, 1995, 1996), Halle (1996), Halle & Marantz (1993, 1994), Marantz (1996), Noyer (1992, 1995) contain background and detailed exposition. Harris (1994b, 1994c, 1995a, 1995b, 1996a, 1996b, 1997) contain supporting arguments from Catalan and Spanish.

[7] Orthographic accent marks can be disregarded; there is no morphological or phonological difference between *hága* and *haga*, for example.

(3)

	Affirmative	Negative
	'do it'	'don't do it'
(a)	2nd person singular (subject *usted*)	
	hága-lo	no lo-**haga**
	*lo-**haga**	*no **haga**-lo
(b)	2nd person plural (subject *ustedes*)	
	hágan-lo	no lo-**hagan**
	*lo-**hagan**	*no **hagan**-lo
(c)	1st person plural (subject *nosotros/nosotras*)	
	hagámos-lo	no lo-**hagamos**
	*lo-**hagamos**	*no **hagamos**-lo
(d)	procedural instructions	
	agíte-se antes de usar	'shake before using'
	manténga-se refrigerado	'keep refrigerated'
	córte-se sobre la línea de puntos	'cut along the dotted line'
	sírva-se bien frío	'serve well chilled'

These sentences are all semantically imperative, and their syntax meets the criteria for imperatives illustrated in (1). But the verbs in (3) all have subjunctive rather than imperative morphology. Morphology aside, (3a, b) differ from (1) only in form of address; that is, 'intimate' 'you' in (1) versus 'formal' 'you' in (3a, b).[8] Imperative illocutionary force or 'logical mood' is not attenuated by the use of the 'formal' rather than the 'intimate' form of address. Indeed, in certain social situations many speakers pragmatically intensify imperative illocutionary force by switching from the intimate to the formal mode, implying suspension of intimacy or affection pending execution of the imperative.

First person plural imperatives like (3c) have 'inclusive' interpretation: the intended subjects are 'speaker(s) plus addressee(s)'. Thus morphologically first person plural imperatives in Spanish include second person semantic content, like the examples in (1) and (3a, b).

The 'procedural instructions' in (3d) are typically found on product labels, in cookbooks, etc. Their morphological content includes an imperative verb

[8] 'Intimate' second person singular *vos*, widely used in Latin America, is introduced in the following subsection. 'Formal' *usted* and *ustedes* mean 'you' and are thus semantically second person, but they are morphologically third person, invariably triggering third person agreement/concord with verbs, possessive adjectives and pronouns, clitic pronouns, etc. More on this below.

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form with (zero) third person inflection and the third person clitic *se*. These are thus third person imperatives; their subject is unspecified, arbitrary.[9]

The data illustrated in (3) pose the following problems for IVL.[10] IVL postulates that only verbs with distinctive imperative morphology (V_{IMP}) in semantically affirmative imperative sentences raise overtly to check the feature [F] in C. But the verbs in (3) do not have imperative morphology – they are not V_{IMP}. Why then do these sentences have imperative illocutionary force, and why does their syntax indicate that the verbs have raised to C? This coin has another side: it is obvious why negative imperatives are understood as negative, but why are they understood as imperatives? Their verbs never have imperative morphology – they do not contain V_{IMP}. On IVL's terms, then, these (well-formed) sentences cannot contain [F], which must be licensed by V_{IMP}. IVL does not suggest any way to solve these problems without abandoning the very premises that motivate the analysis.

The contrast between the affirmative imperatives with intimate 'you' (*tú*) as subject (1) and with formal 'you' (*usted*) as subject (3a) is especially instructive. The former have imperative morphology in all major dialects while the latter have subjunctive morphology. These are morphological, not syntactic, details; the syntax of the two cases is identical.

2.2 *Latin American versus Iberian Spanish*

Latin American Spanish provides additional data of interest, not taken into account in IVL.[11] Unlike standard Iberian, Latin American dialects systematically lack second person plural morphology: every semantic/syntactic second person plural item is realized overtly with third person plural morphology. This generalization is all-inclusive, covering not only all verb inflection but also nominative and object-of-proposition pronouns; long and short possessive adjectives and pronouns; accusative, dative, and reflexive clitic pronouns; etc. An example is given in (4), where bold typeface marks elements used in Iberian but not in Latin American dialects:

(4) (a) i**d-os vosotros**; **vuestro** hijo **os** llama
(b) vayan-se ustedes; su hijo los llama
'go-REFLEXIVE; your son is calling you'

[9] Third-person imperatives also include marginal literary/archaic cases like *y dijo Dios*, ≪*hága-se la luz*≫ 'and God said: let there be light' (literally '…make-itself the light'). Expressions like *vaya*, *válga-me Dios*, *líbre-me Dios*, etc., are frozen lexical items like their English equivalents 'my goodness', 'God help us', 'Heaven forbid', etc.

[10] Though not mentioned in IVL, examples of this type, except for (3d), are recognized in Rivero (1994b), but no analysis of them is worked out. Rivero states that clarification 'must await future research'. Clarification does not emerge, however, in IVL.

[11] Or in any other analysis of Spanish imperatives that I know of. See works in note 5 and references therein.

Both (4a) and (4b) are unambiguously understood as being addressed to plural 'you'; they are semantically second person. However, as shown by the underlined morphemes in (4b), the Latin American version is unmistakably third person in morphology throughout (compare *ellos se van*; *su hijo los llama* 'they're leaving; their son is calling them'). The generalization that Latin American Spanish lacks second person plural morphology entirely is captured by the morphological rule given in (5):[12]

(5) *2pers impoverishment* (Latin American Spanish only)
[2pers, +plur]
↓
∅

Rule (5) removes the feature [2pers] in the context of [+plur], leaving no person feature at all. This is the formal counterpart of 'third person', the default person in Spanish (and perhaps universally). All other features are unaffected; in particular, the features of case, gender and number necessary for realization of overt phonological distinctions in these properties remain intact. It is important to bear in mind that impoverishment is a purely morphological operation; syntactic and semantic representations are not affected by it at all.

In accordance with (5), all semantically/syntactically second person plural verbs are realized with third person plural morphology. For example, Iberian second person plural imperatives like *haced* in (1) and *id* in (4a) have as Latin American counterparts morphologically third person forms like *hagan* (3b) and *vayan* (4b). Moreover, the morphology of the Latin American forms is subjunctive rather than imperative. Consequently, in Latin American Spanish, all semantically second person plural imperative verbs have overt subjunctive morphology; it is irrelevant whether plural 'you' corresponds to intimate singular *tú*/*vos* or to formal singular *usted*.

With this information in mind, consider the following scenario in which the participants are a Latin American speaker, an Iberian speaker and a given group of people whom these speakers address individually with intimate *tú* or *vos*. Our two speakers simultaneously direct an imperative utterance – for example (4) – to this group, under exactly the same circumstances with exactly the same pragmatic intentions and the same illocutionary force. Despite the pragmatic, semantic, and syntactic identity of these utterances, their overt morphology must be different: imperative for the Spaniard, subjunctive for the Latin American, like *id* versus *vayan* in (4). The facts of this real-life scenario refute IVL's claim that logical and

[12] This rule is discussed extensively in Harris (1995a, circulated in 1992) and reviewed in Halle & Marantz (1993). I bring it in from the theoretical cold in section 3.

morphological moods correlate one-to-one in Spanish imperatives (p. 305), and they constitute a challenge not only to the particular analysis from which this claim arises but also to any analysis that excludes all reference to morphology.

2.3 *Ecuadoran dialects*

The affirmative imperatives used in certain Andean dialects of Ecuador are illustrated in (6a) along with examples of second person singular future verb forms in (6b). Corresponding negative imperatives are shown in (6c).[13]

(6) (a) Affirmative imperative
Verb-Clitic
dá-me-lo / **darás**-me-lo 'give it to me'
pon-lo ahí / **pondrás**-lo ahí 'put it there'
escríbe-nos / **escribirás**-nos 'write to us'

(b) Future (indicative)
Clitic-Verb
me-lo-**darás** 'you'll give it to me'
lo-**pondrás** ahí 'you'll put it there'
nos-**escribirás** 'you'll write to us'

(c) Negative imperative
Clitic-Verb
no me-lo-**des** / no me-lo-**darás**
'don't give it to me'
no lo-**pongas** ahí / no lo-**pondrás** ahí
'don't put it there'

In these dialects, the verbs in affirmative imperatives (6a) may have either the same imperative inflection used in other dialects (*da*, *pon*, *escribe*) or future indicative infection (*darás*, *pondrás*, *escribirás*).[14] As expected in affirmative imperatives, clitics obligatorily follow verbs regardless of their overt morphology. Also as expected, clitics must precede verbs in sentences with future (non-imperative) meaning as well as future morphology (6b). Thus only the position of verbs with respect to clitics overtly distinguishes the semantic imperatives from the semantic futures.

The negative imperatives (6c) use either (present) subjunctive or future morphology. In isolation, it is impossible to determine whether particular

[13] Thanks to Lelia Gándara, Mercedes Niño-Murcia and Consuelo Pellicer for confirming and amplifying the observations on Ecuadoran in Kany (1963: 157–158) and references therein.

[14] Niño-Murcia (1995) explains the social factors involved in the choice of imperative or future morphology.

instances of negative sentences with future morphology (for example, *no me-lo-darás* and *no lo-pondrás ahí*) have imperative illocutionary force or a simple future indicative interpretation. Speakers tend to judge that such sentences are potentially ambiguous over the two readings.[15]

What is the import of the data in (6)? This much is clear: examples like those in (6a) with future inflection provide one more case of semantic/syntactic imperatives that do not have imperative morphology, contra IVL. Furthermore, if negative sentences with future morphology are indeed ambiguous in the technical sense over imperative and future interpretations – here the facts are unclear – then some mechanism not envisioned in IVL must be proposed whereby future morphology can be associated (or not) with imperative 'logical mood' in negative sentences.

2.4 *Summary of morphology; complementary distribution*

Summarizing the previous subsections quickly, we have seen that pan-dialectal data (3) raise technical questions about the relationship that IVL posits between [F] and V_{IMP}. Moreover, the general Latin American morphological neutralization of second person plural with third person (and consequent subjunctive morphology in semantic imperatives) confutes IVL's claim of a biunique relationship between logical and morphological moods in Spanish imperatives, as does the use of future morphology in imperatives in Ecuadoran dialects.

It is also illustrated above that in all dialects of Spanish, distinctive imperative morphology (V_{IMP}) and subjunctive morphology are in complementary distribution in semantic and syntactic imperative sentences.[16] This distribution is summarized in (7).

(7) *Special case: distinctive imperative morphology*
affirmative
- subjects *tú/vos* (singular), *vosotros/vosotras* (plural, Spain only)

Elsewhere: subjunctive morphology
affirmative
- subjects *usted* (singular), *ustedes* (plural), *nosotros/nosotras* (plural)
- arbitrary/unspecified subject

negative
- all subjects

[15] This possible ambiguity does not appear to degrade communication in actual linguistic and/or situational contexts.

[16] With the proviso for Ecuadoran that future morphology may replace imperative morphology.

In short, the distribution of the morphological categories traditionally called 'imperative' and 'subjunctive' is straightforwardly predictable rather than contrastive, given clausal affirmative/negative polarity and the morphological properties of (overt or 'pro-dropped') subjects. Since IVL does not examine the relevant data, it does not recognize or exploit the predictable complementarity summarized in (7).

2.5 *Syntactic complementarity of imperative and subjunctive*

The previous subsections establish the descriptive generalization that imperative and subjunctive are not contrastive as morphological categories; their distribution is complementary, predictable. The present subsection demonstrates that the same is true of imperative and subjunctive as syntactic categories. To a first approximation (to be refined directly below), the syntactic generalization is that semantic/syntactic imperative clauses – irrespective of overt morphology – cannot be embedded while semantic/syntactic subjunctive clauses must be dominated by some trigger expression.[17] This is illustrated in (8):

(8)	(a)	Imperative	
		cómpre-lo usted	'buy it'
		*pido que **cómpre-lo** usted	'I request that buy it'
		comprémos-lo	'let's buy it'
		*sugiero que **comprémos-lo**	'I suggest that let's buy it'
	(b)	Subjunctive	
		quizá **lo-compre** usted	'maybe you'll buy it'
		*quizá, **lo-compre** usted	
		ojalá **lo-compremos**	'I really hope we'll buy it'[18]
		*ojalá, **lo-compremos**	

Clitic position distinguishes the imperatives in (8a) from the subjunctives in (8b). An intonational break after *quizá* and *ojalá* in (8b), signaling that these words are outside the main clause, results in ungrammaticality.

The syntactic generalization illustrated in (8) is also embodied in the special relationship between imperatives and so-called 'optative' subjunctives, as exemplified by the following dialog:

(9)	A:	**haz-lo** ahora	'do it now'
	B:	¿cómo?	'what (did you say)?'
	A:	que **lo-hagas** ahora	'do it now'

[17] A few idiomatic discourse connectives have initial (undominated) subjunctives, for example *o sea*, *sea como sea/fuere*, etc. These are syntactically anomalous like their English counterparts 'so to speak', 'be that as it may/were', etc., and thus do not invalidate the generalization.

[18] *Ojalá* is from an Arabic expression meaning something like 'may it please Allah'; it has no religious import for modern speakers.

In answer to *¿Cómo?*, speaker A could repeat the syntactic/morphological imperative *haz-lo*, but it is pragmatically more natural to choose the optative construction *Que lo-hagas*, in which the complementizer *que* is followed by subjunctive morphology. Independently of morphology, clitic position diagnoses *haz-lo* as imperative versus *lo-hagas* as optative. The syntactic point is that the imperative may appear undominated – in absolute initial position – while the subjunctive cannot. In short, the imperative and optative variants are pragmatically, syntactically, and morphologically distinct, though native speakers of Spanish strongly judge their semantic content to be identical.[19] We may thus say that an optative is just an imperative *manqué* (on IVL's terms, one whose verb doesn't raise to C). That is, what is conventionally called an 'imperative' is an 'optative' whose verb, regardless of overt inflection, moves to sentence-initial position, above clitics and negation, if present.

Of course, certain dislocated elements can appear to the left of syntactic imperatives.[20] A few examples (all with enclisis to confirm their status as imperatives) are given in (10):

(10)	tú **haz-lo** en seguida	'you do it right now'
	mejor **hagámos-lo** en la noche	'let's do it tonight instead'
	mañana **tráiga-me-lo** sin falta	'bring it to me tomorrow for sure'

It is controversial at present how to characterize explicitly the set of elements that MAY precede imperatives versus the set that MUST dominate subjunctives.[21] In any event, these two sets are clearly disjoint. Thus the point stands that the distribution of imperative and subjunctive is complementary in syntax just as in morphology. Overt imperative and subjunctive realizations are therefore predictable local manifestations of a single abstract category. Let us call this category 'subjunctive' from now on.

3. Analysis

Three subsections follow. In the first, I set out some preliminary considerations in semantics and syntax. In the second, I give a minimal sketch of the theoretical framework that I take as a point of departure. In the

[19] At present there is no consensus as to formalization of this semantic content. (IVL gives no formal semantic explication of 'logical mood', 'illocutionary force', etc.). The fact that native speakers robustly judge imperatives and optatives as in (9) to be semantically (but not pragmatically) equivalent is sufficient to sustain the argument at hand.

[20] Not all Spanish speakers find the same configurations well-formed. The example *a ella siempre déselo usted* (without internal pauses) 'always give it to her', suggested by a *JL* referee, was rejected by the 17 native speakers whom I consulted about it.

[21] For example, Rizzi (1995) argues that syntactic functional structure above IP is much more complex than that postulated in most current syntactic investigation.

third I articulate detailed proposals regarding the parts of the Morphology module of Spanish that are relevant to imperative verb morphology.

3.1 *Semantic and syntactic preliminaries*

As a preparatory move, I will tidy up the conceptual arena by jettisoning the notion of 'imperative illocutionary force', legitimate elsewhere but an irrelevant distraction here.[22] Any physically possible human vocalization, or even a silent gesture, could serve pragmatically to command or request, if the speaker so intended. For example, any of the following expressions might serve as a speech act that would induce a Spanish speaker to open a window:

(11)	(a)	fuchi	'phew'
	(b)	la ventana, coño	'The window, damn it'
	(c)	¿tendrías la bondad de abrir la ventana?	'Would you be so kind as to open the window?'
	(d)	te rompo la crisma si no abres la ventana	'I'll knock your block off if you don't open the window'
	(e)	abre la ventana; repito, que abras la ventana	'Open the window; I repeat, open the window'

Linguistic embodiment of imperative illocutionary acts in Spanish can range from a bare interjection to diverse complex structures. Even when particular actions and objects are specified, as in (11c–e), such speech acts do not constitute a syntactic natural class; they are not a natural object for syntactic investigation. On the other hand, Spanish speakers intuitively recognize a class of syntactic structures that are understood as imperatives; these do constitute a natural object of study. In (11) only (11e) is a member of this class.[23] From this point on, we will be concerned only with this smaller set of structures; the term 'imperative' will be restricted accordingly.

Turning to a technical issue, we need an explicit representation that characterizes the relationships among the tense/mood categories 'subjunctive', 'imperative' and 'future' in Spanish.

In the indicative mood, Spanish has distinct sets of inflections for present, future, and past (with an additional contrast between perfective and imperfective aspect in the latter). In the subjunctive, on the other hand, there is only a binary contrast between present and past. In the absence of future subjunctive inflection, present subjunctive forms are used to express both present and future meaning. This is illustrated in (12).

[22] Wilson & Sperber (1988) is recommended for general discussion.

[23] I leave as an open question the status of illocutionarily imperative infinitives like *No fumar* 'No smoking'.

(12)		Indicative	Subjunctive
	(a)	**está** ahí ahora	dudo que **esté** ahí ahora
		'he's there now'	'I doubt that he's there now'
	(b)	**estará** ahí mañana	dudo que **esté** ahí mañana
		'he'll be there tomorrow'	'I doubt that he'll be there tomorrow'

The contrast in the indicative between present (*está* (12a)) and future (*estará* (12b)) is neutralized in syntactic contexts that require subjunctive mood (for example, complements of *dud-* 'doubt'), where present tense forms like *esté* (12a, b) are used to express future as well as present meaning. The phenomenon is general, not limited to dubitative contexts. For example, consider the temporal relationships of the verbs in the two clauses of the sentences in (13).

(13) (a) ayer, yo **salí** cuando él **entró**
'yesterday, I left when he came in'
(b) normalmente, yo **salgo** cuando él **entra**
'usually, I leave when he comes in'
(c) mañana, yo **saldré** cuando él **entre/*entrará**
'tomorrow, I'll leave when he comes in'

Given the pattern of past indicative (perfective aspect) *salí/entró* in (13a) and present indicative *salgo/entra* (13b), we would expect future indicative *saldré/entrará* in (13c).[24] But future inflection (for example *entrará*) is ungrammatical here; present subjunctive (for example *entre*) is required because the expression of future meaning after *cuando* in Spanish requires subjunctive mood. Since Spanish has no future subjunctive inflection, the intended meaning is expressed with present subjunctive morphology.

The examples in (12) and (13), and much additional data, show clearly that present tense subjunctive verb morphology in Spanish can be either [+future] or [−future] semantically. As a concrete basis for further investigation, in (14) I propose feature characterizations of the seven 'simple tenses' of Spanish finite verbs, that is, the one-word forms that overtly manifest Φ-features of their subjects.[25]

(14) IND = present indicative SUB = present subjective
FUT = future (indicative) PRT = preterit (past perfective)
PSJ = past subjunctive CON = conditional[26]
PIM = imperfect (past imperfect)

[24] As in French and other languages.

[25] This excludes the infinitive, gerund and participles, as well as compound forms with auxiliary verbs (which bear the inflections defined in (14)). I use the most common English terms for these inflection sets.

[26] The 'conditional' expresses, among other meanings, subsequence to a temporal reference point prior to the moment of speaking; a plausible characterization for this meaning is [+past, +future].

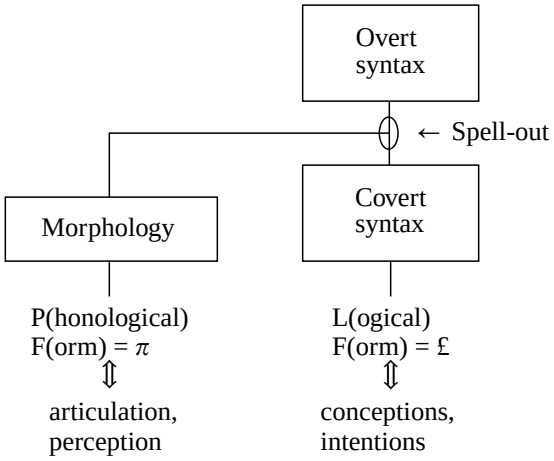
	IND	SUB	FUT	PRT	PSJ	CON	PIM
past	–	–	–	+	+	+	+
future	–	–/+	+	–	–/+	–/+	–
subjnc	–	+	–	–	+	–	–
imperf				–			+

The mapping from semantic/syntactic properties to morphologically relevant features of Spanish verbs is a largely unstudied topic that I cannot develop adequately here;[27] (14) is only a place-holder that provides a rational taxonomy for the inflections at issue. My expectation is that future investigation of the semantics, syntax, and morphology of the complex system of Spanish verb inflection will confirm that (14) as it stands provides an adequate though temporary basis for the present line of inquiry.

3.2 *The organization of the grammar*

I follow IVL in assuming the theoretical framework of the Minimalist Program (Chomsky 1993, 1994, 1995 and much related work). Further, I couple the proposals of so-called Distributed Morphology with the Minimalist framework.[28] The resulting model of grammatical organization can be schematized essentially as in (15).

(15)



[27] This mapping is obviously non-biunique, as illustrated in (12) and (13).

[28] See note 6.

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I note the following formulations from Chomsky 1995 (p. 229): 'Spell-Out strips away from Σ [the structures formed up to Spell-Out, JH] those elements relevant only to π, leaving the residue Σ_L, which is mapped to £ by operations of the kind used to form Σ'. On the PF path, 'Spell-Out delivers Σ to the module Morphology, which constructs word-like units […], and which eliminates features no longer relevant to the computation' terminating in π. Chomsky assumes that 'computational procedures are uniform throughout' the overt and covert phases of the syntactic computation to LF/£, while the computation to π 'modifies structures (including the internal structure of lexical entries) by processes very different from those that take place in the [mapping to LF/£]'.

Spell-Out transfers syntactic arboreal structures into the Morphology module, where they continue to be subject to syntactic-type operations, among others. Thus morphological representations and operations do not necessarily differ radically from their syntactic counterparts.[29] Distributed Morphology postulates that the Morphology module contains two subcomponents: a set of rules and the Vocabulary. The rules subcomponent consists of operations that modify minimally the structure and content of syntactic representations delivered by Spell-Out. Essentially, morphological rules make the adjustments necessary for the phonological instantiation of morphemes. The Vocabulary is a list of lexical entries from which phonological matrices and other information are copied onto morphological terminal nodes. Vocabulary insertion is strictly 'feature filling'; that is, phonological and morphological information is added to the output of the morphological rules but the features already present in these terminal nodes are not altered.

3.3 *A fragment of the Morphology module of Spanish*

Given that the manifestations conventionally known as 'imperative' and 'subjunctive' are in complementary distribution both syntactically and morphologically, I propose that they are controlled by the rule of Imperative morphology (16) in all dialects of Spanish:

(16) *Imperative morphology*
$[+\text{subjnc}] \rightarrow \emptyset / \_\_\_\_ [2\text{pers}]\ ]_C$

Rule (16) is an impoverishment operation that interprets the syntactic property 'subjunctive' as a requirement for imperative inflection (future in

[29] To fix the terminology of this article, I take 'syntax' to be equivalent to Overt Syntax in (15), while 'morphology' subsumes any syntactic-type operations that affect Σ on the PF path after Spell-Out.

the Ecuadoran case) in second person verb forms which, following IVL, we assume to have risen to C.[30] The property 'subjunctive' is not altered in other contexts. Thus subjunctive inflection is the default realization of syntactic subjunctivity. The operation of (16) is a purely morphological effect that takes place on the PF/π path; representations on the LF/£ path are untouched by it. Accordingly, (16) reconciles the discrepancies in imperatives between semantics and syntax on the one hand and morphology on the other.

On our assumptions, the only subjunctives that syntax allows to reach C are [−past].[31] As argued subsection 3.1, these can be either [+future] or [−future]. In matrices with [+subjnc, +future], deletion of [+subjnc] leaves [+future, −past]. This is the correct result for Ecuadoran dialects in which semantic/syntactic imperatives are peculiarly [+future] as well as [+subjnc], as the data in subsection 2.3 indicate. In all other dialects, where semantic/syntactic imperatives are [−future, +subjnc], (16) leaves [−future, −past], a combination that does not otherwise appear with syntactic subjunctives in C. This is thus an appropriate specification for special 'imperative' inflection, which appears nowhere other than in C.

We examine the environment of (16) further. Recall from the comments on (3c) that first person plural imperatives are interpreted as inclusive, that is, as including at least one addressee 'you'. However, Spanish has no morphological distinction between inclusive and exclusive first person plural; the morphological marking corresponding to the meaning 'we' is formally equivalent to 'first person plural', nothing more. Given the organizational model in (15) with its two paths leading to LF/£ and PF/π, the fact that syntactically first person imperatives have a second person component of meaning has no necessary effect on their morphology. Semantics notwithstanding, first person plural imperatives surface with subjunctive morphology because (16) is a morphological operation and these forms are not morphologically [2pers].

Similarly, we saw in (3a, b) that the pronouns *usted* and *ustedes*, and the verb forms inflected to agree with them, are formally third person, even though they mean 'you'. Moreover, as explained in subsection 2.2, in Latin America even semantically intimate second person plural items are realized morphologically as third person. All corresponding semantically imperative verb forms are realized with subjunctive rather than imperative morphology, semantics notwithstanding, because (16) is a morphological rule while these forms are not morphologically [2pers].[32]

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[30] This assumption can of course be modified in the light of future syntactic research. The last paragraph of subsection 2.5 should be kept in mind.

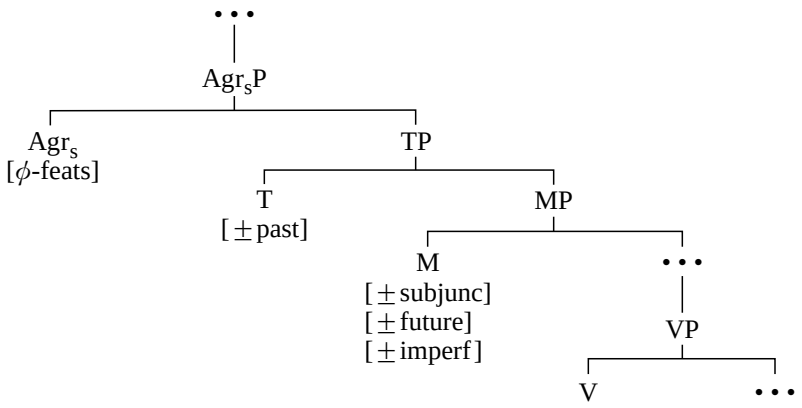
[31] If it should turn out that some form with [+past] can occupy C, then minimal alteration of the input of (16) to require [−past] will preserve the desired effect.

[32] One possible technical implementation of these generalizations regarding the morphological person marking of *nosotros/nosotras* and *usted*(*es*) is shown in (i):

The fact that '2pers impoverishment' (5) operates in the Morphology module is of paramount importance; it guarantees that rule (16) also operates in the Morphology module, since (5) applies before (16). The sequence of operations ≪(5) precedes (16)≫ has the following correct effect: (5) removes [2pers] in plurals, consequently (16) does not assign special 'imperative' morphology to them since (16) crucially refers to the feature [2pers]. Accordingly, in Latin American dialects, semantic/syntactic second person plural imperatives are not only morphologically third person but morphologically subjunctive as well. These results escape the reach of purely syntactic analysis: there is no sense in which the generalization embodied in '2pers impoverishment' (5) can be considered syntactic or semantic without rendering these terms meaningless; only the overt form of semantic/syntactic second person plural items is affected, on a dialect-particular basis. Moreover, (5) modulates the specific effects of (16) on the overt shape of a particular set of syntactically subjunctive verb forms, again with dialect-particular results and no modification of their semantic or syntactic properties or positions.

How are the features in (14) distributed among functional projections in syntax? The most explicit proposal available at present is that of Laka (1990), so far as I know. Thus, pending further syntactic work directed specifically to this question, I take Laka's proposal as a working hypothesis, updating it slightly as shown in (17).

(17)



Under standard assumptions, overt verb raising in (17) yields the configuration shown in (18):

(i) [2pers] → ∅ / *we*, *you*-FORMAL

Like (16), (i) is a rule of the Morphology module. '*We*' and '*you*-formal' are place-holders for whatever formal semantic representation turns out to be correct. Refinement of (i) must await elucidation of this representation.

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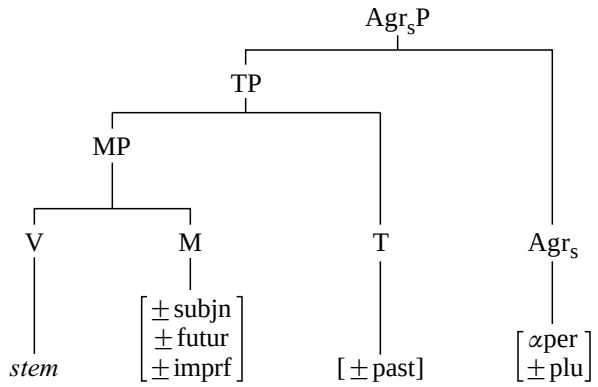
(18)



The proposals sketched in (17) and (18) are motivated empirically within strongly constraining theories of syntax and of grammatical organization. They must thus constitute our initial working hypothesis concerning the architectural structure of the rich inflectional system of Spanish verb forms. It goes without saying that this hypothesis is subject to revision as required by sound arguments.[33]

For a number of verb forms, (18) maps transparently onto surface morphological constituency, as illustrated in (19a). In other forms, various semantic/syntactic features have no overt realization, as illustrated in (19b, c).

(19) (a) 2nd person singular future FUT
love]$_V$ +FUT]$_M$ −PST]$_T$ 2PER]$_{AgrS}$
am+*a* *r* *á* *s*

(b) 1st pers plur pres indic IND/pret PRT
love]$_V$]$_M$]$_T$ 1PERS/+PLU]$_{AgrS}$
am+*a* *mos*

(c) irregular imperative (subject *tú*)
come]$_V$]$_M$]$_T$ 2PERS]$_{AgrS}$
ven

In most cases (19a, b), the overt verb 'stem' consists of the 'root' followed by the 'theme vowel' (TV). The root is not specified for syntactic category.[34] The theme vowel (actually a diphthong in certain cases) depends on the conjugational class of the stem and other morphological information.

[33] Readers familiar with the literature on Spanish morphology know that structures like (18) have been a bone of contention for decades (Ambadiang 1993 contains extensive discussion and bibliography), no doubt largely because proposals have been made in a syntactic vacuum. In the absence of strongly constraining theories of syntax and of grammatical organization, these complex data – like any other – can be described in a vast number of mutually incompatible ways.

[34] For example, the bound root *am*- 'love' occurs both in the noun stem *am*+*or* (and denominals like *amor*]$_N$*oso*]$_A$ 'amorous', *amor*]$_N$*ío*]$_N$ 'love affair', etc.) and in the verb stem *am*+*a* (and deverbals like *ama*]$_V$*nte*]$_N$ 'lover', *ama*]$_V$*ble*]$_A$ 'amiable, nice').

Conjugational class is an arbitrary, idiosyncratic lexical property of stems (*am*+*a* is a 'first conjugation' stem = [1C]); neither this property nor the theme vowel has any semantic or syntactic relevance. Thus under Minimalist assumptions, the theme vowel is not present in semantic/syntactic representations; rather, it is generated in morphological structure.[35] In (19b) there is no overt mood or tense constituent; the form *amamos* is ambiguously present indicative IND or preterit PRT. The irregular imperative *ven* (19c) consists of a bare root, with no theme vowel or overt inflection of any kind.

As the next step in the explication of the effects of rule (16), I give a fragment of the Vocabulary of Spanish in (20).[36]

(20) *Morphology module: Vocabulary*

(a) TV $\leftrightarrow$ ie / [mC]____[+subjnc] [+past][37]

i / {[mC]____X[38] / [3C]____}

e / {[1C]____[+subjnc] [−past] / [2C]____}

a (default)

(b) M $\leftrightarrow$ r / {[____, +futur] / [____, +subjn] [+past]}

(c) T $\leftrightarrow$ e / [+futur]____[1pers]

a / [+futur]____

(d) Agr_S $\leftrightarrow$ mos / [____, 1per, +plu]

{d / [____, 2pers, +plu]]$_C$ / is [____, 2pers, +plu]} (Iberian only)

{∅ / [−futur] [____, 2pers]]$_C$ / s [____, 2pers]}

n / [____, +plu]

With (18)–(20) available for reference, we can examine the effects of rule (16) concretely. In (21) I illustrate the derivation of the intimate second person singular (subject *tú*) imperative of the regular 'first conjugation' stem *am*+*a*- 'love' in standard Iberian and Latin American dialects (21a) and in Andean Ecuadoran (21b).

[35] In certain cases, stems are overtly athematic; that is, they manifest no theme vowel (19c). The conditions that determine athematicity are complex and not crucial to present concerns; I will say nothing about theme here.

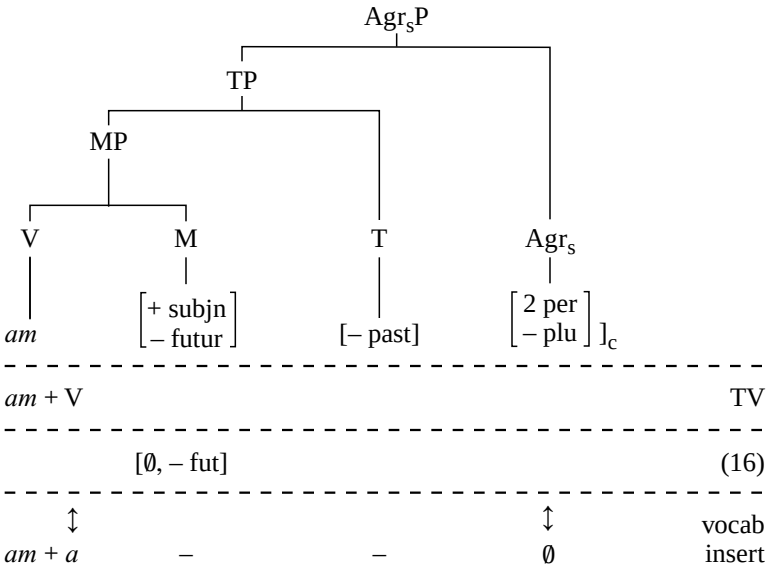
[36] Complete listing of entries for the entire system of Spanish verb inflection (fifty-odd phonologically distinct forms for each stem, with significant dialect variation) would entail a few changes; the sample in (20) is intended only to illustrate the overt inflections of semantic/syntactic imperatives and a few other forms.

[37] [mC] = marked conjugation class (= 2nd and 3rd). TV exponent *ie* appears before other inflectional and derivational suffixes as well.

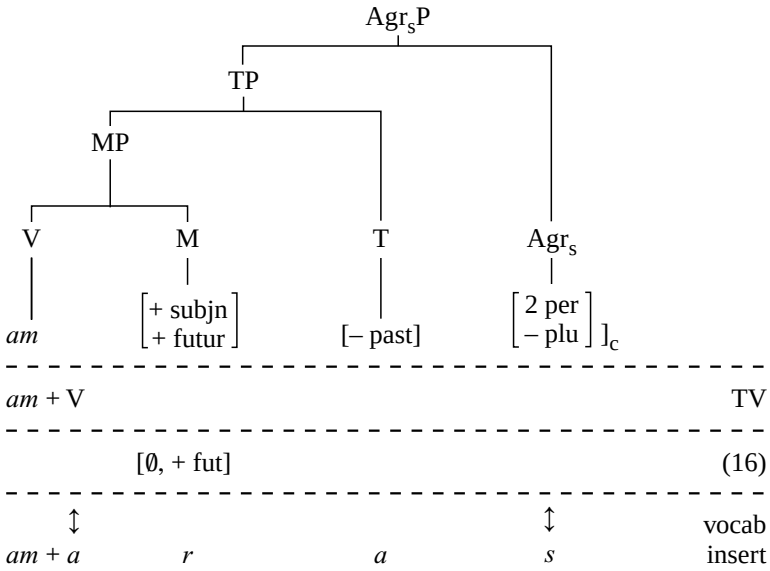
[38] X = other inflectional and derivational suffixes.

(21) *Second person singular*, *subject* tú

(a) standard



(b) Ecuadoran



In both (21a) and (21b) the representation above the top dotted line is the syntactic output handed over to Morphology by Spell-Out – the same in both derivations except that 'subjunctive' is [−future] in standard dialects

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but [+future] in Ecuadoran, as discussed above. Also as discussed above, the theme vowel (TV) terminal is generated in the Morphology module. Rule (16) deletes [+subjn] in both derivations, leaving [−futur] in the M constituent in (21a) and [+futur] in (21b). Next, items are inserted from the Vocabulary. Vocabulary insertion obeys the condition that the indexical/contextual features of vocabulary items match all or a subset of the grammatical features specified in the context of the terminal node; insertion does not take place if the Vocabulary item contains features not present in this context. Vocabulary items are characteristically underspecified with respect to terminal nodes, and their contextual features impose a partial ordering within sublists in accordance with the familiar universal Paninian principle of 'more complex takes precedence'.[39] Thus, for the TV terminal, the default item *a* is inserted since the contextual features of items higher in sublist (20a) are not found in either (21a) or (21b). In (21a), no item can be inserted in either the M or the T terminal since nothing in sublists (20b, c) is compatible with the features [−futur] and [−past], respectively; and ∅ is the only item in sublist (20d) that contains a subset of the features of the Agr_S terminal.[40] For the M terminal in (21b), *r* is inserted from sublist (20b); the item *a* in sublist (20c) contains a subset of the contextual features of the T terminal; and *s* in sublist (20d) meets the requirements for insertion into the Agr_S terminal.

In short, the strikingly different surface phonological representations *áma* and *amarás* are traceable to a single source, namely, the difference in the coefficient of the feature [futur] in the structures received from syntax.[41]

Let us pause a moment to note that in all standard dialects, the intimate second person singular imperative of regular verbs with subject *tú* (for example *ama* (21a)) is identical to the third (not second!) person singular present indicative. The same is true of *vos* imperatives (for example *amá*) except for the position of stress and its consequences.[42] Of course the imperative is not somehow literally borrowed from the indicative paradigm. Rather, the homophony is due to the fact that the two forms share two morphological properties: (i) both emmply the unmarked/default verb stem, and (ii) both have T, M, and Agr_S elements with no associated segmental phonological matrices.

We continue now with second person plural imperatives. As background,

[39] This theory of vocabulary insertion has significant consequences not brought out by the present data. See references in note 6, especially Halle (1996) and Harris (1997).

[40] Is there a purely syntactic reason why M, T, and Agr_S terminals are all phonologically empty here and in similar cases? In view of the fact that changing [−plur] to [+plur] alters the picture (see (24a)), it does not seem likely.

[41] The imperative form that agrees with *vos* is stressed *amá* in most dialects that use this form. The position of stress is exceptionlessly predictable in Spanish verb forms (Harris 1994a).

[42] For example, diphthongization of certain mid vowels under stress, which results in segmental differences as illustrated in *pi̲é̲nsa* (indicative) vs. *pe̲nsá* (imperative) 'think', *recu̲é̲rda* (indicative) vs. *reco̲rdá* (imperative) 'remember', etc.

it is necessary to understand how theme vowels are realized phonologically in present indicative IND and subjunctive SUB forms. This is illustrated in (22), where theme vowels are highlighted.

(22)

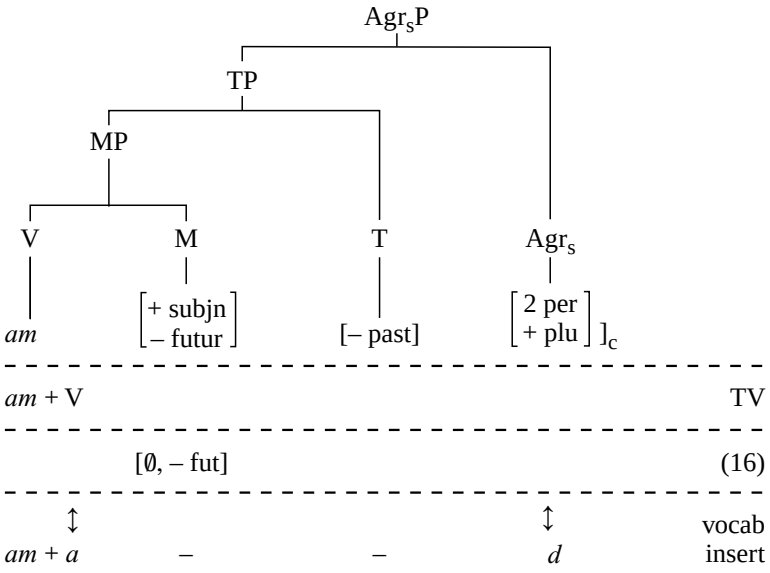
	IND	SUB	
1Conj:	vend + **a** −	vend + **e** −	'bandage'
2Conj:	vend + **e** −	vend + **a** −	'sell'
3Conj:	rind + **e** −	rind + **a** −	'render'

In the unmarked first conjugation, the TV is *a* in the present indicative and *e* in the subjunctive; the reverse is true in the marked second and third conjugations.[43] Vocabulary sublist (20a) provides the exponent *e* for the first conjugation TV in the present subjunctive. Rule (23), which applies prior to Vocabulary insertion (as do all impoverishment rules), deletes the class diacritics [2C] and [3C], with the result that the subjunctive TV is default *a* in the marked conjugations:

(23) *Marked conjugation impoverishment*
$[mC] \rightarrow \emptyset \; / \; \_\_\_\_ [+\text{subjn}]\,[-\text{past}]$

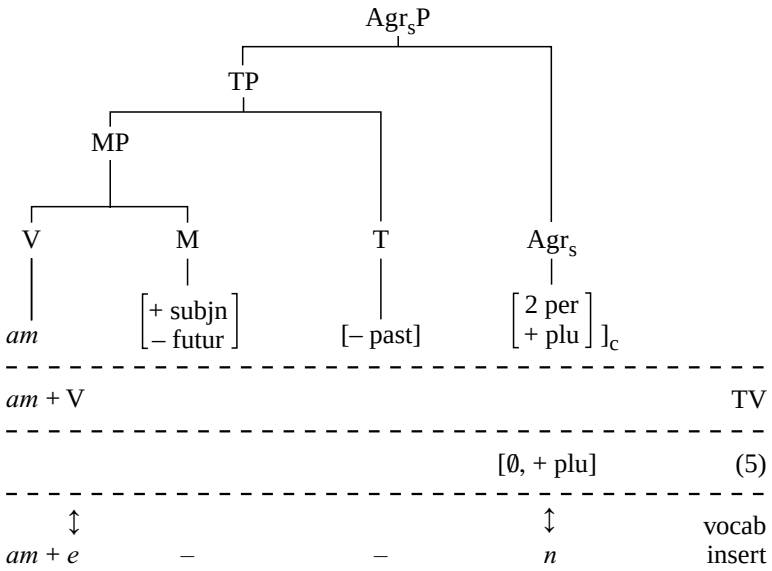
Now, the derivation of semantic/syntactic second person plural imperatives is quite instructive, as is illustrated in (24).

(24) *Second person plural*
(a) Iberian, subject *vosotros/vosotras*



[43] The first conjugation is unmarked in the sense that it contains more stems than the other two combined (by a huge margin) and is almost always the one to which new verbs are assigned. Not illustrated in (22) is the fact that the TV in non-subjunctive forms alternates between *e* and *i* in both second and third conjugations, under different conditions in each.

(b) Latin American, subject *ustedes*



The syntactic representations are of course identical in (24a) and (24b). Latin American (24b), however, shows the general morphological neutralization of all semantically and syntactically second person plural items to third person, whose formal effect is the removal of the feature [2per] by '2pers impoverishment' (5). Consequently, rule (16), whose context requires the feature [2per], does not operate in Latin American (24b), though it does in Iberian (24a).

Lexical insertion follows. In Iberian (24a) the default theme vowel *a* is inserted from sublist (20a), as expected. As in (21a), there are no valid entries in sublists (20b, c) for the M and T terminals. For the Agr$_s$ terminal, the second entry *d* takes Paninian precedence over the less-highly specified third entry *is*; the former thus wins the competition for insertion. Vocabulary insertion is now complete for *amad*.

In the Latin American counterpart, because of the context /____[+subjnc] [−past], the entry *e* in sublist (20a) takes precedence over default *a* for insertion in the TV terminal. Again, there are no valid entries in sublists (20b, c) for the M and T terminals. Finally, since [2per] has been deleted by (5), only the context of the last item *n* in (20d) is satisfied in the Agr$_s$ terminal. Insertion of this item completes the derivation of *amen*.

In short, the striking phonological difference between Iberian *amád* and Latin American *ámen* follows as an automatic consequence of the removal of a single morphological feature by the general neutralization process (5) – a systematic and pervasive feature of the morphology of Latin American dialects. Syntax has nothing to do with it.

4. Conclusion

The meticulous survey of traditionalist, structuralist and generativist literature on the inflection of Spanish verb forms in Ambadiang (1993) suggests that investigation of this intricate material becomes interesting only when and to the extent that a restrictive theory, supported empirically by (perhaps few but compelling) crucial cases, radically reduces the available descriptive options. The present study focuses on the inflection of verb forms used in sentences understood by native speakers as imperatives, which is examined from the theoretical perspective of Chomskyan Minimalism and Distributed Morphology.

The main challenge to a principled account of this material lies in the seemingly arbitrary pairings of 'imperative' and 'subjunctive' in semantics, syntax, and morphology that have been examined above. This challenge is not seriously addressed in the syntactic literature with which I am familiar, but it is the central issue in the present study. Accordingly, rule (16), which determines the distribution of overt imperative, future, and subjunctive morphology in semantically/syntactically imperative sentences, is the central formal mechanism. The total descriptive apparatus employed is minimal: only rule (16) itself and one or two Vocabulary items, depending on dialect, are required exclusively for imperative inflection; these and other devices are needed in one guise or another in any event in a general account of Spanish syntax and derivational and inflectional morphology.

The primary focus of this reply to IVL is the distribution of labor between syntactic and morphological computation in the specification of overt verbal inflection: no role is assigned to a formal morphological component of grammar in IVL, while this component is an indispensable element in the analysis laid out above. To review quickly, the effects of rule (16) are purely morphological: its consequences are seen only in the phonological manifestation of grammatical features; representations that underlie semantic interpretation are unaffected by (16) and other operations of the Morphology module. This view of grammatical organization is supported by the following evidence, among other data.

- Affirmative imperatives with semantically second person singular subjects *tú* and *vos* manifest verbs with special imperative inflection (for example *haz* (*tú*), *hacé* (*vos*) 'do') while otherwise identical imperatives with semantically second person singular subject *usted* manifest verbs with subjunctive morphology (for example *haga* 'do').
- The general Latin American morphological neutralization of second person plural with third person results in a distinction between imperative and subjunctive morphology (for example *haced* versus *hagan* 'do') in Iberian and Latin American dialects, respectively, in pragmatically, semantically, and syntactically identical imperatives.

- In certain Ecuadoran dialects, imperatives with subject *tú* may be manifested overtly with future indicative morphology.

These and similar phenomena are details of the overt morphology of various dialects of Spanish, not of their syntax, which is the same in each case. In the formal analysis proposed above, overt inflectional contrasts in semantically and/or syntactically identical imperatives follow from the interaction of rule (16) with independently motivated morphological operations (for example 2pers impoverishment (5)) on independently motivated syntactic structures. It is thus fairly clear what burden must be shouldered by an analysis that accounts explicitly for all of the evidence presented above (IVL doesn't) without attributing a major role to a formal Morphology module.

The inflectional characteristics of Spanish imperatives also present a challenge to affix-based lexicalist theories of Morphology,[44] in which word formation applies pre-syntactically, and all information relevant to a word's syntax must appear in the root node of that word's constituent structure tree ('complex symbol') via 'percolation' or else be provided by redundancy rules that supply unmarked feature values. It remains to be demonstrated by proponents of affix-based theories that these two devices are able to furnish the syntactically required features of Spanish verb forms in imperative sentences on the basis of their overt affixes.

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[44] DiSciullo & Williams (1987); Lieber (1980, 1991, 1992); Selkirk (1982).

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Author's address: *Department of Linguistics and Philosophy,*
Room E39-319,
Massachusetts Institute of Technology,
Cambridge MA 02139,
U.S.A.
E-mail: jharris@mit.edu