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Proceedings of the 25th Annual Meeting of the Berkeley Linguistics Society (2000), pp. 183-194

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On the rise of suppletion in verbal paradigms

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1. Introduction*

The Ibero-Romance languages Portuguese, Galician, and Spanish share a rare suppletion¹ pattern in which there is complete overlap in certain inflectional categories of two distinct verbs—*ir* 'to go' and *ser* 'to be'. This unusual situation contrasts with familiar suppletion examples such as English *go-went* and *be-am-is-are-was-were*; in these cases the irregular verbs do not 'share' parts of their paradigms with other verbs. In this paper I examine the history of both of these types of suppletion in verbs meaning GO in the Romance languages and propose that the principal distinction between them is the semantic distance of the lexemes to which the overlapping forms belong; specifically, I argue that cases of non-overlapping suppletion come about when the verbal sources of the forms are essentially synonymous and that instances of overlapping suppletion arise when the source verbs, while semantically linked, are more semantically different.

(1) The present indicative and preterit (indicative) of BE and GO in Spanish

		ser 'to be'				ir 'to go'	
present		preterit		present		preterit	
soy	somos	fui	fuimos	voy	vamos	fui	fuimos
eres	sois	fuiste	fuisteis	vas	vais	fuiste	fuisteis
es	son	fue	fueron	va	van	fue	fueron

The languages in question display syncretism in the preterit (perfective past) between *ser* 'to be' and *ir* 'to go' (as shown with forms from Spanish in Table 1). In exploring the factors in the development of suppletion in verbs meaning GO in Romance, I will touch on the following questions:

- Why does an irregular verb get 'replaced' by a highly suppletive one?
- Which parts of the paradigm are replaced by the 'suppletive' forms?
- Why does a verb meaning GO take some forms from a verb meaning BE?
- What is the nature of this type of 'overlapping' suppletion?

2. Suppletion versus irregularity

In answering these questions, the first step is to address the issue of what suppletion is and how it relates to irregularity. While intuitively there is a certain appeal to putting pairs such as *bring-brought* and *go-went* in different categories, in part on the basis that in the first there is shared phonological material, one might argue that the distinction is outweighed by the need to 'list' both *brought* and *went* in the lexicon (i.e., memorize them) and that there is then no justification for distinguishing between 'irregular' and 'suppletive' morphology. In this paper I define **suppletion** as the phenomenon whereby semantically regular relations are encoded by unpredictable formal patterns. Cases in which the forms related paradigmatically share phonological material (i.e., 'irregular' forms) are examples of **weak suppletion**, while the others are instances of **strong suppletion**; these types reflect two ends of a continuum rather than an either-or opposition. In the next section I describe the relationship between these types and the diachronic processes

behind them. Then I address motivating factors involved in suppletion, which I illustrate in section 5 with a case study of some suppletive patterns in verbs meaning GO in the Romance languages. I present preliminary conclusions in section 6.

3. Diachronic sources of verbal suppletion

There are three main diachronic processes which lead to suppletion: sound change (both regular and 'irregular'—see below), analogy, and **incursion**, or borrowing from other lexemes. In this section I examine how these lead to suppletion, starting first with weak cases and moving on to strong ones.

3.1. Weak suppletion

Weak suppletion arises through sound change and analogy, but apparently does not result from incursion.

3.1.1. Sound change

In the case of sound change, there are two main subtypes. The first is regular or 'Neogrammarian' change in which all eligible instances of a given sound undergo a particular change, and the second is apparently irregular, that is, it does not display Neogrammarian consistency. A good example of suppletion induced by regular sound change concerns the Spanish verb *decir* 'to say'. Through a series of regular sound changes (the two most important of which can be represented as $k > \theta / V$ [+front], $k > g / V _ V$ [-front]), the Latin verb *dicere* developed from a regular verb into a suppletive one. These cases depend on the interaction of such changes with loss of the conditioning environment or leveling; the allophonic status of the [g] ~ [θ] alternation was lost with the subsequent change of $k^w > k > g / V _ V$ [+front], as in *aquila* /ak^wila/ > *águila* /'agila/ 'eagle'. In contrast, the regular development of the present indicative forms of *pacāre* > *pagar* 'to pay' did not result in suppletion (see Table 2; shaded cells indicate cases in which non-phonological factors played a role).

(2) The results of regular sound change: PAY and SAY in Latin and Spanish

	PAY		SAY	
	Latin	Spanish	Latin	Spanish
1s	'pa:ko:	'pago	'di:ko:	'digo
2s	'pa:ka:s	'pagas	'di:kis	'diθes
3s	'pa:kat	'paga	'di:kit	'diθe
1p	pa:'ka:mus	pa'gamos	'di:kimus	de'θimos
2p	pa:'katis	pa'gajs	'di:kitis	de'θis
3p	'pa:kant	'pagan	'di:kunt	'diθen

Similarly, what might be called 'irregular' sound change can also lead to suppletion, as in the case of English *say~says*, which displays an irregular vocalic development in the third singular. Given the high frequency of this lexeme (as compared to *pay~pays*, for example), it is likely that this type of change reflects the same process found reduction commonly associated with grammaticalization (cf. Hopper & Traugott 1993, among others). In both cases, elements appropriate to frequent use in discourse appear in relatively weak prosodic positions, which leads to phonological reduction.

(3) The results of 'irregular' sound change: PAY and SAY in English

	PAY	SAY
base	pɛj	sɛj
3s	pɛjz	sɛz

3.1.2. Analogy

In addition to sound change, analogy can also lead to suppletion. This has happened in the case of the Galician imperfect indicative of the verb *ir* 'to go', which has variant forms resulting from analogy between this verb and the semantically related *vir* 'to come'. The following proportion can be set up using the infinitive and the first person singular imperfect indicative:

(4) Analogy in the Galician imperfect indicative of *ir* 'to go'

infinitive	impf. 1s	infinitive	impf. 1s		
<i>vir</i>	: <i>vija</i>	:: <i>ir</i>	: X,	X=	<i>ija</i>
'to come'	'I used to come'	'to go'			'I used to go'

In this case, a number of regular sound changes reduced the difference between the infinitives of these two verbs: /we'ni:re/ > /vir/ 'to come' and /i:re/ > /ir/ 'to go'. Regular sound change led to distinct imperfects, however: /weniam/ > /vija/ 'I used to come', /i:bam/ > /iba/ 'I used to go'. Thus, the nasal is etymologically appropriate in *vir* 'to come', where the regular sound changes of Galician (and Portuguese) resulted in the loss of intervocalic /-n-/ but not of /-ŋ-/, which comes from the loss of hiatus between a front vowel followed by a back vowel in the present and imperfect; a similar development occurred in *ser* 'to be' under influence of *ter* 'to have'.

This example of analogy differs from more canonical cases such as Eng. *dream~dreamt* → *dream~dreamed*, in which an irregularity is eliminated. In the Galician case, the analogy effectively increases the irregularity of *ir* 'to go'; another parallel can be in non-standard *bring~brang~brung* in English, where a verb which fell into none of the inflectional subpatterns of the language enters one (cf. *sing, ring*).

3.1.3. Contamination

Closely related to analogy is **contamination**, the phonological alteration of a form to more closely resemble another, usually semantically related, form; it can be thought of as a form of non-proportional analogy. Well-known examples include the Germanic words for 'four', all of which have /f/ under the influence of the word for 'five' but should have reflexes of /*k*/, which shows up in Latin *quattuor* (cf. Eng. *what*, Lat. *quod*); likewise Russian *devjat'* 'nine' has been affected by *desjat'* 'ten', with replacement of /n/ with /d/ (cf. Eng. *nine*; see Anttila 1972:76, 91).

Like analogy, contamination can lead to weak suppletion in verbal paradigms. For example, in the Campidanese variety of Sardinian, the verb *andai* 'to go' has *andu* 'I go' alongside the variant *bandu*, in which the initial /b/ reflects the influence of forms coming from Latin *vādere* 'to go'. For reasons explored below (§5.2), this contamination occurred only in the singular and the third person plural. Another example in Romance is Galician *estar* 'to be', which, under the influence of *ser* 'to be', shows contamination effects resulting in instances of non-etymological -ŋ- in

patterns similar to those induced by analogy between *ter* 'to have' and *ser* 'to be' (see 3.1.2 above).

Given that analogy and contamination deal with the interaction between morphological and phonological patterns, one would predict that this type of change would not lead to suppletion in which the forms share no phonological material. That is, suppletion induced by analogy or contamination is only of the weak type, not of the strong type, to which I now turn.

3.2. Strong suppletion

Unlike analogy and contamination, sound change can lead to either weak or strong suppletion. Meanwhile the other source of strong suppletion, incursion, does not appear to induce weak suppletion (though in principle it could). Synchronically, strong suppletion falls into two basic types, which I call overlapping and non-overlapping. **Overlapping suppletion** is a situation in which forms of one lexeme also belong to a suppletive relationship with forms of another lexeme. The Ibero-Romance preterit forms of *ser* 'to be' and *ir* 'to go' display this type of suppletion; in this case the forms in question are in a suppletive relationship with forms in both paradigms, though this is not always the case (in Catalan, e.g., the form *estat* is a regular participle of *estar* 'to be' and is also a suppletive participle of the other copula (*és*)*ser*). **Non-overlapping suppletion** does not involve such sharing of forms across lexemes and is by far the more widespread of the two types; among the numerous examples are the forms of the English verb *to be*.

3.2.1. Sound change

With suppletion induced by sound change the difference between weak and strong outcomes is essentially one of degree in that over long periods of time, series of sound changes (it does not appear to matter whether it is regular or 'irregular') can result in a chain of development from a regular paradigm to a weakly suppletive one and ultimately to a strongly suppletive one. An example of strong suppletion induced by sound change is found in the English verb *to be*, in which Proto-Indo-European **esmi*, **esti* yielded *am* /æm/, *is* /ɪz/.

3.2.2. Incursion

The main source of strong suppletion in inflectional verbal paradigms, however, is **incursion**, or the incorporation of forms from one lexeme into another, historically separate, lexeme. There are three types of paradigms to which this happens: defective, suppletive, and regular. **Defective** paradigms are paradigms missing an expected element. In these cases it is perhaps misleading to refer to the incorporation of forms from other lexemes as incursion, since no form is actually being replaced; nevertheless, it captures the similarity to other situations and the contrast with other possible processes, such as analogy. An example of a formerly defective paradigm which has undergone incursion is the non-overlapping case of *to be*, which actually includes forms from two previously separate defective paradigms centered on the PIE roots **es-* 'be' (*am*, *is*, *are*) and **bheu-/*bhū-* 'become' (*be*, *been*) (*was*, *were* are from a third root **wes-* 'live, dwell'; see Buck 1949:635-636).

In the case of previously suppletive paradigms, incursion tends to change the phonological substance of the allomorphy but leaves the suppletive pattern intact. This happened when the Old English pattern *go-erode* gave way to *go-went*, as well as in verbs meaning GO in various Romance varieties, as I discuss below.

Finally, incursion can also affect regular paradigms, as in the case of Italian *andare* 'to go', which, like most Romance verbs meaning GO, also has reflexes of

Lat. *vādere* 'to wander'; the case of French *aller* 'to go' is similar, but here there is also incursion by forms from *īre* 'to go' (in the future and the conditional).

In most Romance languages, the verb meaning GO displays both weak and strong suppletion resulting from a combination of all of these factors (Table 5). Before looking at the details, let us consider some possible motivations for these developments.

(5) Selected forms of GO in Iberian Romance and Latin

	Ptg	Gl	Sp	Ct	Latin	additional etyma
pr inf	ir	ir	ir	ə'na	'i:re	*an'da:re
1s pr i	vow	vow	boj	batʃ	'eo:	'wa:do: / *'wa:deo:
3s pr i	vaj	vaj	ba	ba	it	'wa:dit
1p pr i	'vamos	'imos	'bamos	ə'nem	'i:mus	'wa:dimus / *an'da:mus
2p pr i	'ides	'i(de)s	bajs	ə'new	'i:tis	'wa:ditis / *an'da:tis
3s pr sb	va	va	baja	'baʒi	'eat	'wa:dat / *'wadeat
2p pr sb	'vades	'vajades	ba'jajs	'baʒiw	e'atis	wa'da:tis / *wa:de'atis
1s imp i	'ia	'iɲa / 'i(b)a	'iba	ə'nabə	'i:bam	*an'da:bam
1s fut i	irej	i'rej	i're	(ən)i're	'i:bo:	'i:re 'abeo: / *an'da:re 'abeo: ²
1s pret	fwi	fun	fwi	ə'ni	'ii: / 'i:wi:	'fui: / *an'da:wi:

4. Motivation

In the search for insight into these developments, I first separate cases induced by sound change from those brought about by analogy or incursion. Sound change operates blindly; whether the result is suppletion depends on phonological pattern. With analogy and incursion, however, the processes do not apply in all possible cases. In this section, I examine some possible motivations for the application of these phenomena.

4.1. Lack of phonetic substance

The replacement of reflexes of Latin *īre* 'to go' has been attributed to a lack of phonetic substance; for example, Lathrop suggests (1980:130):

The Classical Latin infinitive *īre* was continued (Sp. *ir*), but none of its present tense conjugation has survived to modern Spanish; most of its forms would have been too short or too confusing: CL *ego eō* ['I go'—MLJ] would have developed to to [sic] Sp. *yo yo*, for example. *Imos* (from CL *īmus*) and *ides* (from CL *ītis*) were the only forms of *īre* that were retained in Old Spanish.

This explanation suffers from a number of flaws, the first of which is that it depends on the elimination of forms on the basis of avoiding the results of subsequent regular sound changes. (He offers no evidence that such forms survived into Romance and then were eliminated.) Lathrop provides no concrete evidence that this is an operating factor in language change, and sound change frequently results in homophonous and otherwise potentially 'troublesome' forms. Second, he invokes a notion of minimal length without offering any criteria for determining whether a form would be 'long enough' or not.

A discussion avoiding some of these problems is that of Maiden (1995:135), in which he remarks on the replacement in Italian of the singular and third plural present indicative forms of Lt *īre* with forms of *vādere*:

The reason for this pattern of replacement is unclear; it is possible that the relative 'insubstantiality' of the phonetically regular outcomes of the relevant forms of IRE...might have favoured replacement by a phonetically more 'substantial' form. But monosyllabic roots are not inherently intolerable, as is shown by *ho* 'I have', *hai* ['you have'—MLJ], *ha* ['he/she/it has'—MLJ], *è* 'he is', *dà* 'he gives', etc.³

I argue below that considerations of phonological substance may play a supporting role in these developments, but they certainly cannot account for all the data.

4.2. Functional considerations

The conditions under which analogy and incursion occur depend in part on semantic and functional/contextual factors as well as on morphological relatedness. As an example, consider Latin *esse* 'to be', which was defective in that it did not have a past participle. The defective character of this verb arose as a result of the development of a change in the distribution and function of certain forms. The Indo-European deverbal adjective in **-to-* was originally a perfective form associated only with some verbs; for many verbs, especially stative verbs, no such form existed. In time, however, these were incorporated into the verbal system as past participles which were used in forming the periphrastic perfect. With the development of new contexts in which a past participle of *esse* was needed, speakers were presented with at least two options to 'fill the gap': create a form analogically or 'borrow' a form from another lexeme.

If the form of parts of the existing paradigm are conducive to setting up an analogy, this is a viable option, as occurred with Spanish/Portuguese *ser* 'to be', which has an analogically-created participle *sido*. Another possibility, however, is to incorporate into the paradigm a pre-existing form that is semantically appropriate. With a copula, for example, a verb meaning STAND might provide a past participle. Such a participle is used primarily in the perfect, and, given that having stood in a place entails having been there, it is not surprising to discover that French, Italian, and Catalan have all incorporated reflexes of *status*, the past participle of STAND, into their paradigms for BE (*été, stato, estat*). It is worth noting that these developments need not be teleological, though they are motivated.

An important consideration here is a form's degree of autonomy, which Bybee correlates with the likelihood that a form has a separate lexical representation (1985:57). A high degree of autonomy is required for lexical split, which can in turn allow an inflected form to become part of another paradigm. Bybee's principle criteria for autonomy are high frequency, phonological distance from the basic form, and semantic separation between the form in question and the basic form (Bybee 1985:88). What appears to happen in incursion, then, is that autonomous forms used in different but related contexts are brought together as a paradigm.

5. A case study: GO in Romance

To explore the interaction of these factors, let us now look in detail at GO verbs in Romance, especially Ibero-Romance, which displays the overlapping suppletion between BE and GO described earlier. I first examine a proposed explanation for this pattern (§5.1), then offer additional background (§5.2) before offering another solution (§5.3).

5.1. Previous research

As stated earlier, in the Ibero-Romance verbs *ir* 'to go' and *ser* 'to be' there is complete overlap in the preterit, imperfect and future subjunctive, and the synthetic pluperfect. Leaving aside for the moment why the relevant forms of *īre* were replaced, I will start with the issue of why the source verb was BE. Lathrop (1984:191) attributes the selection of BE to a change in a system of resultative/non-resultative verb pairs conditioned by the loss of the verb *fieri* 'to become'. He claims that there was an aspectual opposition between resultative and non-resultative verbs which had the same forms in the perfect; he cites the verbs *sīdō/sedeō* 'to sit down/to sit', *sistō/stō* 'to stand (tr)/to stand (intr)', *fīō/sum* 'to become/to be', and *calescō/caleō* 'to grow warm/to be warm'.

His argument is as follows:

When *fieri* is lost in the Romance languages, it appears that *eō* ('to go') and *sum* ('to be') become related as non-resultative/resultative. Thus, the perfect of both is *fuī*. We see that they functioned this way on the basis of the type of constructions: ['it came into my mind' / 'it is in my mind — it is into my mind'] (my translation).

This explanation has two problems. First, two of the four pairs of perfects mentioned—*sistō/stō* and *fīō/sum*—do not have identical perfects, while another does so only optionally (Table 6). Furthermore, the Latin example offered (with no source citation) does little to support the claim, as the forms of BE are in the present tense and the motion verb cited is COME, not GO.

(6) The presents and perfects of Latin 'resultative/non-resultative' pairs

	seat oneself	sit	stand (tr.)	stand (intr.)	become	be	grow warm	be warm
1s pr in	sīdō	sedeō	sistō	stō	fīō	sum	calescō	caleō
1s pf in	sīdī, sēdī	sēdī	stiī	stefī	factus sum	fūī	calūī	calūī

The original version of the same work offers a much more satisfying account in which Lathrop claims that the reason that *esse* 'to be' was the verb which provided the forms of the perfect (and related categories, which he does not mention) is that there was in popular Latin usage a pattern whereby

the perfect of *esse* could be used with in + accusative to mean 'went':

Pretores in provinciam...furerunt.

'The officers went into the province.'

in Mediam fui saepius...

'I went more often to Media...' (Lathrop 1980:147).

Lathrop remarks that there is a parallel in French with the '(frowned upon but common) *j'ai été au théâtre* for the more standard *je suis allé(e) au théâtre* "I went to the theatre"' (Lathrop 1980:148), as there is in English, as in *We've been to France twice*. Lathrop fails to explain why it is that this usage of BE to express motion is restricted to the categories where it is found. To understand the distribution of BE forms in GO paradigms, I will first examine motivations for the suppletive patterns elsewhere in Romance GO verbs.

5.2. Non-overlapping suppletion: WALK, GO AROUND, and GO

At least seven distinct Latin lexemes are the sources of the modern forms: *īre* 'to go', **allāre* 'to walk', **andāre* 'to go around', *vādere*/**vādēre* 'to go', *meāre* 'to go, to pass', *venīre* 'to come', and *esse* 'to be'. As many as four of these contribute to the paradigms in a given language (French). Verbs meaning COME and BE appear only in overlapping suppletion in GO paradigms. Intuitively it is clear that in some way these meanings are more different from GO than the others are; I argue in the next section that this semantic distance is a necessary factor in the development of overlapping suppletion (further research is required to determine exactly how to judge semantic distance). The others, on the other hand, participate only in non-overlapping suppletion. In this section I examine the reasons for the patterns of suppletion that they show.

A number of recurrent patterns call for explanation. First, in the present tense, a number of Romance languages have one stem for the first and second person plural forms and another for the singular and third person plural. This appears to reflect the development of a type of subparadigm which separates the first and second plural from the other forms. This is largely the result of the phonemicization of the stress in the development of the Romance languages. In Classical Latin, stress fell on the penult if it was heavy (i.e. had a long vowel, diphthong, or a coda consonant); otherwise stress was antepenultimate. A number of sound changes—most importantly the loss of phonemic vowel length—resulted in the phonemicization of stress; in Spanish, for example, *hablo* ['aβlo] is 'I speak', while *habló* [a'βlo] means 'he/she/it spoke'. In the present tense, these changes set the first and second person plural apart from the other forms in that the former had ending stress and the latter had stem stress (cf. Haiman & Benincà 1992:83).

This appears to correlate directly with the distribution of the so-called inchoative augment, which is found in most non-Ibero-Romance languages and typically appears only in the singular and third person plural; this results in stress on the first syllable after the stem (e.g., Ct *conduexo~conduim* 'I drive~we drive'). It does not appear to be a coincidence that this is the same as the common pattern of stem suppletion in the GO verb whereby forms from *vādere* are used in the singular and third person plural, with forms from various other stems used for the first and second person plural. (These two use the same stem as each other, however, except when secondary factors come into play, as described below; cf. 7).

(7) Stress in the Catalan present indicative

	SING	GO
1s	'kanto	'batʃ
2s	'kantas	'bas
3s	'kanta	'ba
1p	kan'tem	a'nem
2p	kan'tew	a'new
3p	'kantan	'ban

Strikingly, these two forms—first and second person plural—are also the ones which typically have forms coming from stems other than *vādere*; the forms are reflexes of **andāre* in Italian and Catalan; **allāre* in French and some Rhaeto-Romance varieties; *īre* in Old Spanish, Old Portuguese, Galician, and some Rhaeto-Romance varieties; and *meāre* in Surselvan (Swiss Rhaeto-Romance). It appears,

then, that the phonemicization of stress in Romance led to a perceived distinction between the first and second person plural on the one hand and the singular and third person plural on the other. This, in combination with the comparative lack of a paradigm consisting of forms of *vādere* in the singular and the third person plural and forms of *īre* in the first and second person plural (Table 8).

(8) The present indicative of GO in early Romance

1s *wado:

2s *was

3s *wa

1p ***imus**

2p ***itis**

3p *wan

Subsequently, a number of languages (Italian, French, several Rhaeto-Romance varieties, Sardinian, Catalan) replaced the reflexes of *īre*, thus preserving the pattern of suppletion. Importantly, all of the stems involved have meanings very close to that of *īre* 'to go': *vādere* 'to go', *meāre* 'to go, to pass', **andāre* 'to go around, to walk', **allāre* 'to walk' (note that in Ibero-Romance *andar* 'to walk' is a completely separate lexical verb). Thus the phonemicization of stress can be said to lead to the 'accidental' development of a subparadigm (in fact, there is evidence that such a subparadigm may have played a role in the development of the Catalan periphrastic preterit; see Juge 1999 [forthcoming]).

5.3. Overlapping suppletion: BE, COME, and GO

Cases of overlapping suppletion in Romance verbs meaning GO are restricted to interactions between GO and COME and between GO and BE.

5.3.1. COME and GO

In Swiss varieties of Rhaeto-Romance other than Surselvan, the first person present indicative of GO is the same as that of COME (Surmeiran /vij/, Puter/Vallader /vep/ < Lt *veniō*). This state of affairs is easy to understand given the deictic value of COME. Prototypically, of course, the understood direction of motion is toward the speaker; when the form is first person, however, the meaning is typically not that the speaker is moving closer to his or her current location. Rather the deictic center is effectively projected to the speaker's intended destination. This happens in English, for example, when a person responds to being called by saying (*I'm*) *coming*. Of course the formal elimination of the COME/GO deictic distinction, even if limited to the present indicative as in this case, also results in the loss of a simple way to express this difference in cases such as habitual or historic present uses and thus appears to run counter to functional considerations in the traditional sense.

5.3.2. BE and GO

To understand the distribution of the forms of GO coming from BE, a brief discussion of the history of the Latin perfect is in order. A conflation of the categories of aorist and perfect, the Latin perfect had both a preterit (perfective past) reading ('I went') and a present perfect reading ('I have gone'). In most of the modern Romance languages, these forms retain only the preterit meaning, though the Portuguese reflex still has perfect-type uses (as does the somewhat restricted

synthetic pluperfect; cf. Parkinson 1988:150, Nitti 1974:xiii). The tense/aspect considerations also support this, as this change is best motivated in a system in which the forms in question have perfect readings. This is so because of the connection which exists between going to a place and being in one. Having gone to a place entails having been there, but while the converse is not necessarily true (one may have spent one's entire life in the same place without having gone there), it typically holds. This slight asymmetry seems to correlate with the fact that the influence was from BE to GO rather than vice versa; it may be that the relative 'insubstantiality' of the perfect of *īre* provided additional motivation for this change.

It is likely that the synthetic preterit, derived from the Latin perfect, still displayed distributional characteristics of a present perfect (just as the simple pluperfect in Portuguese still functions as a past perfect) when the substitution took place, because the closeness of the connection between 'I have gone (to a place)' and 'I have been (to a place)' is far greater than that between 'I went (to a place)' and 'I was (to a place)'; in fact, this is evident in the fact that in English the use of *to be* plus a prepositional phrase with *to* is quite common in the perfect tenses (as in *He's been to France many times*) but almost unheard of in the simple past (**He was to France last year*, but see below). Subsequent changes in the tense/aspect characteristics of the preterit and related forms have obscured the earlier motivation for this pattern of syncretism between BE and GO.

The most obvious of these obscuring changes is the loss in most Romance languages of the perfect reading of the preterit. The synchronic separation of the forms was increased by the fact that the modern Ibero-Romance locative copula is *estar*, not *ser*; this fact provides evidence for a relatively early date for the incorporation of these forms into the GO paradigm. Another relevant change concerns the imperfect subjunctive, historically from either the pluperfect indicative or the pluperfect subjunctive and synchronically built on the same stem as that of the preterit. In counterfactual sentences, the imperfect subjunctive is used when referring to unreal present scenarios, as in *Si fuera al mercado ahora mismo,...* 'If I were going to the store right now,' In such a case, there is no plausible way to interpret the form *fuera* as a form of *ser* 'to be'. Similarly, the future subjunctive (almost never used in modern Spanish, but still in use in Portuguese) uses the same stem as the preterit.

The semantic connection between the perfect of BE TO and GO TO is paralleled not only by English but also by modern French, as below.

9 French Elles ont ét-ées au théâtre
 They.f have.3p be-ppcpl.fp to the.m theater.m
 'They went/have gone/have been to the theater.'

This connection, however, is by no means universal; in Norwegian, for example, *å være* 'to be' collocates with *i* 'in', while *til* 'to' is used with *å gå* 'to go' and other motion verbs:

10 Norwegian Vi har aldri vær-t i/*til Norge
 We have-p never be-ppcpl in/to Norway
 'We have never been in/*to Norway.'

Another area of potential overlap concerns the common connection between GO and BE in evaluation; the questions *how did it go?* and *how was it?* are equally

appropriate for inquiring about a past event, such as a presentation, for example. This is a widespread pattern cross-linguistically and may have contributed to the incursion of forms of BE into the paradigm of GO.

5.3.3. Cross-paradigmatic relationships

As mentioned above, the overlap between GO and BE is not limited to the preterit, where it is semantically motivated, but is also found in the imperfect subjunctive, synthetic pluperfect indicative, and future subjunctive; in these cases there is no clear semantic motivation. There is, however, an important morphological connection among these forms. These are all built on the stem of the third person plural of the preterit (cf. Table 11; these related forms are bolded). This is perhaps the most consistent generalization that can be made with respect to relationships across paradigms; even the most irregular of verbs in Ibero-Romance display this pattern.

(11) Selected third person plural forms in Spanish

	<i>ser</i> 'to be'	<i>ir</i> 'to go'	<i>de'θir</i> 'to say'
present indicative	son	ban	'diθen
imperfect indicative	'eran	'iban	de'θian
preterit (indicative)	'fweron	'fweron	di'xeron
future indicative	se'ran	i'ran	di'ran
present subjunctive	'sean	'bajan	'digan
imperfect subjunctive	'fweran	'fweran	di'xeran
future subjunctive	'fweren	'fweren	di'xeren

6. Conclusions

Using the development of verbs meaning GO in the Romance languages as a case study, I have examined the development of suppletion in verbal paradigms. I have argued that the traditional explanation for a syncretism in the preterit between *ir* 'to go' and *ser* 'to be' placed excessive emphasis on the notion of lack of adequate phonetic substance, though this consideration appears to play a role in some cases. Suppletion can arise out of the conventionalization of patterns of use of synonymous verbs but also can result from specific tense/aspect connections between less semantically close verbs; this can in turn lead to overlapping suppletion, which seems to typically exist between verbs with a relatively high degree of semantic distance. The patterns examined show that synchronic morphological relations also play a role in determining which parts of a paradigm undergo replacement by forms derived from a given root even though prediction of these patterns is not strictly possible. I have also illustrated that cross-paradigmatic analogy can result in weak suppletion and that this kind of analogical change seems at odds with most instances of analogy in that it increases idiosyncrasy without appreciably increasing the distribution of patterns in the language. Finally, I have pointed out that suppletion of the kind examined here raises a number of issues for further investigation in both diachronic and synchronic morphology.

Notes

* I would like to thank the members of the UC Berkeley Fall 1997 Analogy Seminar for providing input on an oral presentation of this work. Andrew Dolbey, Andrew Garrett, and Gunnar Ól. Hansson were especially helpful in our discussions of this material. They do not necessarily agree with the analysis presented herein and any shortcomings are strictly my responsibility. Please

direct comments on this paper to the author, Department of Linguistics, UC Berkeley, Berkeley, CA 94720.

¹ In this paper I focus on stem suppletion rather than affixal suppletion of the type found in the English forms *boxes* and *oxen*, where /əz/ and /ən/ are suppletive exponents of the plural. I am also not addressing suppletion across derivational paradigms.

² The synthetic Romance future comes from a periphrastic construction consisting of the present infinitive plus forms of the verb *habēre* 'to have'.

³ As in my own citations, forms are presented in standard orthography; <h> corresponds to phonetic zero.

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