

Language dynamics and the ge-Prefix in Western Central German

0. Introduction

- It is often assumed that German speech is becoming more uniform today than it ever has been in the past.
- While this may be true for certain areas of the German speaking world, it is not necessarily true for all areas and indeed there are aspects of the structure of German where speakers are diverging away from the pattern of the standard language and towards an individual dialect.
- Herein I will consider one aspect of the grammar of German with reference to these properties: namely, that of prefixation of *ge-* for the formation of the past participle.
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(1) Formation of the past participle in MSG

	Stem	Past Participle
a.	finden	gefunden
b.	stehen	gestanden
c.	machen	gemacht
d.	denken	gedacht
e.	anmachen	angemacht
f.	kennzeichnen	gekennzeichnet
g.	studieren	studiert, *gestudiert
h.	betreffen	betroffen

- Prefix is used to build the past participle in examples like a-f.
- No *ge-*Prefix in g. or h.
- Not all *-ieren* examples are loans *-ieren* has also been added to some native bases e.g. *hausieren* ‘to peddle, hawk’ (< *Haus* ‘house’) and its past participle *hausiert*, **gehausiert*.
- Research inquiry: Schmidt and Herrgen (2005).
- Two sources of data are compared: The Wenker Atlas collected in the late 19th century and the *Mittelrheinischer Sprachatlas* with data collected around 1980.

1. Etymology and origin of the ge-Prefix in Germanic

- Generally speaking, the *ge-*Prefix has been connected to *co-* or *con-* prefix known from Latin.
- But can Latin /k/ actually be cognate with Germanic *g word-initially?
- And while the OED leaves open the possibility of a Proto-Indo-European *k in this position developing regularly into Proto-Germanic *g by Verner’s Law, Philippa’s *Etymologisch Woordenboek* sees this development as an irregularity, not caused by regular sound change, writing: “By regular sound change the form should really have appeared as Proto-Germanic *ha(m). One can explain the *g as a special case of Verner’s Law, that normally would not have applied in the *Anlaut*.”¹
- However, this represents only one of the various uses of the *ge-*Prefix. These examples primarily show the use of *ge-*Prefix in the sense of collectivity. Philippa’s *Etymologisch Woordenboek van het Nederlands* recognizes the following 7 different (Dutch specific) uses of the *ge-*Prefix:

¹ Klankwettig zou hieruit echter pgm. *ha(m)- moeten zijn ontstaan. Men verklaart de g als een speciaal geval van grammatische wisseling, die normaal niet in de anlaut werkt.

a. **With Past Participles but not of perfective verbs *worden, vinden, brengen, komen*.**

b. *Nomina Actionis* of verbs: *het geschreeuw* ‘shouting, screaming’, *het gezeur* ‘complaining’

Also lexicalized examples of *gebed* ‘prayer’, *gevecht* ‘battle’

c. Collectives built from nouns, often with an additional suffix *-te* e.g. *gebergte* ‘mountains’, *gesteente* ‘rocks’

d. Collective built from verbs such as *geschenk* ‘gift’, *gevoel* ‘feelings’, *gewas* ‘plants’, *gebouw* ‘buildings’

e. Adjectives built from nouns in the meaning *provided with X* e.g. *gezind* ‘well disposed’ literally ‘provided with sense’, *gerust* ‘calm, tranquil’ lit. ‘provided with rest’

f. **Used in Middle Dutch to build new verbs from existing verbs, imparting a sense of multiplicity, perfectivity, completeness, intensity or difficult situation, which gradually disappeared from Dutch, but includes examples such as *gebeuren* ‘to happen, occur’, *gebieden* ‘to command’, *gedijen* ‘to thrive’, (*zich*) *gedragen* ‘to behave’, *geleiden* ‘to lead, direct’. Often the base verb is no longer present *gebruiken* ‘to use’, *gedogen* ‘to tolerate’ *genezen* ‘to recover’, *genieten* ‘to enjoy’.**

g. Adjectives with a prefix expressing completion e.g. *geheel* ‘fully, entirely’, *geruim* ‘considerable’, *getrouw* ‘faithful, loyal’. In some instances the base form no longer exists e.g. *gedwee* ‘obedient, meek’, *genoeg* ‘enough’, *gezond* ‘healthy’

- For our purposes, the most important types are those listed in a. (past participle formation) and f. (perfectivity).
- The use in a. is found in High German, Yiddish, Luxemburgish and Dutch.
- Subtypes a. and f. are likely related.

2. Typology of ge-Prefix in Germanic languages

- Although ge-Prefixation of some kind is common in Germanic languages, it is far from universal and some languages exhibit more or less prefixation than others.
- As I see it, Germanic languages can essentially be divided into 7 different with respect to the use of a ge-Prefix. Consider the following table summarizing these different categories.

(2) Typology of ge-Prefixation in Germanic Languages

Type ²		Ancient Languages	Present Day
A	No Verbal Prefixation	Old Norse	
B	No ge-Prefix		English
C	Lexically conditioned loss	Old and Middle High German	
D	Syntactically conditioned loss		Saterland Frisian
E	Phonologically conditioned loss		Southern German ³
F	ge-Prefixation with all unprefixated roots		Standard German
G	ge-Prefixation also with loanwords		Dutch

A. No verbal prefixes

- The language that most clearly exhibits this pattern is Old Norse, where there are no real verbal prefixes of any kind. Generally, it is uncontroversial that Old Norse lost prefixes quite early on in the development of the language, but that they must have been present early on in the development of the language.
- Dal (1930:179) writes:
“Doch meistens sind die Präfixe spurlos verschwunden. Man muss hier mit einer Bewegung in der Sprache rechnen, die auf das Abwerfen sämtlicher vortonigen Silben hinwirkte. Akzentuierungstendenzen und Abstumpfung des Sprachgefühls für die Funktion dieser Präfixe werden zusammengewirkt haben.”
- Old Norse has preserved a reflex of the ga-Prefix include the following: *glíkr* ‘alike’, *gnógr* ‘enough’, *granni* ‘neighbor’ and also from the latter *grennd* ‘neighborhood’.

B. Verbal prefixes, No ge-Prefix

- English does not a ge-Prefix for past participles, but does have other verbal prefixes
- Consider the table below exhibiting verbal prefixes in English.

(3) Verbal Prefixes in English

	Prefix	Verb
a.	be-	believe
		bespatter
		bestir
b.	for-	forgo
c.	under-	undergo

- The above examples attest that English has retained some use of prefixation, but that this use of prefixation is not fully productive in the modern language. Outside of this development, however, English shows very few that harken back to the old ge-Prefix.

² The type names listed here are my own. They are intended to build a scale from least use of the ge-Prefix to most use of the ge-Prefix, with the types in the middle roughly falling somewhere between the two.

³ The pattern is exemplified here by the variety of German spoken in Nuremberg, but as can be seen from the pattern is typical of Southern German dialects.

- The reason for this is that the *ge*-Prefix had already become [jə-] in form by the time of Old English and by Middle English <ie-> or <3e-> and was sometimes even written <i->.
- Today, the prefix survives as *a-* or *e-* only in words such *alike* and *enough*.⁴

C. Lexically (*Aktionsart*)⁵ conditioned lack of *ge*-Prefix

- In Middle High German (MHG), most unprefixated verbal roots form their past participle with a prefixed *ge-* element.
- But there is one significant difference between MHG past participles and those of the present day standard language. Consider the examples in the table below in (6).

(4) MHG Verbs without a *ge-* Prefix in the past participle (cf. Hennings 2012:110-111)

	Infinitive	Past Participle
a.	vinden 'to find'	vunden
b.	komen 'to come'	komen
c.	treffen 'to meet'	troffen
d.	werden 'to become'	worden
e.	bringen 'to bring'	brâht (brungen)

- The first question that arises when considering these verbs is what semantic or phonological property these verbs could have in common that would distinguish them from other verbs in MHG.
- The traditional answer to this question has been that these verbs are all “perfective” verbs that have a semantic property of perfectivity.
- The same situation obtains for the earliest stage of the German language, Old High German (OHG). At that stage, one finds the participle forms of the verbs *quëman* (past participle *quëman* or less commonly *quoman*), *findan* (past participle *funtan*) und *bringen* (past participle *brungan* as well as *brâht*) systematically without a *ge*-Prefix. The verbs *wërden* und *treffen* forms of both types are attested e.g. *wortan* or *uuordan* besides *giwortan* or *chiiuordan*; *troffan* beside *gitroffan* (cf. Braune und Reiffenstein 2004: 273).

D. Syntactically conditioned lack of a *ge*-Prefix

- Saterland Frisian, as shown in Kramer (1982:33), does not use a *ge*-Prefix for the past participle *ik hääbe brukt* ‘I have used’
- or as an adjective e.g. *brukte Kloodere* ‘used clothes’
- However, when a helping verb is absent the *ge*-Prefix does appear e.g. *eerelk gekweedden* ‘to be honest (lit. honestly said)’ (cf. Ger. *ehrlich gesagt*)
- *hi sien Rääd gekrigen* ‘He quickly took his bicycle’. To my understanding, this latter form represents an example where the helping verb *häd* ‘(he/she/it) has’ is for some reason absent.⁶

⁴ It should be noted, however, that not all cases of an *a-* Prefix in English go back to an original *ge*-Prefix. Words such as *away* and *alive* derive from the preposition *on*.

⁵ It should be pointed out that I am NOT distinguishing here between lexically conditioned lack of prefixation and *Aktionsart* conditioned lack of prefix. Strictly speaking, these two are not the same thing, as lexically conditioning would only involve a closed set of verbs with a lack of prefixation in the past participle, whereas as *Aktionsart* conditioning would presumably describe a situation where ALL verbs of a certain semantic property would lack a prefix in the past participle. The distribution here is probably closer the former, though I will leave this question open to further research.

E. Phonologically conditioned lack of ge-Prefix

- This pattern is commonly found in dialects of southern Germany. As a dialect representative of this pattern, one can consider the dialect of Nuremberg, as described in Gebhardt and Bremer (1907).
- Consider the data in the examples below in (5).

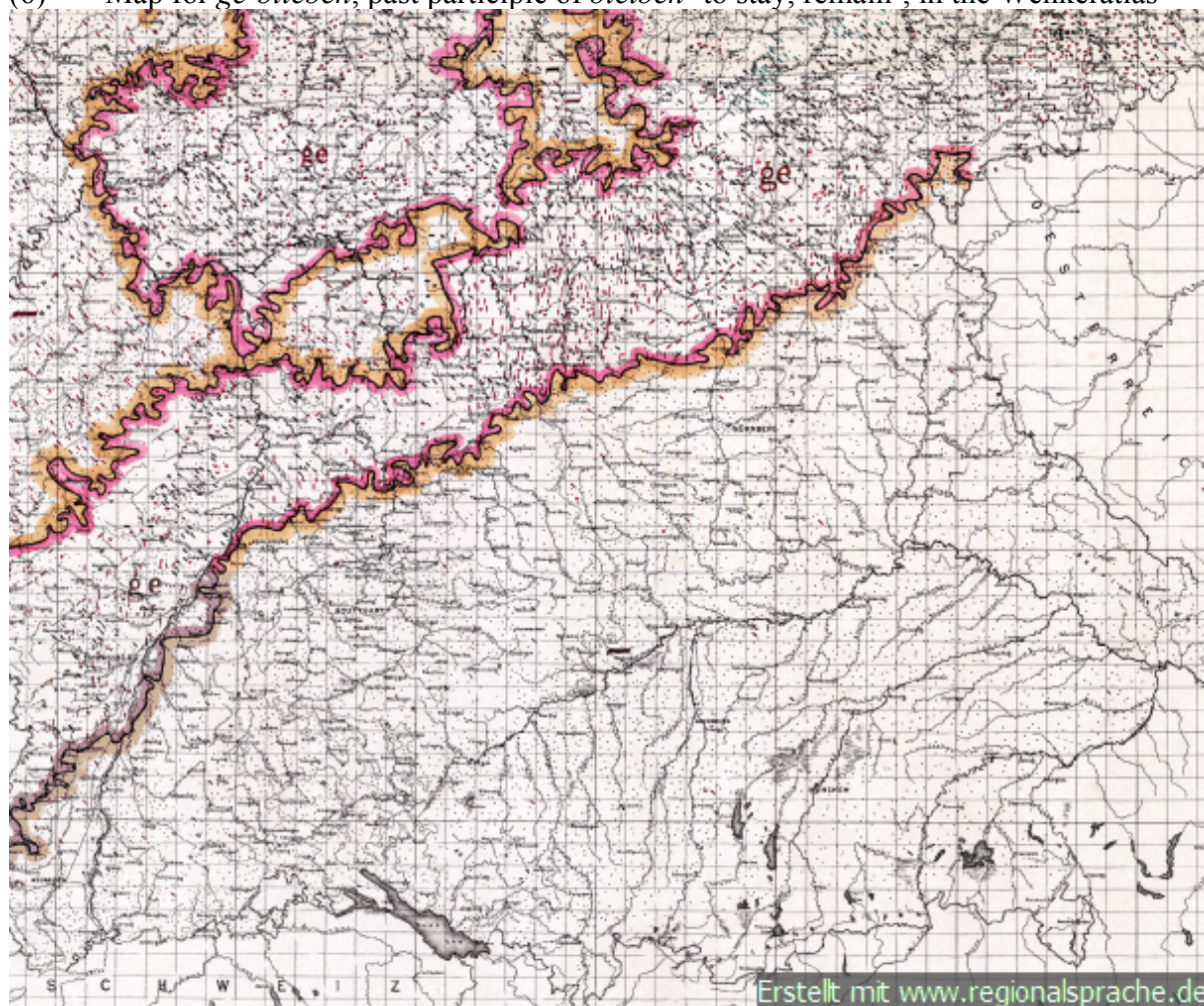
(5) Distribution of ge-Prefix in Nuremberg dialect

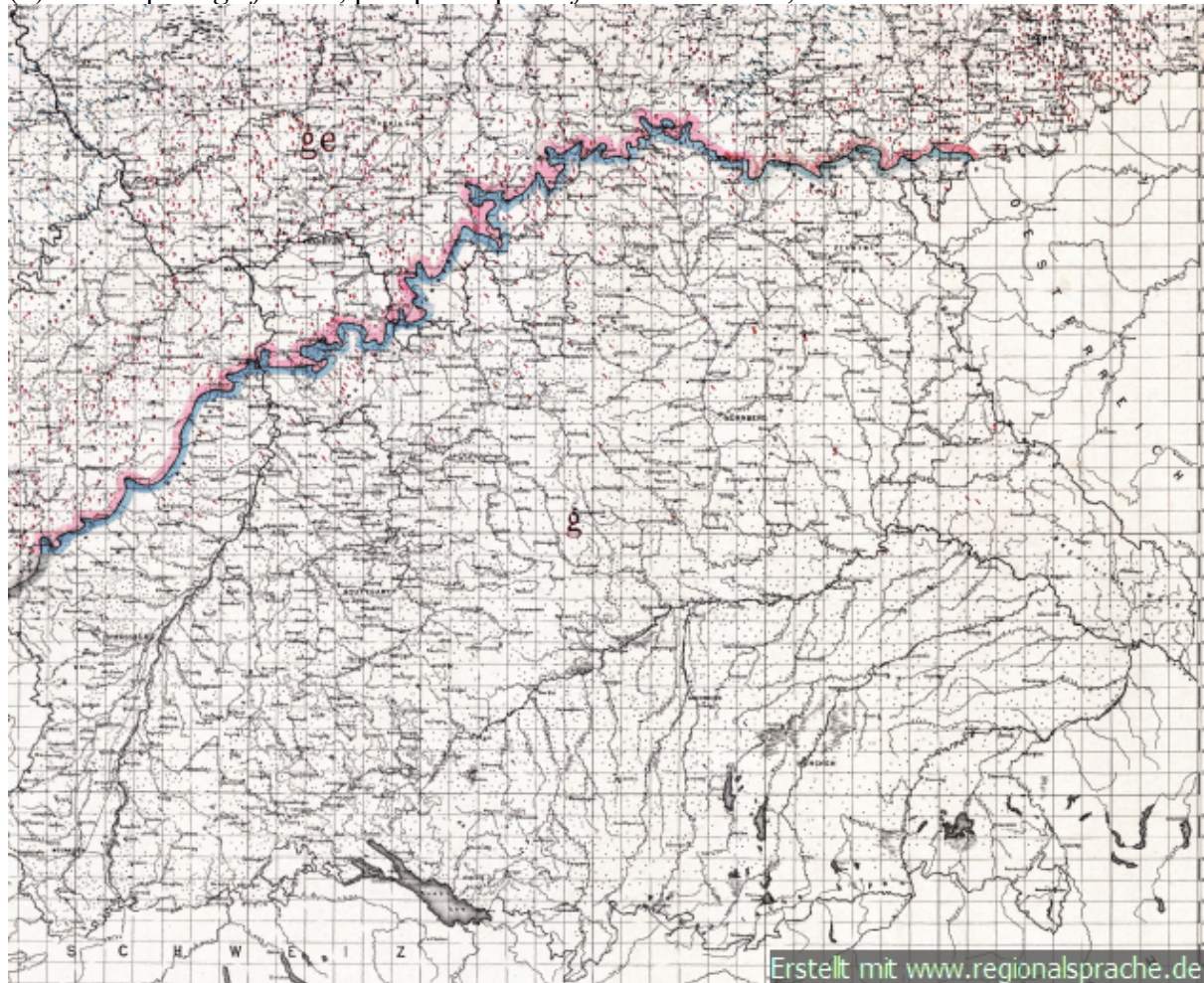
		Nuremberg Dialect	Standard German	Gloss
a.	k-	ksufm̩ / ksofm̩	gesoffen	‘drunk’
		kfw̩n̩	geschwiegen	‘remained silent’
		kf̩r̩çt̩n̩	gefürchtet	‘feared’
b.	g-	gm̩auln̩	gemalt	‘painted’
		gl̩it̩n̩	geläutet	‘sounded’
		glofm̩	gelaufen	‘run, waked’
		groufm̩	gerufen	‘called’
		gw̩ōt̩n̩	gewatet	‘waded’
		gh̩eɲt̩	gehängt / gehangen	‘hanged’
c.	Ø-	ts̩ūn̩	gezogen	‘pulled’
		trofm̩	getroffen	‘met’
		t̩ũ	getan	‘done’
		pi̩sn̩	gebissen	‘bitten’
		k̩ēm̩	gegeben	‘given’
		pat / p̩ōdn̩	gebadet	‘bathed’

- Though this exact distribution of /g-/, /k-/ and Ø is not universal across southern German dialects, it is quite common for southern dialects to have some sort of phonological reduction in the ge-Prefix.
- Consider the following maps of the past participles in southern Germany from the *Wenkeratlas*.

⁶ The exact reason for the lack of a helping verb here is not clear. Generally, Kramer’s grammar indicates that the perfect is formed with a helping verb *hääbe* ‘to have’ + past participle e.g. *ik hääbe hoald* ‘ich habe geholt’, a construction parallel to the standard language. Under which exact circumstances one can drop the helping verb is not clear to me, but this might be parallel to a stylistic variant in historical German where the helping verb can be dropped.

(6) Map for *ge-blieben*, past participle of *bleiben* 'to stay, remain', in the Wenkeratlas



(7) Map for *ge-fahren*, past participle of *fahren* 'to drive', Wenker-Atlas

- In map 9, it can be seen that most southern dialects, more or less covering the entire area of present day *Baden-Württemberg* and *Bayern* do not have any trace of *ge-* in the past participle of *geblieben*.
- Full deletion in this case would not be all that surprising, since a /gbl/ cluster at the beginning of a word would be quite difficult to pronounce.
- Map 10 shows, however, that across this same region there is prefixation in *gefahren*, albeit orthographically represented as *gfahren*, which attests to phonological reduction of the prefix.
- Taken together, the evidence provided in *Ortsgrammatik* of Nuremberg and the two maps taken from the *Wenkeratlas* attest to the fact that varieties of German spoken in the south of Germany, roughly the provinces of *Baden-Württemberg* and *Bayern*, can be broadly characterized as having a phonological reduction of the prefix that can in some cases lead to full deletion of the suffix.

F. *ge-*Prefixation with all unprefixated roots⁷ (Exception: Loanword with irregular stress pattern)

- This pattern is attested in MSG.

⁷ Strictly speaking, this only affects verbs with an unstressed prefix such as *ent-*, *be-*, *er-*, *ver-* etc and not verbs with a prefix that has secondary stress e.g. *durchlesen* (past participle = *durchgelesen*) or *abziehen* (past participle *abgezogen*).

- It has been described in detail the introduction to this paper. However, consider once again the table in (8), reprinted from (1) above.

(8) Formation of the past participle in MSG

	Stem	Past Participle
a.	finden	gefunden
b.	stehen	gestanden
c.	machen	gemacht
d.	denken	gedacht
e.	anmachen	angemacht
f.	kennzeichnen	gekennzeichnet
g.	studieren	studiert, *gestudiert
h.	betreffen	betroffen

- Once again, it can be seen in (8) that MSG uses a prefix with all unprefixated verbal roots with the exception of the examples like that in g., where the verb is usually a borrowing from a Romance language and has non-initial stress.

G. ge-Prefixation with all unprefixated roots, including loanword with irregular stress pattern

- This pattern is exhibited by the Standard Dutch language, which in essence shows a ge-Prefix in all contexts described in F, but also exhibits prefixation in the past participles of verbal roots that do not have initial stress.

(9) Comparison of past participle prefixation in German and Dutch

Dutch		German	
Infinitive	Past Participle	Infinitive	Past Participle
digitaliseren 'digitalise'	gedigitaliseerd	digitalisieren	digitalisiert, *gedigitalisiert
rechercheren 'research'	gerechercheerd	recherchieren	recherchiert, *gerecherchiert
rekruteren 'recruit'	gerukruteerd	rekrutieren	rekrutiert, *gerekrutiert
accepteren 'accept'	geaccepteerd	akzeptieren	akzeptiert, *geakzeptiert

- Note that Dutch uses a ge-Prefix in even more cases than German does.

3. Language Dynamics and ge-Prefix

- With the typological system described in section 2 in mind, it is now time to turn our attention to the primary investigation of this paper.
- Is this MHG and MHG system still preserved in the dialects?
- This section will be subdivided into two parts: part A, which will describe the results of a survey of data collected originally by *Georg Wenker* in the late 19th century and section B, which will survey data collected in the *Mittelrheinischer Sprachatlas* at the end of the 20th century.

A. Wenker Atlas

- In a sample taken from the Wenker Atlas, the past participles of four verbs have been charted: namely, *finden* ‘to find’ (*gefunden*), *fallen* ‘to fall’ (*gefallen*), *bringen* ‘to bring’ (*gebracht*) and *brennen* ‘burn’ (*gebrannt*).
- So, one would expect any German dialect that deletes an initial ge-Prefix in past participle for phonological reasons (as in Nuremburg German above in section 2E) to handle *gefunden* and *gefallen* in the same manner.
- Furthermore, the past participles of *finden* and *bringen* have the added complexity that they largely appear without a prefix in MHG, where this is of course said to be due to the lexical aspect (Ger. *Aktionsart*) of these verbs.
- So, one would hypothesize that any dialect that adds the ge-Prefix with reference to *Aktionsart* would form its participles of *finden* and *bringen* as \emptyset -*funden* and \emptyset -*bracht*, but still form the past participles of *fallen* as *gefallen* and *brennen* as *gebrannt*.
- A map of all of the towns under investigation here is therefore presented in (10).

(10) Summary of all towns under investigation



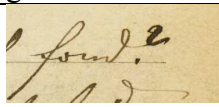
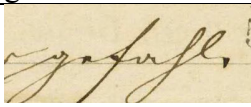
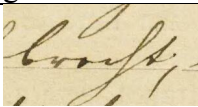
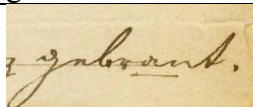
- On the map, it can be seen that the 485 towns under investigation here are generally characterized as belonging to one of two different dialectal *Großräume*: Middle Franconian (Ger. *Mittelfränkisch*) and Rhine Franconian (Ger. *Rheinfränkisch*), according to the seminal dialect classification of Wiesinger (1983).
- As I noted above, the Wenker surveys for these 485 towns were consulted (available online at regionalsprache.de) and four items were elicited from each survey, namely the past participial forms of *finden* ‘to find’ (*gefunden*), *fallen* ‘to fall’ (*gefallen*), *bringen* ‘to bring’ (*gebracht*) and *brennen* ‘burn’ (*gebrannt*). Each of these verbs has one occurrence respectively in the 40 *Wenkersätze*. The four sentences relevant for this study are summarized in the table below in (11).

(11) The four *Wenkersätze* under consideration here

Item	<i>Wenkersatz</i> number and full sentence
gefunden	Sentence 32: Habt ihr kein Stückchen weiße Seife auf meinem Tisch(e) gefunden ?
gefallen	Sentence 4: Der gute alte Mann ist mit dem Pferd(e) auf dem Eis eingebrochen und in das kalte Wasser gefallen .
gebracht	Sentence 37: Bauern hatten (fünf) Ochsen und (neun) Kühe und (zwölf) Schäfchen vor das Dorf gebracht , die wollten sie verkaufen.
gebrannt	Sentence 6: Das Feuer war zu heiß, die Kuchen sind ja unten ganz schwarz gebrannt .

As a sample of the work undertaken here, consider the examples from Mettendorf of the four instances of the past participles.

(12) Mettendorf past participles examples

MSG	gefunden	gefallen	gebracht	gebrannt
Wenker				

- The above table shows a sample of how the four past participles are recorded in the Wenker surveys. This information was then collected and plotted into an Excel spreadsheet.⁸
- The results of the consultation of the Wenker surveys can be summarized as follows. As I see it, the surveys generally show one of nine different patterns. The nine different patterns can be summarized in the table below.

(13) The nine different subtypes of the results

Subtype	gebracht	gefunden	gefallen	gebrannt
0	ge-bracht	ge-funden	ge-fallen	ge-brannt
1	Ø-bracht	ge-funden	ge-fallen	ge-brannt
2	Ø-bracht	Ø-funden	ge-fallen	ge-brannt
3	ge-bracht	Ø-funden	ge-fallen	ge-brannt
4	ge-bracht	g-funden	g-fallen	ge-brannt
5	Ø-bracht	g-funden	g-fallen	ge-brannt
6	Ø-bracht	Ø-funden	g-fallen	ge-brannt
7	ge-bracht	Ø-funden	g-fallen	ge-brannt
8	Other			

- Subtypes 1-3 represent dialects that must be some kind of lexical aspect system for ge-Prefixation.

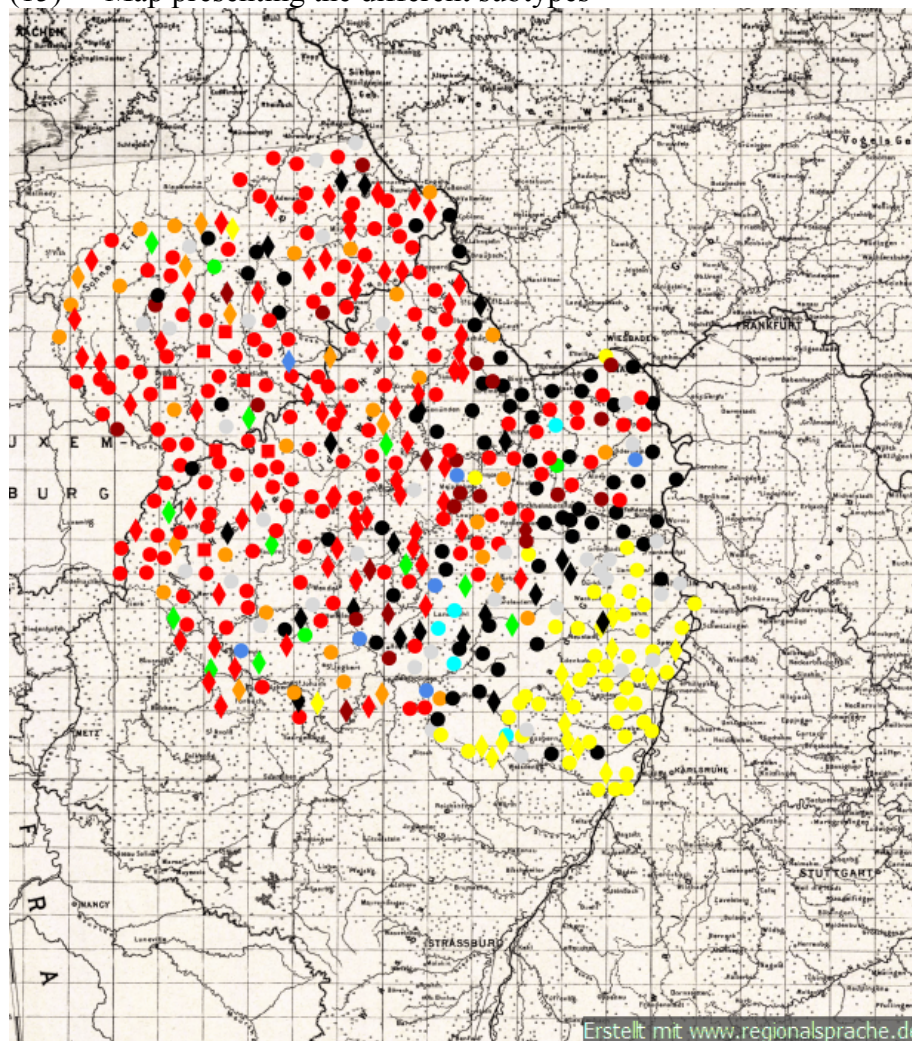
⁸ A copy of this spreadsheet can be made available to the interested party.

(14) Results by subtype

Subtype	0	1	2	3	4	5	6	7	8	Total
Number	85	24	209	36	61	5	14	7	35	476 ⁹
Percentage	17.9%	5.0%	43.9%	7.6%	12.8%	1.0%	2.9%	1.5%	7.3%	

- It can be seen that subtype 2, which is the MHG pattern of distribution, is by far the most common type in the data presented here. This means that 43.9% of these dialects show a lack of prefixation for both *gebracht* and *gefunden*. In the following map, the areal distribution of these different subtypes is presented.

(15) Map presenting the different subtypes



Color schema: Subtype 0: Black, Subtype 1: Maroon, Subtype 2: Red, Subtype 3: Orange, Subtype 4: Yellow, Subtype 5: Light Blue, Subtype 6: Green, Subtype 7: Dark Blue, Subtype 8: Gray.

- It can clearly be seen that subtype 2 (presented in red) dominates a broad swath of the central and northern region of the map.
- All of these varieties have preserved the MHG system intact.**

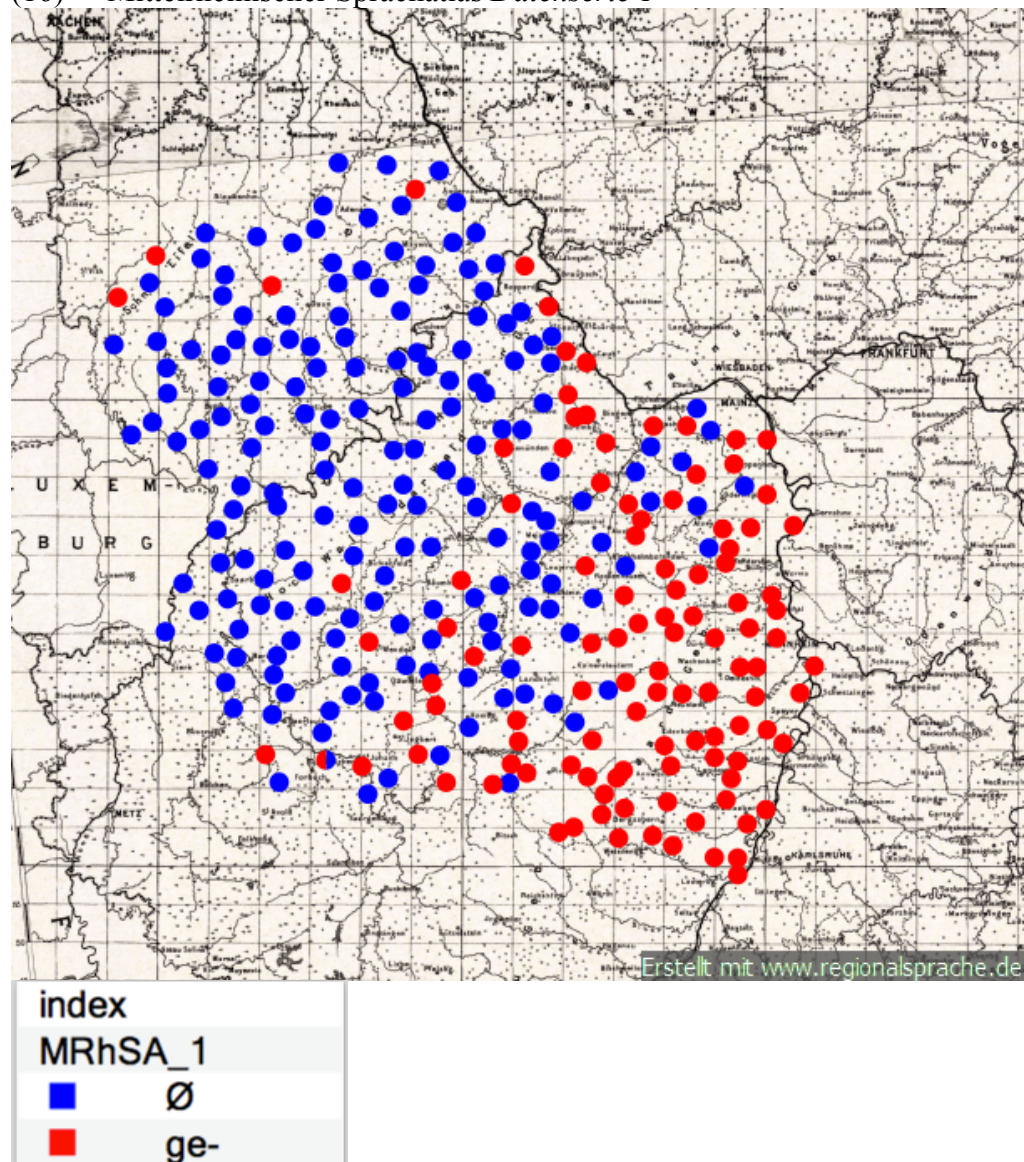
⁹ N.B. There were nine instances of a Wenker survey that was for one reason or another not decipherable. These have therefore been eliminated from the table.

- Additionally, the southwestern area of the map is dominated by subtype 4 (yellow). This is a phonologically reducing variety.
- Finally, subtype 0 (black), with uniform ge-Prefixation as in MSG, can be seen to predominantly occur in the northeastern regions of the map represented.

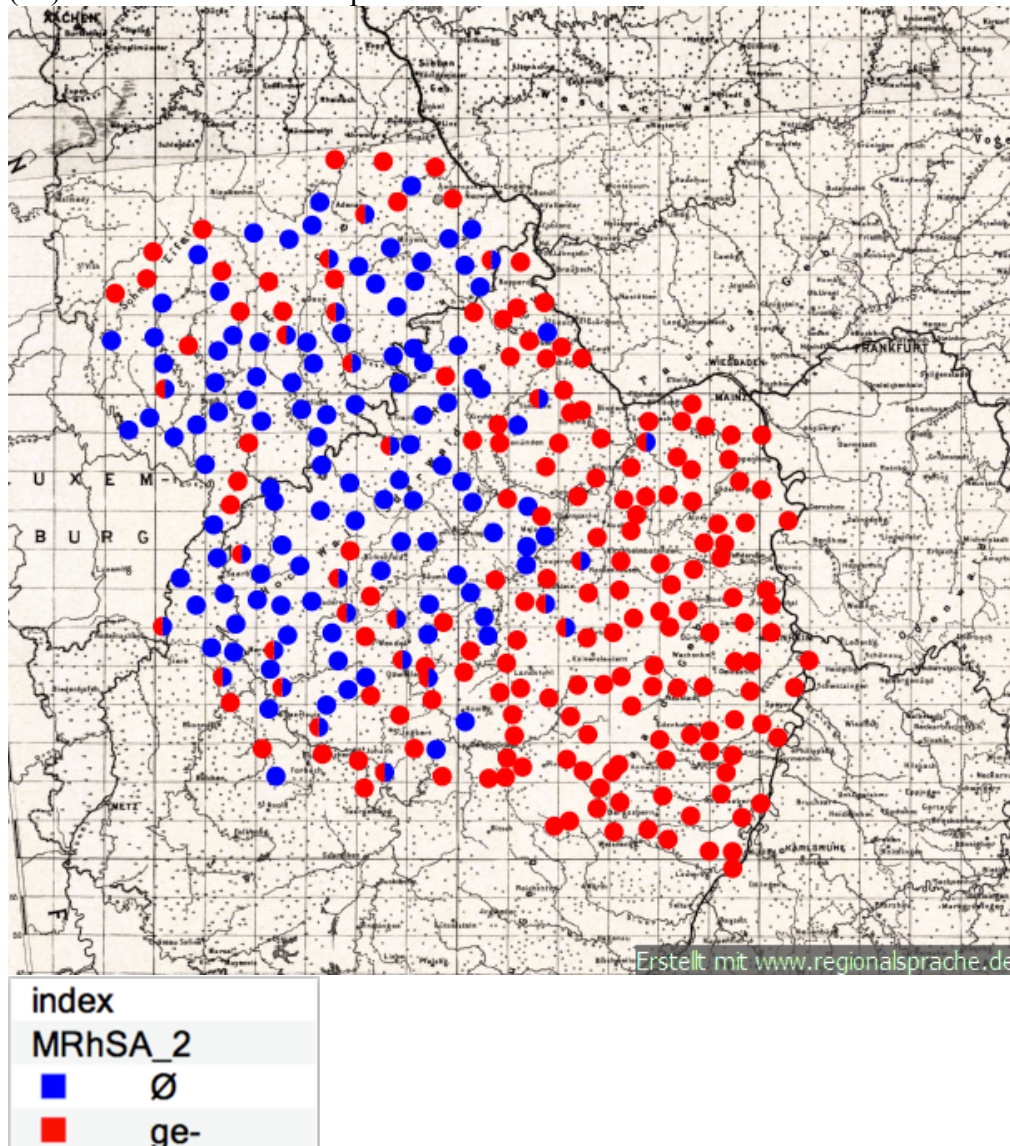
B. *Mittelrheinischer Sprachatlas* (MRhSA)

- For background the *Mittelrheinischer Sprachatlas* (MRhSA) is a linguistic atlas that investigated a number of phenomena in the Western Central Area (roughly *Rheinland-Pfalz*)
- It appeared in 5 volumes between 1994 and 2002, each of which were devoted to one particular linguistic area of the investigation.
- The informants were divided into two groups: *Datenserie 1* and *Datenserie 2*
- Data has been collected in MRhSA for 291 of the 485 towns under investigation.
- Consider the following maps below:

(16) *Mittelrheinischer Sprachatlas Datenserie 1*



- In the above map, it can be seen that prefixless forms occur most frequently in the northwestern regions of this map, while forms with a prefix dominate in the more southwestern regions.
- This appears to be similar to the maps representing data from Wenker surveys where the southwestern region was likewise mostly dominated by prefixed forms.
- Therefore, it appears that the pattern of lack of prefixation in past participles of verbs like *gebracht* has been preserved in this generation, but perhaps not quite as vigorously as it was in the previous generations i.e. the generation who participated in the Wenker surveys. These results are presented in (17) below.

(17) Mittelrheinischer Sprachatlas *Datenserie 2*

- The results show that red (ge-) has clearly increased in prominence as compared to the map in (18). This means that younger generations of speakers are now using ge-Prefix to form *gebracht* much more consistently than they ever have in the past.

4. Discussion

- The purpose of section 2 was largely to establish a typology of Germanic varieties with regard to the use and context of the ge-Prefix, so that it can be seen what the

overall patterns have been over time from MHG to present day varieties of Western Central German.

- Generally, the pattern appears to be that there has been no change in the system of prefixation in Western Central German from MHG to the time of the collection of the data in the Wenkeratlas.
- In the MRhSA, the system of lexically conditioned absence of the prefix *ge-* is still attested for *gebracht*
- **It appears that in the younger generation of speakers interviewed in the MRhSA, the past participial form *Ø-bracht* has clearly lost some ground and prefixed forms originating from further southeast have spread to the north.**
- It seems likely that a phonological reduction in *ge-*Prefixation would likely strike the deathblow to an Aktionsart conditioned distribution of *ge-*Prefixation, for the following reasons.
- First, consider the likely pathway of development for a phonologically reducing variety such as Nuremberg German, as is represented in table (18).

(18) Historical Derivation of phonologically reducing varieties

MHG	getrieben 'driven'	gefangen 'done'	gegeben 'given'	gerufen 'called'
Schwa Deletion	gtrieben	gfangen	ggeben	grufen
Cluster Simplification ¹⁰	trieben	kfangen	geben	-----
Result	Ø-trieben	k-fangen	Ø-geben	g-rufen

- The result of these historical changes, however, is that the variety would never have any prefixation before stops (voiced or voiceless) and would only show prefixation before voiceless fricatives (here as /k-/) and before sonorants (here as /g-/).
- **After the phonological reductions listed above, a speaker encountering past participial forms such as *Ø-komen*, *Ø-troffen* and *Ø-bracht* would likely conclude that these forms are following the normal rules of prefixation.**
- The only forms that would be exceptional would be (unprefixed) *Ø-funden* and *Ø-warden*, which would one expect to appear as *kfinden* and *gwarden* based on the rules of Nuremberg prefixation.
- But this could also be due to influence of the standard language.

5. Conclusion

- One of the more well-known uses is of course the use of the prefix to form the past participle familiar from MSG and Dutch.
- It turns out, however, that this use of the *ge-*Prefix did not occur quite as uniformly in the past as it does today and that some specific verbs systemically do not show prefixation in the older varieties of continental West Germanic (the ancestral varieties to High German, Low German, Dutch and Frisian).

¹⁰ I intend this process of "cluster simplification" to be an amalgamation of processes that create better syllable onsets.

- Specifically, the verbs *finden*, *kommen*, *treffen*, *werden* and *bringen* can be observed without a prefix in earlier times.
- The MHG pattern is more or less intact in Western Central German in the late 19th century
- The pattern is still found in the data collected in the MRhSA but has apparently lost a little bit of ground, especially with the youngest generation of informants.

References

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