Suppletion and the unity of the lexeme: German *sein* 'to be' and its second participle

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Abstract:

The ulterior aim here is to suggest a richer structural phenomenology of suppletion than is commonly assumed. To this end, a gap in the use of the Participle II (or "resultative" participle) of the verb *sein* 'to be' in German is identified: *gewesen* does not adapt to periphrastic uses in the passive. It is shown that this gap has no semantic reasons, but is due to the peculiarly suppletive morphology of this verb. It is argued that, unlike other suppletive verbs, the paradigm of the lexeme SEIN is not well integrated, despite its relative antiquity, insofar as its Preterite/Perfect stem retains a categorial identity of its own and pertinaciously resists an extension to non-Preterite/non-Perfect functions of Participle II.

1. One Participle II

All verbs in German have two participles in the non-finite sections of their inflectional repertoires, a Participle I and a Participle II:

INFINITIVE	PARTICIPLE I	PARTICIPLE II	
sag-en	sag-end	ge-sag-t	'to say'
sprech-en	sprech-end	ge-sproch-en	'to speak'
denk-en	denk-end	ge-dach-t	'to think'
tu-n	tu-end	ge-ta-n	'to do'
geh-en	geh-end	ge-gang-en	'to go'

Participle I is always expressed through suffix *-end*, being added to the verb stem – to the Present tense stem in case the verb has more than one stem form, just like the Infinitive suffix *-en*, as seen in the examples above. The form of Participle II partly, concerning the suffix part of the participial circumfix, depends on the verb class: weak verbs, which have only a single stem form and take suffix *-(e)t* as the exponent of the Preterite tense (*ich sag-t-e* I say-PRET-1SG.IND), combine prefix *ge-* with suffix *-(e)t*; strong verbs, with ablaut alternations for Present, Preterite, and Participle II stems (e.g., *sprech-*, *sprach-*, *sproch-*, where all three are distinct, but sometimes only two are), combine *ge-* with *-(e)n*; some verbs add complications to the weak-strong dichotomy (e.g., *denken*, *tun*; and there are further mixed and vacillating verbs inflectionally more

regular than these two); the suppletive verb *gehen* (PRET *ich ging-Ø* I go.PRET-1SG.IND, not **geh-t-e*) takes *ge-* and *-en* because its Preterite and Participle II stem is from an old strong (reduplicative) verb. Further, there is a prosodic constraint on prefix *ge-*, which is suppressed when main stress is not on the initial syllable (*(*ge-)trom.PE.t-et* '[has/was] trumpeted', *(*ge-)ver.SPRO.ch-en* '[has/was] promised')

Participle I is often called "Present Participle" or "Active Participle" or "Present Active Participle". Participle II is often called "Past (or Preterite) Participle", "Perfect Participle", "Passive Participle", or "Past/Preterite/Perfect Passive Participle". (For "Participle" old-school German grammarians sometimes prefer the native term "Mittelwort", word in the middle between verb and adjective.) For Participle I the combined tense (Present) and voice (Active) epithet for Participle I makes sense, but not for Participle II. And it is Participle II that we are only interested in here. To convey to non-Germanists – or learners of German as a foreign language, or typologists keen to compare German with other languages also boasting forms called "participles" – what this inflectional category is all about we need to spell out, first, which role it plays in the paradigmatic system and, second, what it is actually used for.

Like Participle I and the Infinitive and in paradigmatic contrast with them, Participle II is a non-finite verb form.²

Prominently, because most firmly grammaticalised, this particular non-finite verb form is used in periphrastic constructions: namely (a) the Perfect, with auxiliaries *haben* 'have' or *sein* 'be' (for most speakers of German, especially in the south, serving as a regular Past, with the synthetic Past hardly used in informal speech); and (b) all Passives, with auxiliaries *werden* 'become' (process), *sein* 'be' (state), *bekommen/kriegen* 'get' (process indirect, with the passive subject corresponding to a non-accusative in the active), *haben* 'have' (state indirect, contextually rather restricted):

- (a1) Sie hat ihm die Wahrheit gesagt 'She has told him the truth'
- (a2) Sie **ist** nach Hause **gegangen** 'She has gone home' (lit. 'is')
- (b1) Von ihr wurde ihm allmählich die Wahrheit gesagt 'Gradually the truth was told him by her'
- (b2) Endlich ist einmal die Wahrheit gesagt

¹ In the spirit of Shagal 2015. However, her notion of participles (and it's not only hers alone) as noun-modifying (adjectival) verb forms that are non-finite, though possibly specified for tense-aspect-mood and possibly of variable voice doesn't exactly highlight the use of such forms in verbal periphrasis, a salient feature of Participle II in German. The exclusive focus of another comparative study of participles, Haspelmath 1994, is on just one type of periphrasis, that of passive.

² Though enlightening on non-finiteness in general, Nikolaeva 2007 does not prominently feature participles in particular. They would seem to continue to be a typologically underexposed category.

'At last the truth is told once and for all'

(b3) Er bekommt/kriegt von ihr die Wahrheit gesagt 'He is being told the truth by her'

(b4) Er hat seine Weisheitszähne schon lange gezogen
'He has his wisdom teeth extracted since a long time ago'
(not causative; simply: he has been without them for a long time)

There are semi-grammaticalised uses of Participle II with certain groups of main verbs, such as (c) verbs of movement (notably *kommen* 'come'), (d) copula-like verbs, (e) verbs with modal or aspectual functions:

(c) Eines Tages wird er gegangen kommen 'One day he will come walking'

(d) Er liegt hier begraben

'He lies buried here'

(e) Er gehört entlassen. Er geht noch verloren 'He needs (to be) dismissed', 'He will go lost after all'

Participle II cannot only be used predicatively, but also co-predicatively (as a "small clause"), relating to subjects as well as objects:

(f) Sie wollte ihm die Wahrheit **ungeschminkt** sagen 'She wanted to tell him the truth without make-up/unvarnished'

Despite being non-finite, Participles II can also be used as sole main clause predicates with (g) imperative or (h) vivid reportative force:

(g) Alle mit**gegangen!**'Everybody come along!'

(h) Gesagt, getan 'Said and done'

Instead of finite verbs, subordinate clauses can have a Participle II as the only overt verb form:

(i) [Nachdem sie] die ganze Wahrheit **gesagt [hatte]**, ging sie '[After she had] the whole truth told, she left'³

³ A Passive reading is also possible here: '[After] the whole truth [had been] told [by someone], she left'.

And the Participle II can be used attributively, with certain limitations (unergative verbs tend to be out) and sometimes with participles shading off into adjectives with some degree of independence from the corresponding verbs:

(j) eine einmal gesagte Wahrheit; der vergangene Winter 'a truth once told'; 'the past winter'

And there is probably more.⁴ But these uses, arguably the most important ones, suffice to discredit a naming of this inflectional form after a tense and a voice: obviously, neither do these uses all have a past (or "preterite" or "perfect") force – few do, inherently – nor are all "passive" (or non-subject-oriented) – few are, inherently. If there is a semantic common denominator for all uses and we want a category's name to reflect it, we might call Participle II a "RESULTATIVE Participle".⁵

But the point I really want to emphasise here is actually simpler: whether or not "resultative" quite does the job, in terms of inflectional contrasts, all German verbs, regardless of conjugation class membership and inflectional exponents provided by these classes, only have ONE SINGLE Participle II for all uses a German Participle II can be put to. There is no single verb with DISTINCT non-finite inflections for, say, uses (a), Perfect, and (b), Passives.

But there is one verb which, without faulting this generalisation, raises a rather puzzling question: it is a suppletive verb, *sein* 'to be', and the questions, against this backdrop, are whether it is really ONE verb and what this verb, or these verbs, might mean for other verbs.

2. Impersonal passives unlimited – almost

German is among those languages where intransitive verbs can be passivised – on condition that their sole argument can be plausibly construed as having some kind of responsibility for and perhaps control over the event designated by the predicate. Depending on further circumstances such as the animacy of the subject, one and the same verb can thus show such differential behaviour:

Alle Schornsteine rauchen wieder

'All chimneys smoke again'

*Von allen Schornsteinen wird wieder geraucht

'By all chimneys is smoked again'

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⁴ A handbook like Behaghel 1924: 396-433 doesn't really have much more, but specialist studies of German participles probably will.

⁵ For a wide-ranging survey of resultative constructions – containing "verb forms [participial or other] that express a state implying a previous event" – see Nedjalkov 1988. For a follow-up typological survey that emphasises the distinction between participial FORM and resultative CONSTRUCTION see Wälchli & Olsson 2012.

Alle Schüler rauchen wieder
'All studens smoke again'
Von allen Schülern wird wieder geraucht
'By all students is smoked again'

The results may not always be the most felicitous and may raise the occasional censorious eyebrow, and such utterances may not often make it from informal conversation into print, but the semantic constraint on impersonal, subjectless, demotional passives really allows a great deal of latitude:

Es wird jetzt aber wieder früher ins Bett gegangen! 'But you will now go to bed earlier again!' (lit. '[it] is now being gone to bed earlier again')

Im Herbst wird immer viel gestorben 'In autumn there is always much dying' (lit. '... [it] is always much being died')

Wegen einem harmlosen Schnupfen wird einfach zu viel zu Hause geblieben 'Because of a harmless cold people simply stay home too much' (lit. '... [it] is simply being stayed home too much')

In diesem Viertel wird überdurchschnittlich oft Grippe gehabt 'In this neighbourhood there is an above-average incidence of the flu' (lit. '... [it] is being had the flu')

Es wird heutzutage einfach zu oft krank geworden 'There is simply too much falling ill these days' (lit. '[it] is simply fallen ill too often')

Now, if *werden* 'become' works, what about impersonally passivising intransitive clauses with the copula *sein* 'to be'?

Es liegt an dir: Man ist krank oder man ist nicht krank!

'It's up to you: One is ill or one isn't ill!'

* ... Es wird von einem krank gewesen oder es wird nicht krank gewesen!

'[It] is been ill or it is not been ill by someone'

Man kriegt den Eindruck, die Leute sind gern krank

'You get the impression people enjoy being ill' (lit. 'are gladly ill')

* ... von den Leuten wird gern krank gewesen

"... being ill is being enjoyed" (lit. '[it] is gladly been ill by people')

Almost without parallel among German verbs, *sein* categorically does not passivise, however hard you try. The question is: why? Do such predicates with *sein* fail to outsmart the relevant semantic constraint? Can't the sole argument be construed as responsible or in control? Hardly. In these last two examples responsibility for or control over DECIDING to feel ill or ENJOYING to be ill is as straightforwardly ascribed to the intransitive subject of the active voice as in the previous examples where passivisation succeeds. There must be another reason, then. I suggest it is to do with morphology rather than semantics.

3. To be or to have been, that is the question

Here is the inflectional paradigm of *sein* in Standard New High German – and it makes no difference whether *sein* is used as a main verb (to predicate existence or identity), as a copula (with non-verbal predicates), or as an auxiliary (especially for Perfect and Passive):

PRES	IND	SG	1	bin	SUB	sei-Ø	IMP	
			2	bi-st		sei-est		sei -Ø
			3	is-t		sei - Ø		
		PL	1	sind		sei-en		
			2	sei-d		sei -e t		sei - d
			3	sind		sei-en		
	INF PRTCP I		sei-n					
			sei-end	d				
PRET	IND	SG	1	war-Ø	SUB	wär-e		
			2	war-st		wär-est		
			3	war-Ø		wär-e		
		PL	1	war-en		wär-en		
			2	war-t		wär-et		
			3	war-en		wär-en		
	PRTCPII		ge-wes	s-en				

Forms are given in standard orthography – which is misleading insofar as 2PL in the Indicative might as well be spelled *sei-t*, like all other verbs (*sag-t*, *sprech-t*, etc.). Morpheme boundaries divide off suffixes which are equally used with other, more regular verbs, too.

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⁶ However much I would love to credit myself with the discovery of this gap, I expect it will turn out to be yet another disappointing case of an independent re-discovery.

Sein is the most highly suppletive verb of the language: synchronically, as indicated through colour-coding above, there are some six stems involved in expressing the contrasts of tense, mood, number, person, and finiteness that a German verb recognises: sei-, bin/bi-, is-, sind, war-/wär-, -wes-. I say "some six", because we might have to count seven: though sharing the bulk of their segmental body, bin and bi-cannot really be related by phonological or morphonological rule. Originally the stems were only three. Historically, war-/wär- and -wes- were the same stem; but rhotacism is no longer a synchronic phonological or morphonological regularity (like umlaut still is, which accounts for war-/wär-). Equally, is-, sei-, and sind (the latter cumulating inflection and stem) in the Present once were one stem, but to divine original unity a German speaker would need to be aware of Proto-Indo-European stress patterns responsible for shaping the allomorphy of ancestral *h1es-.

The distribution of suppletive stems is not random, but follows the paradigmatic hierarchy of inflectional categories in German, modeled through the layout of the paradigm above:⁷

tense > mood / finiteness > number > person

War-/wär- and -wes- are selected by Preterite tense, with no influence of any lower-ranking category; elsewhere, sei- is selected by non-Indicative moods and all non-finite categories, again regardless of remaining lower-ranking categories; elsewhere, sind is selected by Plural and bin/bi- by Singular number, with is- interfering in the Singular and (patternwise somewhat unexpectedly) sei- in the Plural for 3rd and 2nd Person respectively. Most importantly for present purposes, the dominant factor for the distribution of stems is tense: war-/wär- is limited to the Preterite and is used for all Preterite forms; the other stems are limited to the Present, which is divided up among sei-, sind, is-, and bin/bi-, with the last three the categorially most specific. The Participle II sides with the Preterite lot: though no longer a regular alternant, -wes- is surely perceived as more similar to war-/wär- than to any of the Present stems.

Suppletion has a reputation of being an especial nuisance of an irregularity, even when stem distributions are not random (sometimes they are), but follow such patterns reflecting morphological structures. The trouble it causes the speaker, and especially the learner, is that one lexeme is expressed through more than one stem, where other words inflecting for the same categories do with a single stem. The tacit assumption when such annoying irregularity is diagnosed is that we (well, mental lexicons and grammars) are indeed dealing with a SINGLE lexeme subsuming all relevant wordforms, whether they are forms of one stem or forms of more than one stem. A lexeme is the unit of the mental lexicon with which the syntax operates; the business of morphology

⁷ On dominance and other relations between inflectional categories and their reflections in distributional patterns of suppletion or syncretism see Plank 1991, 2016.

On the non-finite side, from a comparative perspective the most obvious paradigmatic gap is the lack of an Infinitive Preterite. That synthetic Future Infinitives and Participles are missing follows from Future being a periphrastic tense in German.

is to provide one stem or several stems plus the inflectional categories and their exponents for all syntactic eventualities. Historically, suppletion can come about through phonological differentiation of single stems (as, originally, in the cases of *sei-*, *si(nd)*, and *is-* and of *war-* and *-wes-*) or through the combining of several distinct stems (as in the cases of *bi(n)-* and *war-/-wes-* or of *geh-* and *ging-/gang-*), and both kinds of origin may be long-winded routes; but the endpoint of suppletion accomplished is supposed to be a single lexeme, as unitary as lexemes with fully regular single-stemmed inflection. All wordforms of a lexeme, whether with the same stem or different stems, are its integral parts and equal representatives of everything the lexeme stands for, lexically and syntactically speaking.

Now, on this assumption that there is a single lexeme SEIN, a potential problem is created for all other verbal lexemes. The inflectional repertoire of SEIN includes a Participle II, but it does not fulfil all functions that Participles II have with other verbs: in particular, *ge-wes-en* is confined to Preterite/Perfect contexts, and is excluded from Passive contexts:

- (a2) Sie **ist** zu Hause **gewesen**'She has been home' (lit. 'is')
- (i) [Wenn du] einmal in Venedig **gewesen** [bist], kommst du immer wieder zurück '[If you have] been to Venice once, you'll always return'
- (j) der gewesene Mattia Pascal 'the late (lit. been) Mattia Pascal'⁸
- (b1) * ... von den Leuten wird gern krank gewesen
 '... being ill is being enjoyed by people' (lit. '[it] is gladly been ill by people')

And, as observed above, this Passive gap has no semantic reasons, unlike certain other barred Participle II forms (with, for example, Aktionsart differences between verbs accounting for such attributive gaps as in *der geschlafene Mattia Pascal 'the slept Mattia Pascal', vis-à-vis der eingeschlafene Mattia Pascal 'the fallen-asleep M.P.').

This could seem to question the unity of the inflectional category of "Participle II". Unlike any other verb, SEIN has a Participle II whose exclusive function is Preterite/Perfect; there is no separate Participle II for Passive, but the Passive function is simply unprovided for formwise. On the widely accepted methodological principle that any categorial contrast that is made in the inflection of one lexeme must be recognised in all other lexemes of the same word class, a Preterite/Perfect Participle IIa would have to be distinguished from a Passive Participle IIb for all verbs. The price to pay of course would be massive syncretism. This would be like imposing the minimally eight-way inflectional contrasts of the verb BE in English – *am*, *are*, *is*, *be*,

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⁸ The original Italian title of this novel by Luigi Pirandello is *Il fu Mattia Pascal*: the "regular" suppletive Participle II of *essere* 'to be' in Italian is *stat*- (shared with *sta-re* 'to stand'), while *fu* continues the suppletive Perfect stem of Latin *esse* 'to be' and is otherwise only used in Italian as a Remote Past stem for finite forms.

being, was, were, been – on all other English verbs, which never distinguish more than four or five forms (weak: talk, talks, talking, talked; strong: sing, sings, singing, sang, sung). Upon reflection it does not really seem a sensible course under all circumstances, then, to give lexical loners such systematic importance. For us, keeping a unitary Participle II seems preferable; what we should focus on instead is the question that splitting the category would have left unanswered anyhow – namely how to account for the Passive resistance of Participle II in the solitary case of SEIN.

The answer, I suggest, is that SEIN is not a unitary, well-integrated lexeme. I suggest that even with suppletion accomplished a structural difference must be recognised between integrated lexemes like GEHEN 'to go, walk' and unintegrated lexemes like SEIN.

The paradigm of GEHEN combines two historically distinct stems: *geh*-, one of the inflectionally somewhat irregular Germanic short verbs, and *gVng*-, a strong verb of class VII (*gangen*, *ging*, *gegangen*). Disregarding dialectal variations, ⁹ *geh*- serves as the Present stem and *gVng*- as the Preterite stem, with the latter also used for Participle II, *ge-gang-en*. Despite the Preterite association of its stem, this Participle II form does everything that is syntactically required of a Participle II, like allowing this lexeme to form Passive and aspectual periphrases in all tenses, non-Preterite as well as Preterite (to repeat):

- (b1) Es wird jetzt aber wieder früher ins Bett gegangen!

 'But you will now go to bed earlier again!'

 (lit. '[it] is now being gone to bed earlier again')
- (c) Eines Tages wird er **gegangen kommen** 'One day he will come walking'

In the case of SEIN, distinct historical stems – Indo-European * h_1es -/*s- 'be, exist' (eventually split up into sei-, sind); *bhuH- 'become, grow' (subtly contaminated with * h_1es -/*s-, eventually yielding bin, bi-); *wes- 'live, dwell' (eventually split up into war-/ $w\ddot{a}r$ - and -wes-) – have come to neatly complement one another to between them express all verbal inflectional categories. And this is the hallmark of suppletion accomplished: such perfectly coordinated division of inflectional labour is not what we expect from sepearate lexemes. The athematic verbs * h_1es -/*s- and *bhuH- and their Germanic descendants seem to have been defective from early on, lacking non-finite and also Past inflections. On the other hand, as late as Old High German $w\ddot{e}san$ was a regular strong verb of class V, but by Middle High German times its Present tense forms appear to have fallen into disuse, and today wesen lingers on as a fully inflecting, but obsolete weak verb, a lexeme of its own despite some similarity of its lofty

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⁹ They are surveyed in Plank 2013, and one upshot here is that the erstwhile Preterite stem frequently infiltrates the Present parts of the paradigm, including the Indicative, suggesting permeable categorial boundaries, as characteristic of integrated lexemes.

existential semantics with *sein*.¹⁰ While the Participle II *gegangen* of lexeme GEHEN is formed from exactly the same stem that does Preterite/Perfect duty, the Participle II *gewesen* of lexeme SEIN is synchronically only a variant of the Preterite/Perfect stem *war-/wär-*. All the same, SEIN is less well integrated than GEHEN insofar as *-wes-* appears to retain its Preterite/Perfect identity-by-formal-association, rather than fully submitting to the demands of lexemic unity. Hence the inability of this singular lexeme SEIN to use its Participle II in non-Preterite syntactic contexts such as Passive periphrases.

In German, SEIN appears to be unique among suppletive or otherwise irregular verbs in showing such non-integration of the stems of one lexeme. This is all the more remarkable because with this verb suppletion has long been emergent and in its present shape has been fully accomplished by Middle High German times at the very lastest, when all Present forms were in place and all *wesen* had was a Past (well, Preterite). If rare, lexemic non-integration – with Preterite forms refusing to be stretched to fulfil non-Preterite functions – thus appears to be quite pertinacious.

Also, it is perhaps no surprise that it is this particular category of a resultative participle which creates such a situation of possible non-integration to begin with. Given the range of functions that Participle II has in a language like German, combining Preterite/Perfect and Passive uses, it is no foregone conclusion where a unitary inflection will be drawn from, if more than one are on offer, as they are in suppletive paradigms split along tense lines. The standard language went for the Preterite/Perfect stem variant -wes-, and thereby incurred a gap for Passive. Dialects, in particular Alemannic, went for the majority stem sei- of the Present, and its Participle II g-si-n (with stem vowel undiphthongised, and in Swiss German rounded, g-sy-n; final nasal unpronounced except in hiatus) – and this was a happier choice from the point of view of lexemic integration. A stem of Present tense affinity should have no hesitations to become part of Passives – and indeed relevant examples that are ungrammatical with gewesen in Standard German are unexceptional in Alemannic:

(b1) ... von dene Lütt wird gern krank gsii'... being ill is being enjoyed by people' (lit. '[it] is gladly been ill by people')

And the reluctance of forms with Preterite/Perfect affinity to be also employed with non-Preterite/non-Perfect meaning as for instance in Passives is asymmetric: Present-affiliated *gsin* does readily adapt to Past/Perfect uses:

- (a2) Sii **isch** z'Huus **gsii.**'She has been home' (lit. 'is')
- (i) [Wenn'd] eimol z'Venedig gsii [bisch], kommsch [du] immer wieder zruck '[If you have] been to Venice once, you'll always return'
- (j) der **gsiine** Mattia Pascal

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 $^{^{10}}$ This is handbook wisdom. To remind myself I consulted Paul 1917: 268-271.

'the late (lit. been) Mattia Pascal'

The Participle II is not the only inflectional category that is inherently unaligned between the Present and Preterite sections of verb paradigms like those of German and its relatives. The reason in the case of Participle II is the tense-wise heterogeneity of its functions. In the case of the Infinitive, Germanic lacks a contrast of tense in the first place. For Participle I the dominant contrast is perhaps one of voice (subjectorientation) rather than tense. Tense contrasts are not as prominent in the Subjunctive and Imperative as in the Indicative, either, which associates them with non-finite categories. Surveying the suppletive paradigms of the "substantive verb" across Germanic, it is striking that it is exclusively in this twilight zone that stem choices vary: while in Alemannic a Present stem is employed for Participle II, the Preterite/Perfect stem was-/war- is variously extended into non- and not-so-finite territory in Gothic, North Germanic, and West Germanic (including temporarily in Old High German); and in this same transitional territory a third stem, be- (boasting a complete non-suppletive paradigm of its own in Old English, alongside the suppletive one of eom, ear-t, is, sī-, sind(-on)/ear-on, wes-/wær-), has found its niche in Modern English. But where tense contrasts are at a premium, namely in the Indicative mood, Preterite/Perfect stems never infiltrate Present sections – which seems to me to confirm the unintegrated nature of the suppletive lexeme of this singular verb.

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