

**The re-distribution of suppletive stems:  
GEH- 'go' and STEH- 'stand' in Upper German dialects**

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Given a suppletive inflectional paradigm, when the suppletive stems which have found themselves combined in that paradigm are subsequently re-distributed, is anything possible (or if you prefer: probable) or are some or indeed many things impossible (improbable)?

Retracting a contrary claim (Plank 1996), I have previously had to concede that there are no universal constraints on paradigmatic distributions of suppletive stems, at least no categorical ones (Plank 2013). It is true, the crosslinguistically most common distributions are paradigmatically simple, being defined through single categories – as, for example, when one stem of a verb is used in all present tense forms and another stem in all past tense forms. However, even the most complex kind of distribution is possible and in fact real, if improbable, being attested quite rarely: in paradigmatic cross-over distributions no featural specifications are shared by the occurrences of a suppletive stem – as for example, when one stem is used in the 1st person singular and 3rd person plural and another stem in 2nd and 3rd person singular and 1st and 2nd plural. Re-encouragingly, lawlessness is seen to reign only partially when matters are being looked at diachronically and morphologically. When suppletion is brought about through the phonological differentiation of forms of one and the same stem and their and eventual dissociation, phonology is in charge and is at liberty not to be guided by morphological structures. But when suppletion is created through the combination of distinct stems in single paradigms, existing morphological structures must be respected. In particular, suppletive stems must not end up in unconnected areas of well-designed paradigms interrupted by areas of the other stem(s).<sup>1</sup>

Now, once a paradigm has become established as being suppletive, the distribution of stems over its cells may be diachronically stable or unstable (depending on such factors as the frequency of the lexemes affected), but it is certainly not immutable: if they retain the suppletive stems, rather than to abandon all but one and thereby get rid of the nuisance of suppletion (a common destiny in the case of infrequent suppletive lexemes, rarely encountered as a language is being acquired, hence likely to be regularised should the need ever arise to inflect them), subsequent generations of speakers may re-distribute these stems. Synchronically, a suppletive paradigm may not wear its history on its sleeves, and accordingly one would not expect its origin through combination of lexemes or phonological dissociation to have a huge

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<sup>1</sup> See also Börjars & Vincent 2011 for a rare study of the origin of suppletion rather than its existence and subsequent fate. The pre-conditions they discuss, over and above that of near-synonymy of the prospective partners-in-crime, are important factors shaping the distributions of lexemes newly yoked together over the paradigms they have come to share.

effect on its subsequent fate. Irrespectively of the origins of distributions, our question therefore is: Are re-distributions random or principled?

As everybody knows, and can find confirmed in surveys such as Osthoff 1899/1900, Veselinova 2006, or the *Surrey Suppletion Database*, the central verbs of autolocomotion and posture are worldwide strongholds of suppletion. In German, where the suppletion of *steh-* – *stand-* 'stand' (PRESENT – PRETERITE) is of long standing, it was in fact only after the Old High German period that the strong verb (ablaut class VII) *gang-an* 'to go, walk, tread' became inflectionally deficient and began to join forces with the near-synonymous short verb *gā-n/gē-n* (inflectionally irregular in several respects), with their paradigms eventually merging. This new suppletive paradigm, like that of *steh-* – *stand-*, is instructive here because the two stems were later re-distributed, and the Upper High German dialect cluster was especially enterprising.

Upper High German comprises Bavarian, Alemannic, and extinct Langobardic. While North, Middle, and South Bavarian seem to essentially agree in the relevant suppletive pattern, there is considerable variation across Alemannic, and even speakers from the same region (Swabian, Low, High, and Highest being the Alemannic macro-areas) sometimes differ or are insecure which stems to use where. Some forms of Alemannic, like the Upper Rhine variety of Low Alemannic, do not diverge from Standard Modern High German and simply distribute the two stems by tense.<sup>2</sup>

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<sup>2</sup> My native speaker consultants for Alemannic (A) and Bavarian (B) were Bayer Josef (B), Blank Franz (B), Christof Blocher (A), Susanne Bonenberger (A), Ellen Brandner (A), Braun Bettina (B), Breu Walter (B), Susanne Brissler (A), Mathias Bscharinger (A), and Frank Bsimmerer (A). Thank you all. Suppletive as well as morphomic feedback was gratefully received from Martin Maiden.

## GEHEN 'go' in Modern High German

The "Standard" variety of Neuhochdeutsch, sometimes said to be nobody's native language, is essentially based on Middle German rather than on Upper German regional varieties.

- suppletive stems *geh-* and *gVng-*
- *geh-* and *gVng-* are historically distinct lexemes, the first one of the irregular Germanic short verbs, whose old hallmarks were a monosyllabic infinitive and a 1SG.IND.PRES in *-n*, the latter a strong verb of ablaut class VII
- the suppletive stems are straightforwardly distributed by TENSE (as straightforwardly as Danish/Norwegian/Swedish *gå-* and *gikk-* [with the Insular North Germanic languages lacking the *gā-* stem], and as English *go-* and *wend-*, the latter replacing equally suppletive and identically distributed Old English *ēo-*, and unlike the suppletive stems *all-*, *va-*, *i-* 'go' in French etc., which show more complex distributions defined through more than one inflectional category)
- this contemporary distribution of the suppletive stems *geh-* and *gVng-* essentially continues that of Middle High German, except (i) that *gVng-* used to be an option or even preferred for 2SG.IMP (MHG *ganc/genc/ginc* alongside *gâ/gê*), and (ii) that *geh-* used to be an option, if the dispreferred one, for the resultative participle (*ge-gâ-n* alongside *(ge-)gang-en*) and for 1&3SG.IND.PRET (*gie-Ø* alongside *gienc-Ø*)

(Note that *gie-Ø* is an analogical formation of the preterite of *gân* on the model of the vowel in *gienc-Ø*. So, sharing elements of both, is *gie-Ø* a form of the *geh-* or the *gVng-* stem? Which is an instructive case to demonstrate that, synchronically, instances of suppletion cannot always be neatly distinguished as involving historically distinct stems or phonologically differentiated variants of one and the same stem.)

PRESENT

	INDICATIVE		SUBJUNCTIVE		IMPERATIVE	
	SG	PL	SG	PL	SG	PL
1	geh-e	geh-en	geh-e	geh-en		
3	geh-t	geh-en	geh-e	geh-en		
2	geh-st	geh-t	geh-est	geh-et	geh(-e)	geh-t

INFINITIVE

geh-en

PRESENT PARTICIPLE

geh-end

PRETERITE

	INDICATIVE		SUBJUNCTIVE	
	SG	PL	SG	PL
1	ging-Ø	ging-en	ging-e	ging-en
3	ging-Ø	ging-en	ging-e	ging-en
2	ging-st	ging-t	ging-est	ging-et

RESULTATIVE PARTICIPLE

ge-gang-en

## GEHEN 'go' in Bavarian

- suppletive stems *geh-* and *gVng-*, but with extension of *gVng-* to ENT  
– and not also to INFINITIVE, despite INF being formally identical with 1/3PL.IND.PRES

Note that we are seeing here the MORPHOMIC pattern 1/3/2SG & 2PL vs. 1/3PL which is so characteristic of suffix syncretisms in German in general. Hence the arrangement of persons 1 – 3 – 2, with the form sharers as neighbours.

The forms given here are Middle Bavarian, but South and North Bavarian agree in the relevant morphological respects – except that there are Southern varieties which have *geh-* and *gVng-* stems in more or less free variation in 1/3PL.IND.PRES.

### PRESENT

	INDICATIVE		SUBJUNCTIVE		IMPERATIVE	
	SG	PL	SG	PL	SG	PL
1	i: <i>gɛ:-</i> ∅	miɐ̯ 'gɛŋ-ɐn(d) <sup>3</sup>	'gɛ:-ɐd-∅	'gɛ:-ɐd-n		
3	ɛɐ̯/si: <i>gɛ:-</i> d	de: 'gɛŋ-ɐn(d)	'gɛ:-ɐd-∅	'gɛ:-ɐd-n		
2	du: <i>gɛ:-</i> sd	iɐ̯/e:s <i>gɛ-</i> ts	'gɛ:-ɐd-sd	'gɛ:-ɐd-ts	<i>gɛ:-</i> ∅	<i>gɛ-</i> ts
						INFINITIVE
						'gɛ:(-ɐ)
						PRES. PARTICIPLE
						'gɛ:-ɐd

### PRETERITE

	SUBJUNCTIVE		
	SG	PL	
1	'gɔŋ(-ɐd)-∅	'gɔŋ-ɐd-n	
3	'gɔŋ(-ɐd)-∅	'gɔŋ-ɐd-n	
2	'gɔŋ(-ɐd)-sd	'gɔŋ-ɐd-ts	
			RES. PARTICIPLE
			'gɔŋ-ɐ

Note: Being among those varieties of German(ic) which have lost, or are losing, the preterite as a past tense form (replacing it with the periphrastic present perfect), Bavarian still retains the preterite subjunctive, at least for certain classes of verbs (especially ones with preterite stem vowel /a/).

<sup>3</sup> The 1PL.IND.PRES form with enclitic rather than preposed 1SG personal pronoun is 'gɛmma < 'gɛŋ(-ɐn)=mɐ, with velar /ŋ/ assimilating to following labial /m/; note the short/lax stem vowel /ɛ/. It's not *gɛ:(-n)=ma*, which would have to have stem vowel /e:/ (cf. minimal pair /'gɛ:mma/ < gɛ:b(-n)=ma 'geben wir', verb 'give').

STEHEN 'stand' in Bavarian

- suppletive stems *steh-*, *steng-*, and *stand-*,  
with *steng-* phonologically differentiated from *steh-* (/ʃteh-n/ > [ʃteŋ] > re-inflection /ʃteŋ-ən/), and with *stand-* historically distinct;
- but with the same morphomic pattern, 1/3/2SG & 2PL vs. 1/3PL, with the latter two infiltrated by *steng-* rather than by *stand-*

PRESENT

	INDICATIVE		SUBJUNCTIVE		IMPERATIVE	
	SG	PL	SG	PL	SG	PL
1	i: ʃte:-Ø	miɐ ʃteŋ-ən(d)	'ʃte:-əd-Ø	'ʃte:-ətd-n		
3	ɛɐ/si: ʃte:-d	de: ʃteŋ-ən(d)	'ʃte:-əd-Ø	'ʃte:-əd-n		
2	du: ʃte-sd	iɐ/e:s ʃte-ts	'ʃte:-əd-sd	'ʃte:-əd-ts	ʃte:-Ø	ʃte:-ts

INFINITIVE  
'ʃte:(-ɐ)  
PRES. PARTICIPLE  
'ʃte:-əd

PRETERITE

	SUBJUNCTIVE	
	SG	PL
1	'ʃtand(-əd)-Ø	'ʃtand-əd-n
3	'ʃtand(-əd)-Ø	'ʃtand-əd-n
2	'ʃtand(-əd)-sd	'ʃtand-əd-ts

RES. PARTICIPLE  
g-ʃtand-n

GEHEN 'go' in Bodensee-Alemannisch (as spoken in Konstanz; Low Alemannic)

- the *gVng-* stem extended to all three persons in PL.IND.PRES, following the general pattern of all person distinctions being neutralised in the plural, owing to a generalisation of the 2PL exponent to 1/3PL (a pattern Alemannic [with the exception of southernmost Highest Alemannic, where three persons continue to be distinguished in the plural] shares with Old English, Frisian, and Dutch);
- and the *gVng-* stem further extended to 2PL.IMP  
– but then 2PL.IMP is never distinct in German but always identical to 2PL.IND.PRES

PRESENT

	INDICATIVE		SUBJUNCTIVE <sup>4</sup>		IMPERATIVE	
	SG	PL	SG	PL	SG	PL
1	i gã:-Ø	miɐ 'gʌŋ-ət	'gã:-ət	'gã:-ət		
3	ɛɐ/si gã:-t	si 'gʌŋ-ət	'gã:-ət	'gã:-ət		
2	du: gã:-f	iɐ 'gʌŋ-ət	'gã:-əf	'gã:-ət	gã:-Ø	'gʌŋ-ət
						INFINITIVE <sup>5</sup>
						gã:

PRETERITE

	SUBJUNCTIVE		
	SG	PL	
1	'giəŋ(-ət)	'giəŋ-ət	
3	'giəŋ(-ət)	'giəŋ-ət	
2	'giəŋ-əf	'giəŋ-ət	
			RES. PARTICIPLE
			'gʌŋ-ə

<sup>4</sup> Synthetic subjunctives, PRESENT as well as PRETERITE, are less popular in Alemannic than in Bavarian. The forms given here and subsequently are probably academic, and what is actually used are periphrases with (synthetic!) subjunctives of *tun* 'do' (*tät-*) and *sein* 'be' (*wär-*).

<sup>5</sup> Present participles are not at home in Alemannic, but are imports from the standard language.

GEHEN 'go' in varieties of Low and High Alemannic, also including Bodensee-Alemannisch (hence differing from the above pattern)

- the original PRETERITE *gVng-* stem extended to 1SG.IND.PRES and not to any PL persons
- and *gVng-* also extended to 2SG.IMP or not so extended, depending upon speakers

[Alemannic varieties differ in stem vowels, nasalisation, and final devoicing; but such variation can be ignored here insofar as they do not mask the distinction of the two stems.]

PRESENT

	INDICATIVE		SUBJUNCTIVE		IMPERATIVE	
	SG	PL	SG	PL	SG	PL
1	i <b>gaŋ</b> -Ø	miɐ <b>gɔn</b> -d	<b>gɔ</b> :-ət	<b>gɔ</b> :-ət		
3	ɛɐ/si <b>gɔ</b> :-t	si <b>gɔn</b> -d	<b>gɔ</b> :-ət	<b>gɔ</b> :-ət		
2	du <b>gɔ</b> :-f	iɐ <b>gɔn</b> -d	<b>gɔ</b> :-əf	<b>gɔ</b> :-ət	<b>gɔ</b> :-Ø/ <b>gaŋ</b> -Ø	<b>gɔn</b> -d
					INFINITIVE	
					<b>gɔ</b> :	

PRETERITE

	SUBJUNCTIVE		RES. PARTICIPLE	
	SG	PL		
1	' <b>giəŋ</b> (-ət)	' <b>giəŋ</b> -ət		
3	' <b>giəŋ</b> (-ət)	' <b>giəŋ</b> -ət		
2	' <b>giəŋ</b> -əf	' <b>giəŋ</b> -ət		
			RES. PARTICIPLE	
			' <b>gaŋ</b> -ə	



GEHEN 'go' in Swabian Alemannic, and also in eastern Bodensee-Alemannisch

- the original PRETERITE *gVng-* stem extended to both all PL persons and to 1SG.IND.PRES
- and *gVng-* also extended to both 2SG&PL.IMP and INF!

This is the most extensive extension of *gVng-*, found in the easternmost area, neighbouring Bavarian (where *gVng-* is never extended to 1SG.IND.PRES, IMP, or INF), and apparently not attested elsewhere in Alemannic.

PRESENT

	INDICATIVE		SUBJUNCTIVE		IMPERATIVE	
	SG	PL	SG	PL	SG	PL
1	i <b>gaŋ</b> -Ø	miɐ <b>'gaŋ</b> -ət	<b>'gã</b> :-ət	<b>'gã</b> :-ət		
3	ɛɐ/si <b>gã</b> :-t	si <b>'gaŋ</b> -ət	<b>'gã</b> :-ət	<b>'gã</b> :-ət		
2	du <b>gã</b> :-f	iɐ <b>'gaŋ</b> -ət	<b>'gã</b> :-əf	<b>'gã</b> :-ət	<b>gaŋ</b> -Ø	<b>'gaŋ</b> -ət
						INFINITIVE
						<b>'gaŋ</b> -ə

PRETERITE

	SUBJUNCTIVE		
	SG	PL	
1	<b>'giəŋ</b> (-ət)	<b>'giəŋ</b> -ət	
3	<b>'giəŋ</b> (-ət)	<b>'giəŋ</b> -ət	
2	<b>'giəŋ</b> -əf	<b>'giəŋ</b> -ət	
			RES. PARTICIPLE
			<b>'gaŋ</b> -ə

Note: STEHEN shows the same distribution of its two suppletive stems in this variety, with the *ftand-* stem extended from PRET to 1/3/2PL.IND.PRES, 1SG.IND.PRES, 2PL.IMP, 2SG.IMP, and INF, and *fta:-* holding out elsewhere.

To complete a picture that is already quite colourful (profuse apologies to readers who will have to take my drab word for it because they are red-green colour-blind), when we look at West Germanic relatives of German, we find extensions, not of *gVng-*, but of *geh-* in Dutch and Frisian:

- Dutch essentially maintains the tense-based distribution of these suppletive stems, except that *gaa-* is extended to the resultative participle (*ge-gaa-n*). (Unless this is a continuation of an earlier distribution not strictly following tense lines.)
- In Frisian, *gea-* stems have become an option, alongside *gyng-/gong-*, also in all persons and numbers of the indicative preterite, as well as with the resultative participle, thereby effectively eliminating suppletion.

There are five themes underlying these variations. A suppletive stem is extended beyond its erstwhile tense domain as follows:

- (i) to 1&3PL.IND, and also to 2PL if person distinctions are wholly neutralised in the plural;
- (ii) to 1SG.IND;
- (iii) combining the two patterns, (i) to 1&3PL.IND or to all plural persons and (ii) also to 1SG.IND;
- (iv) to 2SG.IMP (and automatically also to 2PL.IMP if 2PL.IND has received the extended stem, too, with 2PL.IMP never distinct from 2PL.IND);
- (v) to NON-FINITE forms, most commonly in conjunction with extensions to IND and IMP sections.

Can any generalisations be made about what has happened, and has not happened, as the *gVng-* stem (and similarly the *stVnd-* and *steng-* stems) and the *geh-* stem were negotiating their shares in the joint paradigm? And it is plausible to assume that the point of departure of these re-distributions, after post-Old High German paradigmatic unification of *gVng-* and *geh-*, was the straightforward division between present and preterite tense domains for *gVng-* and *geh-*, respectively. A possible exception to this re-distributional scenario is that *gVng-* in the imperative, already sometimes found in Middle High German, may not be the result of an extension, but a continuation from the times where *gangan* was not yet defective.

We have nothing positive to contribute here to the question of WHY a suppletive paradigm neatly divided up along tense lines got complicated and WHY these particular re-distributions of suppletive stems happened. Our present focus is on the negative side, insofar as we are trying to filter out what happened from what could have happened but didn't.

First, a constraint that has never and nowhere been violated in Upper German is as follows:

- A suppletive stem entrenched somewhere in a paradigm can only be extended to such other sections of that paradigm
  - (i) which are vertically or horizontally adjacent in a well-designed paradigm (cf. the neighbourhood condition and cross-over constraint in Plank 2013, concepts which, if you prefer, can also be expressed in terms of [shared] morphological categories rather than geometric arrangements), and
  - (ii) which form a subset defined through other commonalities, such as systematic (= non-accidental) exponence syncretism ("template", Aski 1995; "morphome", Aronoff 1994, Maiden 2004 etc.).

This constraint, intended as a universal, licenses extensions of *gVng-* (and *stVnd-* and *steng-*) to:

- 1 & 3PL.IND.PRES (as in all of Bavarian), which are consistently suffix-syncretic in all of German (partly also 1SG = 3SG, as PRET and SUBJ)
  - which is an entrenched morphomic pattern, since 1&3 do not share anything featurewise as opposed to 2 (well, the meaning 'non-addressee', but with the referential hierarchy that holds for German, 1 > 2 > 3, that is not a systematically relevant meaning);

- 1&3&2PL.IND.PRES, also 2PL.IMP (as in most varieties of Alemannic), which are consistently suffix-syncretic in Alemannic (that is, 2PL forms have here been extended, not to just one PL person, but to both, on the strength of the 1=3 requirement, seemingly outranking all other syncretism requirements).

Second, extensions of *gVng-* (and *stVnd-* and *steng-*) to 1SG.IND.PRES, on its own (as in some varieties of Alemannic) or in addition to 1&3&2PL.IND.PRES (as in other varieties of Alemannic) are in line with a paradigmatic neighbourhood constraint (Plank 1996, 2013): introducing a "loner" in a single cell in a paradigm does not create discontinuities, nor does the horizontal extension from a plural to a corresponding (hence neighbouring) singular person.

The same "loner" status licenses the introduction of *gVng-* to 2SG.IMP on its own, or equally its lonely present tense survival from non-defective times of *gangan* (as in varieties of Middle High German<sup>6</sup>). The other way round, from PRESENT to PRETERITE terrain, the introduction of *gaa-* to the resultative participle function (as in Dutch) is also licensed as a loner in a non-finite section of the paradigm.

What has also happened – and probably shouldn't have happened in light of such constraints inspired by the morphological or morphomic profile of a paradigm, and in this sense remains unaccounted for – are extensions of *gVng-* to 2SG.IMP<sup>7</sup> in addition to 1&3&2PL.IND.PRES or to 1SG.IND.PRES, but not 2SG.IND.PRES (as in varieties of Alemannic): it would seem unfeasible to arrange paradigms so as to have these cells or sections as neighbours, in one- or two-dimensional representations. (Nor do they form natural classes in terms of plausible features.)

How the infinitive is linked up with the rest of the paradigm is a moot question; I don't know whether it is a spurious generalisation that *gVng-* extends to INF only if it has also invaded IMP as well as 1&3&2PL.IND.PRES and 1SG.IND.PRES – i.e., in the case of its relatively most extensive extension.

What is also left unaccounted for, most lamentably, is the absence of further re-distributions that would not in fact have been ruled out by the constraints suggested.

First, given that loners are permissible, there are quite a few single cells in the present tense section where a sole *gVng-* (and *stVnd-* and *steng-*) has NOT been introduced to. Perhaps there is a concept of preferred loners in suppletive paradigms, or of preferred stepping stones when re-distributions are commencing.

Second, the way paradigms have been set out above, one wonders why *gVng-* (and *stVnd-* and *steng-*) have only ever been extended horizontally from PLURAL to 1SG, and not also to 3SG and/or 2SG. Again, perhaps the salient parts of paradigms that are especially inviting for loners are also preferred targets for extensions licensed by neighbourhood.

Given the overall picture of variation sketched here it is hard to see how FREQUENCY could possibly define all attested distributions of suppletive stems. The claim in Nübling 2000: 297, made with reference to Alemannic, that (shorter) *geh-* resists encroachments of (longer) *gVng-* in those inflectional categories which occur more frequently is ill-founded.

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<sup>6</sup> And imperatives are on record as morphological mavericks also elsewhere; cf. e.g. Maiden 2007.

<sup>7</sup> 2PL.IMP never has a distinct form but always coincides with 2PL.IND.PRES.

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