

Markedness can't explain replacement patterns in suppletive paradigms

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Abstract. Claims that markedness influences morphological change do not fit attested patterns of suppletive replacement in verb paradigms. Examination of all suppletion types and sources reveals that markedness considerations are weaker predictors of suppletion patterns than interparadigmatic relationships, intraparadigmatic relationships, and semantic connections.

Keywords. aligned overlapping suppletion; markedness; semantic distance; template; implicature; analogy; Romance; Uralic

1. Introduction. Suppletion has long posed challenges for theories of morphology, both synchronically and diachronically. In this paper I examine the applicability of markedness to this phenomenon and conclude that this approach does little to clarify the development and distribution of suppletive forms. Instead, as data from Germanic, Romance, and Uralic show, proper evaluation of the sources of suppletion—including semantic, phonological, analogical, and pragmatic considerations—and suppletion types—including such factors as overlap and optionality—contribute more to understanding suppletion than markedness does.

Markedness is a concept that is notoriously fraught with difficulty. Haspelmath presents twelve different senses found in the literature along with numerous problems with the concept and its application, especially as an explanatory idea (2006: 62). Hale & Reiss (2000) argue that it may even be epiphenomenal. This paper focuses specifically on how markedness relates to suppletion.

Here I focus mostly on suppletion in verbs in Romance (Indo-European) and Hungarian (Uralic). Catalan provides a clear example of one common view of markedness, where the Present Indicative of the verb *dormir* ‘sleep’ has five forms with suffixal person/number marking and one form—third person singular—with no marking at all. This type of situation supports the view that third person is less marked than the other persons and that singular is less marked than plural. For such statements to be valid generalizations, they must be evaluated against properly analyzed cross-linguistic data.

1	dormo	dormim
2	dorms	dormiu
3	dorm	dormen
	SG	PL

Table 1. The Present Indicative of Catalan *dormir* ‘sleep’

2. Types and sources of suppletion. To evaluate whether markedness shapes the development of suppletion, we must identify and distinguish as clearly as possible the other factors involved in the growth of suppletive paradigms. This process involves two components characterized by substantial variation and riddled with confusion due in large part to the failure to consistently distinguish suppletion as a synchronic set of relationships and the creation and modification of suppletive paradigms as a set of diachronic processes. First, there are many more types of

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suppletion than are usually recognized. Second, traditional accounts recognize far fewer sources of suppletion than there are. As such, it is possible that multiple interactions between suppletion and markedness are at play. To contextualize these factors, this section provides a brief review of the types and sources of suppletion. For more details see Juge (1999, 2013, 2019).

2.1. TYPES OF SUPPLETION. The key criteria that distinguish suppletive types (which are mostly addressed in Corbett 2007) are overlap (with optionality and alignment as further factors), strong/weak (degree to which stems share phonological material), and inflectional category (tense, mood, person, etc.). A full account of the relationship between markedness and suppletion must treat all these types, not just an undifferentiated or idealized notion of suppletion.

2.1.1. NON-OVERLAPPING SUPPLETION. The type of suppletion that is probably most familiar is the type illustrated by the English word *go*, where the Past tense form *went* is unique to this verb, i.e., it does not also belong to any other verb. This situation is non-overlapping suppletion, the type of suppletion that characterizes the most well-known instances.

2.1.2. OVERLAPPING SUPPLETION. As the name implies, overlapping suppletion is the situation in which one or more forms belong to two or more lexemes. In Ibero-Romance, for example, the verbs *ir* ‘go’ and *ser* ‘be’ share several parts of their paradigms (Table 2).

	<i>ir</i> ‘go’		<i>ser</i> ‘be’		<i>ir</i> ‘go’/ <i>ser</i> ‘be’			
	Indicative		Indicative		Indicative		Subjunctive	
	Present	Imperfect	Present	Imperfect	Preterit	Pluperfect	Imperfect	Future
1SG	vou	ía	son	era	fun	fora	fose	for
2SG	vas	ías	es	eras	fuches	foras	foses	fores
3SG	vai	ía	e	era	foi	fora	fose	for
1PL	imos	íamos	somos	eramos	fomos	foramos	fósemos	formos
2PL	ides	iades	sodes	erades	fostes	forades	fósedes	fordes
3PL	van	ían	son	eran	foron	foran	fosen	foren

Table 2. Overlapping (bold) and non-overlapping suppletion in Galician

2.1.2.1. ALIGNMENT IN OVERLAPPING SUPPLETION. In the suppletive Ibero-Romance verbs just discussed, each of the shared forms belongs to the same part of the paradigm in the lexemes involved. For example, *fun* is the 1SG Preterit Indicative of both *ir* and of *ser*. Therefore these verbs exhibit aligned overlapping suppletion. The Hungarian copula and the verb *lesz* ‘become’ also have aligned overlapping suppletion in several areas: the Subjunctive, Infinitive, Present Participle, Future Participle, and Potential (Table 3; Rounds 2001: 285, 292). These two verbs also display a type of suppletion that appears not to have been documented until my analysis of it (2019b, preceded by conference presentations in 2017, 2018, 2019a), namely a set of forms that belong to one part of one verb’s paradigm and to another part of the other verb’s paradigm. In this instance, the forms of the Future of *van* are the same as those of the Present of *lesz*.

	<i>van</i> ‘be’				<i>lesz</i> ‘become’		
	Present	Past	Future	Subjunctive	Present	Past	Subjunctive
1SG	vagyok	voltam	leszek	legyek	leszek	lettem	legyek
2SG	vagy	voltál	leszel	légy ~ legyél	leszel	lettél	légy/legyél
3SG	van	volt	lesz	legyen	lesz	lett	legyen
1PL	vagyunk	voltunk	leszünk	legyünk	leszünk	lettünk	legyünk
2PL	vagytok	voltatok	lesztek	legyetek	lesztek	lettetek	legyetek
3PL	vannak	voltak	lesznek	legyenek	lesznek	lettek	legyenek

aligned suppletion

non-aligned suppletion

Table 3. Aligned and non-aligned overlapping suppletion in Hungarian

2.1.2.2. OPTIONAL OVERLAPPING SUPPLETION. The Hungarian data discussed in the previous section raise an important issue omitted previously, namely the fact that some instances of suppletion are optional. In this type, a lexeme shares forms with another but also has other (possibly regular or more weakly suppletive) forms not shared with another lexeme. Examples include the Catalan copula (Present Infinitive *ésser* ~ *ser* ‘be’ and Participle *sigut* ~ *estar*, the latter overlapping with *estar* ‘be’); the Participle of Catalan *matar* ‘kill’, *matat* ~ *mort* (overlapping with *morir* ‘die’); and the Participle of Portuguese *matar* ‘kill’, *matado* ~ *morto* (shared with *morir* ‘die’, which, like a number of Portuguese verbs, also has an alternate form, *morrido*). The Hungarian verbs just discussed also have optional overlapping suppletion in the Conditional forms (Table 4). No adequate survey of optional suppletion has yet been conducted, but it seems that the cases involving relatively strong suppletion are also instances of overlapping suppletion. For examples of alternations between regular and suppletive forms in imperatives and hortatives, see Veselinova (2013).

	<i>van</i> ‘be’		<i>lesz</i> ‘become’
1SG	volnék	~ lennék	lennék
2SG	volnál	~ lennél	lennél
3SG	volna	~ lenne	lenne
1PL	volnánk	~ lennénk	lennénk
2PL	volnátok	~ lennétek	lennétek
3PL	volnának	~ lennének	lennének

Table 4. Optional aligned overlapping suppletion in Hungarian

2.1.3. STRONG AND WEAK SUPPLETION. Traditional analyses commonly restrict discussions of suppletion to cases where stems in a given lexeme have no phonological material in common, as in English *go/went*. This approach is closely tied to the old assumption that the only true source of suppletion is incursion, the ‘invasion’ of forms of one lexeme into those of another. This reliance on etymology is not viable for many less-documented languages. In such cases, establishing the factors involved in suppletive developments relies on insights derived from correlations between synchronic types of suppletion and diachronic patterns. It is here that Mel’čuk’s oft-cited definition proves quite useful. He writes, “for the signs **X** and **Y** to be suppletive their semantic correlation should be maximally regular, while their formal correlation is maximally irregular” (1994: 358). The two key benefits of this formulation are that it treats suppletion as a synchronic phenomenon and that it recognizes its gradability. Previous analyses have tended to conflate the diachronic processes that lead to the synchronic distribution and the distribution itself. This error

stems in large part from the fact the instances that have been the easiest to analyze are those in Indo-European languages where etymological information about the stems involved has usually been readily available. As we shall see later, the strong/weak axis does not neatly correlate with prior characterizations of suppletion as true suppletion vs. pseudo-suppletion (cf. Rudes 1980), for example. By Mel’čuk’s definition, English *go/went* is an example of strong suppletion, while Latin *facere* ‘do, make’ (active)/*fieri* ‘do, make’ (passive) exemplifies weak suppletion since the stems share some phonological material, namely the initial /f/.

2.1.4. INFLECTIONAL CATEGORIES. Veselinova presents the wide array of lines along which suppletive splits can fall: non-categorical, tense, aspect, mood (especially imperative), verbal polarity, subject person/number, object person/number, voice, and honorific levels (2006: 58-61 with details in subsequent chapters).

2.2. SOURCES OF SUPPLETION. Suppletion has three main sources: glomeration (the ‘collision’ of forms of distinct lexemes), sound change, and analogy.

2.2.1. GLOMERATION. Glomeration includes the most widely recognized source of suppletion, incursion, where one or more forms of one lexeme ‘invade’ another etymologically distinct lexeme, as in the case of English *go/went*. Coalescence is the process by which two or more partial or defective paradigms come together and create a full paradigm. Lexical merger is the fusion of two or more lexemes into a single lexeme with the loss of some forms that previously belonged to the contributing lexemes. The French copula *être* illustrates this process, with the merger of Latin *esse* and *stāre*, which remained separate in most other Romance varieties (e.g., Catalan *ésser* and *estar*) (Figure 1). Distinguishing these three types from each other can be difficult depending on the availability of information about etymology and diachronic phonology.

	Indicative				Conditional	Subjunctive	
	Present	Imperfect	Passé Simple	Future		Present	Imperfect
1SG	suis	étais	fus	serai	serais	sois	fusse
Participles	Present	étant	Past	été			
Infinitive		être					

Figure 1. Non-overlapping suppletion in the French copula *être* as a result of lexical merger of *esse* and *stāre* (reflexes in bold)

While these processes are associated with strong suppletion, they can yield weak suppletion under certain circumstances. The weak suppletion of the aforementioned case of Latin *facere/fieri* ‘do, make’ arose when two stems, *dheh₁- ‘do, put’ and *bheu(h_x)- ‘be, become’ coalesced and the former underwent the regular sound change /*dh/ > /f/ in initial position (Clackson 2007).

Many discussions state or assume that the only scenarios that can legitimately be called suppletion are those created by glomeration, though its subtypes are rarely acknowledged. Corbett (2007), for example, recognizes this limitation, but he expands the scope of his study to include sound change as a source and leaves out analogy. Perhaps the most compelling reason for rejecting this criterion is that for many languages, there is insufficient etymological information to evaluate the status of the relevant lexemes. Imposing such a diachronic requirement on the analysis of synchronic patterns unduly eliminates many examples worthy of study.

Rudes discusses incipient suppletion via incursion in Romanian, where two verbs meaning ‘want’ overlap. He asserts that there are “[t]wo paths which the language may then follow”

(1980: 666, 673). The first is what happened with English *go* and *went*, where *wended* was created analogically. The second is the elimination of the other forms of the ‘donor’ verb, as in Romance verbs meaning ‘go’. These two paths exclude a case Rudes mentions immediately before this discussion, namely the overlapping suppletion of *ir* ‘go’ and *ser* ‘be’ in Ibero-Romance (Table 2). Rudes illustrates another instance of overlapping suppletion in a footnote without appearing to recognize it as such, namely 1SG Present Indicative forms of verbs meaning ‘go’ and ‘come’ in Rhaeto-Romance.

While Rudes does not explain what factors condition the paths that he proposes, I have shown (1999, 2013, 2019) that semantic distance correlates with whether the forms of distinct lexemes end up as members of separate verbs, optionally shared forms, or mandatorily shared forms. A key benefit to appealing to semantic distance in the examination of suppletion is that it is not an ad hoc ploy but rather an analytic tool needed elsewhere in linguistic research, e.g., in the development of deponency (see Good 2007: 224).

Specifically, the closer the lexical semantics of the contributing lexemes, the more likely they are to become forms in a single paradigm. Thus Romance lexemes glossed ‘go’, ‘rush’, ‘pass’, and ‘walk’ (Figure 5) have furnished forms mostly belonging to verbs with non-overlapping suppletion, while intransitive/causative pairs in Catalan and Portuguese show optional overlapping suppletion, and overlapping suppletion appears in Ibero-Romance ‘go’ and ‘be’ and in Hungarian ‘be’ and ‘become’ (Tables 3, 4).

Claims regarding possible markedness effects must be contextualized in improved understanding of how the various sources of suppletion interact with semantic factors, interparadigmatic and intraparadigmatic relationships, and frequency.

2.2.2. SOUND CHANGE. The long-standing perception of tension between sound change and regularity centers on the fact that phonological change can reduce the similarity among members of a paradigm or, to paraphrase Mel’čuk, can make their formal correlation less than maximally regular. For example, the regular stem /di:k-/ of Latin *dīcere* ‘say’ underwent sound changes that yielded the weakly suppletive stems <di-> /di-/ (Imperative, Future, Conditional), <dig-> /dig-/ (Present), <dic-> /dis-/ (Present Indicative), <dich-> /ditʃ-/ (Participle), and <dij-> /dix-/ (Preterit, Past Subjunctive) in Spanish (Ibero-Romance). In Surmeiran (Rhaeto-Romance), however, the initial /d/ has been lost in some forms, yielding strong person/number suppletion in the Present Indicative (Table 5; see the Appendix in Haiman & Benincà 1992). Similarly, some reflexes of the Indo-European copula exhibit strong suppletion created by sound change (e.g., English *am* ~ *is* < Proto-Indo-European **esmi* ~ **esti*). Meanwhile, the case of Latin *facere/fieri* ‘do, make (active/passive)’ mentioned in the previous section qualifies as weak suppletion rather than strong suppletion because of the otherwise unrelated merger of initial /*bh/ and /*dh/ in /f/.

	Spanish						Surmeiran	
INF	decir						dɛkr	
TENSE	Present		Future		Preterit		Present	
1	digo	decimos	diré	diremos	dije	dijimos	dej	ʒaɲ
2	dices	decís	dirás	diréis	dijiste	dijisteis	dejʃt	ʒets
3	dice	dicen	dirá	dirán	dijo	dijeron	dei	dejən
	SG	PL	SG	PL	SG	PL	SG	PL
PTCPL	dicho						ʒetʃ, dɛç, zɛt	

Table 5. Suppletion created by sound change in Spanish and Surmeiran

2.2.3. ANALOGY. Though commonly viewed as a regularizing force, analogy is also a source of suppletion. Because analogy in the relevant sense is tied to formal connections, it is to be expected that cases of suppletion created by analogy are instances of weak suppletion, as is the case in all known examples.

2.2.3.1. PROPORTIONAL (FOUR-PART) ANALOGY. This section provides a brief account of how four-part, or proportional, analogy led to suppletion in the Fisterran dialect of Galician (Ibero-Romance, Spain). In this variety, the Imperfect (past imperfective) Indicative of *ir* ‘go’ has a non-etymological palatal nasal as a result of analogical influence from another deictic motion verb, *vir* ‘come’ (Figure 2). The regular loss of intervocalic alveolar nasals in some forms and the palatalization of nasals before front glides in other forms led to an alternation in the Infinitive and the Imperfect Indicative stem in verbs like *vir* ‘come’ and *ter* ‘have’. This alternation was extended to *ir* despite its lack of etymological nasals (other than those in person/number suffixes). Thus the forms *iña*, *inas*, etc. replaced *ía*, *ías*, etc. For more see Juge (2013).

<u>Infinitive</u>	<u>Imperfect Indicative 1SG</u>	::	<u>Infinitive</u>	<u>Imperfect Indicative 1SG</u>
vir	vina		ir	X, X = iɲa
‘to come’	‘I used to come’		‘to go’	‘I used to go’

Figure 2. Suppletion in the Imperfect Indicative of *ir* ‘go’ in Galician

This development does not simply challenge the view of analogy as a source of regularization; it increased the irregularity of *ir* so much that it is the only Galician verb with a stem-final nasal in the Imperfect Indicative that has no stem-final nasals elsewhere in the paradigm.

Another familiar example is English *dove*, past tense of *dive*, under the influence of verbs like *drive* (Figure 3). Like the analogical creation of *iña*, *iñas*, etc. in Galician *ir*, this change yielded a verb with a unique alternation, as no other verb exhibits the /-ajC/ ~ /-owC/ ~ /-ajCd/ relation. This is one of Mel’čuk’s criteria for evaluating suppletion, though the application of this criterion often proves somewhat complicated (Juge 2019: 398-399)

drive : *drove* :: *dive* : X, X = *dove* (cf. *dived*)

Figure 3. Weak suppletion in the Past of *drive* in English

2.2.3.2. CONTAMINATION. This type of analogical change, whereby speakers transfer features of one lexeme to another, usually semantically related, lexeme, is also evident in Galician. Non-standard forms of the Present Subjunctive of the Galician copulas *ser* and *estar* show a stem-final palatal nasal under the influence of *ter* ‘have’ (Table 6; RAG 2005: 143).

gloss	INF	PRESENT SUBJUNCTIVE	
have	ter	teña	
be	ser	seña	sexa
be	estar	esteña	estea
		non-standard	standard

Table 6. Non-standard Present Subjunctive forms showing contamination in Galician

2.2.3.3. LEVELING. In the context of suppletive developments, leveling refers to the passive mechanism where elimination of alternations may leave behind a suppletive residue, e.g., English *house* ~ *houses* (Ronneberger-Sibold 1990).

2.2.4. TEMPLATES. Aski (1995) argues that templates guide person/number suppletive replacements in ‘go’ verbs in Italian, French, and Spanish. This proposal neither accounts for the data nor explains it, especially when the rest of the paradigm is analyzed and other Romance languages are considered (see Juge 2013 for more detail).

3. Marked and unmarked categories and values. While the example of markedness in the Present Indicative in Catalan is quite straightforward, many instances are much more complicated. First, the term refers to both categories and values within categories. For example, there appears to be a consensus that the category of subjunctive mood is marked compared to the indicative. Within the category of person, however, third person is widely seen as less marked than second person, but Maiden suggests that it is more marked than the other persons (2004: 159). The nature of suppletive patterns makes both of these types of markedness potentially important. Generally, the following rankings or hierarchies appear in the literature (Figure 4).

category	less marked	more marked	even more marked
person	third	first	second
tense	present	preterit	future
mood	present	subjunctive	

Figure 4. Commonly proposed markedness hierarchies

Among the difficulties in evaluating markedness include the fundamental question of whether it is an empirical matter open to description. Markedness can be evaluated only in the context of a particular system. Only in the simplest of cases, like that of the Catalan Present Indicative, can markedness be assessed in a relatively theory-neutral way.

Challenges to the concept of markedness and its application come from Hale & Reiss (2000), Maiden (2004), and Haspelmath, who states bluntly “that the term ‘markedness’ is superfluous, because some of the concepts that it denotes are not helpful, and others are better expressed by more straightforward, less ambiguous terms” (2006: 25).

4. Suppletion, autonomy, frequency, and markedness. This section addresses two concepts closely related to markedness and an evaluation of the relationship between suppletive forms and several allegedly marked verbal categories. Autonomy and frequency, which themselves share a strong connection, are often cited as factors affecting the development of suppletion and the distribution of suppletive forms. Bybee describes autonomy as “the extent to which a word is likely to be represented in the speaker’s lexicon as a whole and separate unit” (2007: 50). She identifies three factors that affect a word’s degree of autonomy: “semantic simplicity, morphophonemic regularity, and word frequency” (2007: 13).

Since, for Bybee at least, the concept of autonomy does not apply to morphemes or to categories, it cannot equate directly to most views of markedness. Similarly, frequency, a component of autonomy, is not the same as markedness, though frequency and markedness often correlate quite strongly in that forms and categories labeled unmarked tend to be quite frequent. Bybee characterizes suppletive developments in terms of a process of increased autonomy for forms before their entry into another paradigm. She claims, “Suppletion requires the splitting of paradigms” (2007: 171). The example she mentions in this context is English *went*, which fits her view of autonomy as a trait of individual words. Since she explicitly states that autonomy—and presumably therefore splitting—is not a feature of paradigms (2007: 50), applying this assertion to instances in which suppletion involves entire TAM categories faces challenges.

Romance copulas derive primarily from three Latin verbs: *esse* ‘be’, *stāre* ‘stand’, and *sedēre* ‘sit’ (in Ibero-Romance), with *fieri* ‘do, make (passive), become’ providing some forms in Romanian. The varied developments of these verbs suggest that Bybee’s view of paradigmatic splitting is inadequate. I will focus on *esse* and *stāre*, starting with an overview (Table 7) and then examining French more closely.

Spanish	separate lexemes	<i>ser</i> ‘be’, <i>estar</i> ‘be’
Portuguese	separate lexemes	<i>ser</i> ‘be’, <i>estar</i> ‘be’
Romanian	separate lexemes	<i>fi</i> ‘be’ <i>sta</i> ‘stay, stand’
French	non-overlapping	<i>être</i> ‘be’ (see Figure 1 and Table 8)
Italian	<i>overlapping</i>	PTCPL <i>stato</i> — <i>essere</i> ‘be’ and <i>stare</i> ‘be’
Catalan	optionally overlapping	PTCPL <i>sigut</i> — (<i>és</i>) <i>ser</i> ‘be’, <i>estat</i> — (<i>és</i>) <i>ser</i> and <i>estar</i> ‘be’

Table 7. Relationships among Romance reflexes of Latin *stāre* and *esse*

While Ibero-Romance and Romanian have kept these roots separate, French has merged them into a single suppletive lexeme. In Italian and Catalan the roots are linked in situations of overlapping suppletion, although in Catalan the shared form is optional. The alternate form, *sigut*, appears to reflect a blending of the older Present Subjunctive forms and the 1SG Present Indicative ending /-k/ found in dozens of common Catalan verbs (see Juge 2022 for creation of suppletion via the spread of this suffix).

Expanding on the earlier French example, however, shows that these two roots merged to create *être* (Table 8). An etymological analysis shows that only eight of the forms shown here come from *stāre*, which suggests that this root should be viewed as the suppletive or donor root. If so, it would be an instance of suppletion in the past tense, a supposedly marked category; other such cases are addressed in §4.2. Extending such an approach and recognizing the /f-/ forms as reflexes of a separate root (**bheu*(h_x)-; cf. §2.2.1) would increase the number of suppletive forms in marked categories. A synchronic analysis might suggest that all the /e-/ forms, including 2SG and 2PL, belong to the same stem, thus increasing the number of suppletive forms in marked categories.

		non-past				past			
		Present		Future		Imperfect		Historic	
IND		suis	sommes	serai	serons	étais	étions	fus	fûmes
		es	êtes	seras	serez	étais	étiez	fus	fûtes
		est	sont	sera	seront	était	étaient	fut	furent
SUBJ		sois	soyons			fusse	fussions		
		sois	soyez			fusses	fussiez		
		soit	soient			fût	fussent		
COND		serais	serions						
		serais	seriez						
		serait	seraient						
INF		être							
PRES PTCPL		étant							
PAST PTCPL		été							

< esse

< stāre

Table 8. Distribution of suppletive roots in the French copula

Veselinova aims to synthesize the relationship between autonomy and suppletion by claiming, “The autonomous forms in suppletive paradigms are always those which are cross-linguistically unmarked with regular verbs” (2006: 57). Like many categorical statements, this one requires little scrutiny to fall short of the mark, despite a helpful chart indicating which parts of the verb paradigms feature suppletive forms in the 94 languages of her smaller sample. Even among the examples discussed here, however, many falsify this characterization, so I will examine to what degree it applies, if at all. I discuss apparent contradictions of the claim regarding person in §4.1 and tense in §4.2.

4.1. THE PERSON HIERARCHY. Patterns of suppletion in at least four Rhaeto-Romance varieties spoken in Switzerland—Surselvan, Surmeiran, Puter, and Vallader—contradict Veselinova’s claim. In these languages, the 1SG Present Indicative reflects incursion by another verb: forms of Latin *meāre* ‘pass’ in Surselvan and reflexes of Latin *venīre* ‘come’ in the other three (/nɛkr/ in Surmeiran, /ɲir/ in Puter and Vallader) (Table 9). In both situations, the verb glossed as ‘go’ shows suppletive replacement in the 1SG but not in the 3SG (Thöni 1969; Figure 5). This appears to contradict the common view that third person is the least marked person (cf. Greenberg 1966). Although the reason for the incursion in Surselvan has not yet been established, the explanation for the Surmeiran, Puter, and Vallader data comes from the semantics of the verbs *eir/ir/ir* and *neir/gnir/gnir*. The semantic relationship between ‘go’ and ‘come’ is strongest in the first person (Juge 1999: 191). Thus, semantic factors account for the distribution of these forms, while the predictions based on markedness do not. Maiden likens appealing to markedness to account for suppletive patterns to painting “a deceptive veneer” over the suppletion’s true nature (2004: 239).

	Surselvan		Surmeiran			
INF	<i>ir</i> ‘go’		<i>ɛkr</i> ‘go’		<i>nɛkr</i> ‘come’	
1	mɔn	mejn	vɨɲ	ɲaɲ	vɨɲ	nɨɲ
2	vas	mejs	vast	ɲets	vɨɲst	nɨts
3	va	van	vɔ	vɔn	vɨɲ	vɨɲɔn
	SG	PL	SG	PL	SG	PL

Table 9. Present Indicative suppletion in Rhaeto-Romance

As Figure 5 shows, the Rhaeto-Romance languages show extensive suppletion in parts of the paradigm that are supposedly more marked. The distribution of forms seems to result from two incursion events in each of the languages involved. First, forms of *vādere* ‘go, rush’ replaced some forms derived from *īre* ‘go’. Then, in Surselvan, reflexes of *meāre* replaced some forms of both of those verbs.¹ Several of these replacements challenge previous views on how suppletion develops.

¹ Like French *aller*, Italian *andare*, and some other forms in Romance verbs meaning ‘go’, the etymology here is unclear. The preponderance of the forms seem to suggest *meāre* ‘pass’ (cf. English *permeate*) as the etymon.

		Romansh (Switzerland)				Italy	
		Engadine				Ladin	
		Surselvan	Surmeiran	Puter	Vallader	Gardena	Badiot
INF		GO					
PRES IND	1SG	PASS	COME				
	2SG						
	3SG	RUSH					
	1PL						
	2PL	PASS					
	3PL						
IMPT	SG						
	PL						
PRES SBJ		PASS	GO				RUSH
IMPF IND							
IMPF SBJ							
PAST PFV							
GER		PASS					
PTCPL							

Figure 5. Suppletion in Rhaeto-Romance (Romansh and Ladin) motion verbs (< Latin *īre* ‘go’, *meāre* ‘pass’, *vādere* ‘rush’, and *venīre* ‘come’)

First, the replacement of the 1SG in the Present Indicative by /mɔ̃n/ ~ /'mɔ̃ndəl/ in Surselvan and reflexes of *veniō* ‘I come’ (Present Active Indicative) in Surmeiran (/viŋ/) and Puter and Vallader (/vɛŋ/) contradicts the nearly universally accepted view that third person is the least marked person value. The factor that accounts for this pattern is not markedness, but rather the relationship between lexical semantics and deixis. As I have argued previously (1999), the overlapping suppletion in Surmeiran, Puter, and Vallader reflects the tendency for deictic distinctions to be neutralized in the 1SG. Linking the overlapping suppletion with ‘go’ and ‘come’ in these varieties to a pattern found elsewhere in data from these and other languages makes it possible to identify the motivation for the change involved without relying on such a questionable concept as markedness. As a point of speculation, it may be that Surselvan underwent the same replacement of the 1SG by a form meaning ‘come’ and that the Present Indicative forms not from *vādere* were all replaced by reflexes of *meāre*. If this is true, then the semantics of the incursion would fit better with known patterns. In either case, the presence of a suppletive form in the 1SG but not the 3SG violates Veselinova’s claim.

English also challenges the view that 3SG is the least marked person/number combination in that most verbs have only one Present Indicative form is different from the others, namely the 3SG. Indeed, some verbs (mostly ending in /-t/) like *cut* have only two marked forms, 3SG Present (Indicative) and Present Participle/Gerund.

Pomino & Remberger raise concerns about the 1PL and 2PL forms: “the typological literature is quite clear that, in verbal forms, 2 is more marked than 1” (2019 : 492). But it precisely in this form that we see the sole reflex of Latin *īre* in the Present Indicative of Portuguese *ir* ‘go’ (Table 10). Galician differs here in that the 1PL is also from *īre* (Table 2).

1	vou	vamos
2	vais	ides
3	vai	vão
	SG	PL

Table 10. Reflexes of Latin *vādere* and *īre* (in bold) in the Portuguese Present Indicative

4.2. MARKED TENSES. The Ibero-Romance data showing overlapping suppletion in Table 2 show suppletion in the marked categories of Past (Preterit Indicative: *fun*, etc.) and Subjunctive (Imperfect Subjunctive: *fose*, etc. and Future: *for*, etc.). Furthermore, these data illustrate the difficulties inherent in analyzing suppletion in that its history and its current components might lead to rather different conclusions about the relationships among the forms. Because Galician is a Romance language, we know that the /i-/ root precedes the /b-/ <v-> and /f-/ roots etymologically (the latter root is from the copula, itself a suppletive verb). The /i-/ forms, though, account for only 30 of the 66 forms (counting syncretic forms separately) (RAG 17.3.10), or 45%. Two of the subcategories, the Future and the Conditional, are known to be the result of a Romance-era fusion of the infinitive and forms of the auxiliary *haber* ‘have’. Depending on how we count the Spanish forms, the figure could be put as low as 19 out of 67, or 28%. The significance of these details is that what counts as suppletive in a synchronic analysis of these verbs is neither straightforward nor directly related to the etymology of the verb’s constituent roots. With regard to markedness, however, the resolution of these issues determines whether a form or set of forms should be viewed as marked or unmarked. If the /b-/ <v-> forms are taken as basic, then, in addition to the suppletion in the marked categories where the /f-/ forms are found, the /i-/ forms count as suppletive forms in the Past (Imperfective) Indicative, which is also supposedly a marked category. If the /i-/ forms are seen as basic, then the /b-/ <v-> forms in the Present Indicative fit Veselinova’s claim better, though the /b-/ <v-> forms of the Present Subjunctive seem to present difficulties either way.

The Hungarian data in Tables 3 and 4 might seem to present similar difficulties, but the relationships among the overlapping forms in the verbs *van* ‘be’ and *lesz* ‘become’ point strongly to *lesz* as the donor. If viewed this way, then the copula has suppletive forms in three marked categories: Future, Subjunctive, and Conditional, the last of which features optional overlapping suppletion, which would presumably make it even more marked.

Suppletion caused by sound change can affect any part of a verb’s paradigm. Table 5 shows that the sound changes that created the modern forms of Spanish *decir* ‘say’ yielded suppletion in multiple marked parts of the paradigm: first person (*digo*), Future (*diré*, etc.), and Past (Preterit *dije*, etc.). Analogy also causes suppletion in marked categories, as the Galician data in §2.2.3.1 illustrate. English also challenges the expectation that suppletive forms would not appear in the past tense, as perhaps the most famous example of verbal suppletion, *go/went*, has its incursive form in the Past.

Elsewhere in Romance, the contrast between present and past verbs furnishes examples of greater differentiation in a supposedly more marked category. In Spanish, for instance, the past of *ir* ‘go’ has four autonomous stems, two more than the present (Table 11, Figure 6), which is assumed to be the least marked tense. Such patterns can be explained by accurately identifying factors such as sound change and semantic relationships among roots, but not by markedness.

		PRESENT		PAST			
IND	1	voy	vamos	iba	íbamos	fui	fuimos
	2	vas	vais	ibas	ibais	fuiste	fuisteis
	3	va	van	iba	iban	fue	fueron
SUBJ	1	vaya	vayamos	fuera	fuéramos	fuese	fuésemos
	2	vayas	vayáis	fueras	fuerais	fueses	fueseis
	3	vaya	vayan	fuera	fueran	fuese	fuesen
		SG	PL	SG	PL	SG	PL

Table 11. Present, Past, Indicative, and Subjunctive in Spanish (Ibero-Romance) *ir* ‘go’



Figure 6. Greater differentiation in supposedly more marked past category

5. Questionable applicability of markedness in Hungarian. Since other languages also display overlapping suppletion, the more significant case of suppletion in Hungarian is the Present of *lesz*, which is also the Future of *van*. This is, to the best of my knowledge, the only documented case of overlapping suppletion in which the shared forms occupy different parts of two verbs’ paradigms. Unlike the overlapping suppletion in Ibero-Romance BE and GO, where the shared forms are suppletive with respect to the other forms in both paradigms, the Hungarian shared forms are strongly suppletive only in the copula. The Future of *van* challenges Veselinova’s claim about autonomy and suppletion in that the future is regarded as more marked than either the Present or the Past.

Not only does markedness wrongly predict where suppletion would appear in these verbs, it also has nothing to say about why these verbs, rather than any other combination of lexemes, should share forms in this configuration. That insight comes straightforwardly from the interaction of the verbs’ lexical semantics and implicature. If something is in the process of becoming something else, i.e., entering a condition, one can reasonably presume that it will be in that condition in the future. A similar semantic connection appears in Mari, a geographically distant Uralic language spoken in Russia’s Mari El Republic (Kangasmaa-Minn 1998: 231). A similar conventionalization of implicature underlies the incorporation of forms of the copula (< *esse*) into the paradigms of Ibero-Romance *ir* ‘go’, since having been to a place implies having gone there (Juge 1999). As with all language change, the identification of a motivation does not bind us to assuming that the potential change will be realized.

6. System pressure. Veselinova claims that “system pressure” affects the development of suppletive paradigms (2006: 177), which presupposes that speakers understand linguistic systems very differently from how they actually appear to. Joseph (1992) argues that speakers have a more limited appreciation of linguistic relationships, and numerous changes reflect this locality, as does the vast time scale involved in many developments that speakers could not possibly be aware of.

7. Conclusions. Suppletion, like other types of paradigmatic perversity such as defectiveness, syncretism, and deponency, poses analytical challenges in part because it is not static but rather results from the dynamic interaction of multiple factors over time. It is further subject to speakers’ (nearly entirely subconscious) perceptions of how forms relate to each other. Markedness does little to clarify the creation, spread, and distribution of suppletive forms, largely due to its

inconsistent and ill-defined character. More importantly, although it may initially seem to provide a means of resolving difficulties posed by suppletive data, its value is heavily outweighed both by traditional and more recent analytical approaches, including the identification of far more types of and sources for suppletion than were known a quarter of a century ago (Figure 7). Careful examination of suppletive patterns and mechanisms of change has deepened our understanding of familiar data and can reasonably be expected to clarify the relationships present in newer data as well.

sources		
glomeration		
incursion	coalescence	lexical merger
sound change		
analogy		
leveling	contamination	proportional

lexical attractors
lexical semantics
deixis
semantic distance
pragmatic implicature
phonological similarity

synchronic parameters		
non-overlapping		
overlapping	(non)optional	(non)aligned
phonological relationship	strong	weak

Figure 7. Sources, types, and lexical attractors in suppletion

Abbreviations

1	1st person	GER	Gerund	INF	Infinitive	PTCPL	Participle
2	2nd person	IMPF	Imperfect	PL	Plural	SG	Singular
3	3rd person	IMPT	Imperative	PFV	Perfective	SUBJ	Subjunctive
COND	Conditional	IND	Indicative	PRES	Present		

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