WHY DOES GA- NOT APPEAR IN THE GOTHIC PAST PARTICIPLE?∗

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ABSTRACT

Why does ga- not appear in the Gothic past participle while ge- does in Old English and German? The study on the Cumulative tendency (CT) which Niwa has made for a long time is found to solve this problem. CT is a universal tendency to strengthen a weakened linguistic unit. So I show in 3. how to solve this problem by CT. The Generative Grammar dealing only with structures could not solve this problem but the minimalist approach has made it possible by introducing semantic features. It so happened that a book by Roberts and Roussou (2003) about the minimalist approach to grammaticalization was published. Following their approach I try to solve this problem in 4. The answer to this problem combines the deficiency of inflectional endings, unstableness of the ga-/ge- prefix and a productive prefix system in Old English and German.

1. Introduction

It is well-known that Old English (OE) and, more properly speaking, German (indicated as G) take ge-, a verbal prefix, for the past participle (indicated as PP) as a verbal inflection. It is also known that Gothic (indicated as Goth.), an oldest remaining language in Germanic, does not take ga- for PP at all (König – van der Auwera 1994). Compare the PP examples of Goth., OE and G in (1)

1) a. Goth. saih-ans. PP of saihwan ‘see’
    b. OE ge-sew-en. PP of seon ‘see’
    c. G ge-seh-en. PP of sehen ‘see’

Why? This problem has not been a target of interest for linguists as far as I know, probably because it is dealt with as a difference of inflection and it has

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been felt to be unnecessary to seek for more. But recently interest in linguistic approaches has changed in two ways: one is that now research is in an era of seeking for a cause rather than a result. It naturally goes to a discovery of the cause mentioned above. The other is concerned with the function of this strange prefix ge- (including all functions other than that of PP). That is, the traditional interest was to find out the semantic and syntactic differences between ge-verbs and non-ge-verbs. It was a long and laborious endeavor in vain. However, the era of seeking for grammaticalization has come and the ge-PP has begun to take a main position in the ge- theory. Thus, in this paper I would like to make a small contribution by answering this “Why?” in (1). As shown below, I use two new linguistic approaches: the cumulative tendency (CT) approach and the minimalist approach.

2. The prefix $ga$-/$ge$-/$ly$-/$li$- for PP in Goth., G and OE

First we have to know the occurrence and non-occurrence of this prefix for PP. In G there is no problem as in (2) because in G ge- for PP occurs regularly except for a few groups of verbs.2

2) “In general PP often took ge- because ge- expressed the action finished, and in Nhd (Neuhochdeutsch) almost all PPs came to take ge-, but till Mhd (Mittelhochdeutsch) verbs having a perfective meaning in themselves had not taken ge-" (Sagara 1950: 265) [my translation from Japanese].

In Goth. the prefix $ga$- did not appear for PP at all because PP was indicated by rich inflectional endings as in (3):

3) “Es (=PP) wird stark und schwach flektiert, also vom st. V. giban geben:

\[
\begin{array}{ccc}
\text{m} & \text{n} & \text{f} \\
\text{st.} & \text{gibans} & \text{giban, gibanta} & \text{gibans} \\
\text{sw.} & \text{gibana} & \text{gibano} \\
\end{array}
\]

und vom sw. V nasjan retten:

\[
\begin{array}{ccc}
\text{nasi}b\text{s} & \text{nasi}b, \text{nasidata} & \text{nasida} \\
\text{sw. naside}a & \text{naside}" \\
\end{array}
\]

(Hempel 1953: 52).

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1 See Dollinger (2001: 6, 17).
2 Verbs not taking ge- for PP: (1) verbs with the prefixes be-, emp-, ent-, er-, ge-, miss-, ver-, and zer-. (2) verbs ending with -$ieren$ (Kasuga – Takahashi – Kotani 1992).
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But in Old English it is necessary to see whether ge- is established as an inflectional marker of PP. My old paper (Niwa 1958) shows that in one MS it seems to be established as so, but in the other MS not so. The main reason seems to be a difference of dialect. See Table 1.

Table 1. The occurrences of PP in A and E MSS classified by prefixes and non-prefix

a. PP occurrences classified by ge-, # and other prefixes

<table>
<thead>
<tr>
<th></th>
<th>A MS</th>
<th>E MS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ge-</td>
<td>78</td>
<td>24</td>
</tr>
<tr>
<td>#</td>
<td>10</td>
<td>28</td>
</tr>
<tr>
<td>other prefixes</td>
<td>69</td>
<td>34</td>
</tr>
<tr>
<td>Total</td>
<td>157</td>
<td>86</td>
</tr>
</tbody>
</table>

b. PP occurrences classified by ge- and #

<table>
<thead>
<tr>
<th></th>
<th>A MS</th>
<th>E MS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ge-</td>
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<td>24</td>
</tr>
<tr>
<td>#</td>
<td>10</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>88</td>
<td>52</td>
</tr>
</tbody>
</table>

cf. A MS. = *Saxon Chronicle Parker* MS written in the early 10th c., West Saxon dialect

E MS. = *Saxon Chronicle Peterborough* MS after 1122 written in the 12th c., East Midland dialect

# = non-prefix


By Table 1 we can say that in the early 10th-c. WS ge- was almost always a PP marker but in the 12th century East Midland dialect ge- appeared in PP but not as a PP marker. There are two aspects we should pay attention to in this. One concerns what that 11.4% # PP means (See Table 1b). The other is that this difference of ge- in two MSS may not be one of dialect but one of time. E MS was written 200 years later.

The first aspect is important when we think of the development of grammaticalization. The verbs shown in Niwa (1958: 276) are *hatan* (1 time), *nemned* (3), *haefniede* (1), *cumen* (3), *freten* (1) and *funden* (1). Remember Sagara’s (1950) description in (2): “… in Mhd verbs having a perfective mean-
ing in themselves did not take ge-”. The same thing will be said for these non-
ge-verbs. At least *finden* is such a verb. So we can assume (4) about the develop-
ment of the PP prefix.

4) Goth. non-prefix, WS ge- and G ge- show the developmental road of gram-
maticalization as a PP marker.

So Gothic is a start, WS a way and G a goal.

The second aspect is easy to solve when we see other dialects in ME. For in-
stance, see Mossé (1949: 9). The ge-PP was preserved or even developed in
some ME dialects though the form changed from ge- to y- and i-.

3. The CT approach³

My CT approach aimed to explain why this development in (4) happened, in
terms of cumulation. Now, what is CT ? See (5):

5) “When a certain linguistic unit weakens in sense, another linguistic unit with
a similar meaning appears and strengthens it. We call it a cumulative tendency”

This tendency is seen in the history of negative sentences and was pointed out
early by Jespersen (1917: 9), as in (6):

6)  a. ic *ne seege* (*nawiht/naht*) (OE)
    b. I *ne seye not.* (ME)
    c. I say *not.* (c. 1400–)

Here the negative words written in italics in Middle English are two, but do not
make a double negative construction, because they are cumulative. Niwa (1995:
139, 121) found this tendency between OE prefix and particle as in (7a) and
even between OE verb stem and prefix as in (7b):

7)  a. 1140 267 27 … for he besæt heom til hi *aiauen up* here castles
    ‘… for he besieged them till they gave up their castles’
    b. *VP 45 11* ic *biom upahefen* in ðiodum
    ‘I am exalted among the nations’.

³ My CT studies began early in 1983 and this phenomenon was investigated in Niwa (1991,
1995) before finally being schematized, setting up semantic features in Niwa (2002). We can call
them the CT features.
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Cf. 1140 267 27 shows the annals, page, and line in Plummer and Earle (1952). VP 45 11 shows Vespasian Psalter, the chapter, and the verse number in Sweet (1885).

In (7a) the particle up strengthens the prefix a- and in (7b) the particle up strengthens the verb hefe, because both share the meaning ‘upwards’. Now in this paper I would like to explain the historical development seen in (4), repeated here as (8), by this CT approach.

8) Goth. non-prefix, WS ge-, and G ge- show the developmental road of grammaticalization as a PP marker.

In general, in order to explain by CT, it is necessary to satisfy three linguistic conditions in (9):

9) a. The weakening of some linguistic unit
   b. The sharing of meaning between a new unit and an old unit
   c. The language with a new unit must be productive in developing a new unit.

In order that we apply these conditions to (8) it is necessary to satisfy (10):

10) a. Weakening of inflectional endings such as Goth. -ans, etc.
    b. Sharing a common meaning (or a common semantic feature4) between the inflectional ending and the PP prefix ge-
    c. OE and G being languages in which a prefix system is productive.

The Goth. inflectional endings had enough function as PP, but OE and G had not, losing some inflectional endings as seen in (11).

11) a. Goth. (=3))

   Es [=PP] wird stark und schwach flektiert, also vom st. V. giban geben:

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4 In Niwa (2002: 357) I set up a common semantic feature as well as a giving feature and a given feature.
Y. Niwa

m n f
st. gibans gtiban, gibanta gibans
sw. gibana gibano

und vom sw.V nasjan retten:

st. nasiþs nasiþ, nasidata nasida
sw. nasidea naside

(Hempel 1953: 52).

b. OE

PP has strong and weak forms. So a strong verb bindan has:

ge-bund-en

Weak verbs hieran ‘hear’, sendan’send’, metan ‘meet’ have:

hier-ed , send, met-t

(Sweet 1925: 22, 30).

c. G

PP has strong and weak forms. So a strong verb kommen ‘come’ has:

ge-komm-en

Weak verbs arbeiten ‘work’, machen ‘make’ have:

ge-arbeit-et, ge-mach-t

Pay attention to the appearance of ge- even in weak verbs such as ge-mach-t.5


When we compare Goth. with OE and G, we can easily notice that Goth. is rich in inflectional endings, while OE and G are not so, losing endings and producing contraction and even loss. Thus (10a) is satisfied.

Next, the Goth. PP had a passive meaning similar to Present-Day English, with ge- in OE and G having the meaning of an action finished (cf. Sagara’s 1950 description in (2)). It is possible to assume that between them there is a common meaning. Thus (10b) is satisfied.

5 In OE, the PP prefix ge- does not appear in weak verbs. It means that the PP prefix ge- developed more in G than in OE.
Finally OE and G are very active in using verbal prefixes. For instance in (7b) the prefix \textit{up-} is used even to strengthen the meaning of a verb stem.\footnote{\textit{Up-} is an adverbial prefix. In general, adverbial particles are more reluctant in prefixing than prepositional particles (= prepositions). It means that the language of this \textit{Vespasian Psalter} has a strong system of prefixing. See Niwa (1991, 1995).} This is nothing but a prefixal system which is very active and productive. Thus (10c) is satisfied.

Now we can conclude that my CT approach can explain why Goth. did not have a \textit{ga-}PP prefix while OE and G had it. Furthermore, in G it works more perfectly than OE, as pointed out in (8). In G \textit{ge}- appears in weak verbs seen in (11c) and even in special verbs such as \textit{sein} ‘be’, \textit{haben} ‘have’, as \textit{ge-wes-en} and \textit{ge-habt}.

4. The minimalist approach

My approach in terms of CT shows the cause for the \textit{ge-}PP appearance to some extent, but lacks a relation with the whole linguistic structure. Thanks to Hopper and Traugott (2003) and Roberts and Roussou (2003) the structural explanation for grammaticalization has become possible. Hopper and Traugott (2003: 7) found the road for grammaticalization as in (12):

\begin{equation}
\text{12) content item} \rightarrow \text{grammatical word} \rightarrow \text{clitic} \rightarrow \text{inflectional affix}
\end{equation}

“Content item” changes to “grammatical word” mainly by semantic bleaching, and becomes “clitic” and finally “inflectional affix” by phonological and morphological reduction. This generalization was confirmed and developed in terms of the minimalist approach by Roberts and Roussou (2003). Roberts and Roussou (2003) showed not only many cases (18 cases) but also their structures and finally their causes. We see the main points of Roberts and Roussou (2003) in (13).

\begin{equation}
\text{13) a. Showing the hierarchic categories based on GB (government and binding) theory: CP (complimentizer phrase) – TP (tense phrase) – VP (verb phrase) and the movement of items from lower to upper for grammaticalization}
\end{equation}

b. Showing the structure by a tree diagram or labeled bracketing

\begin{equation}
\text{c. Showing the change by parameter}
\end{equation}

d. Showing the cause of change

e. Seeking for the parametric change in language acquisition

f. Seeking for the motivation of move and merge in the feature of a functional head.
As seen in (13) the structures of a change are illustrated by the frameworks of GB and the minimalist approach. This naturally leads to the discovery of the cause of that change and referring to the idea of parameter provided by the universal grammar reaches the natural explanation of a linguistic change. This approach seems to be a new and epoch-making one in diachronic linguistics, by fully taking in the achievements of the generative grammar. Let us understand these characteristics by taking examples shown by Roberts and Roussou (2003).

(13a) shows that movement is from a lower to upper category. For example, English auxiliary verbs (in TP) are formed from main verbs (in VP) by V-to-T movement. This is a movement to an upper category. (13b) shows this change (or reanalysis) by labeled bracketing as follows:

\[ [TP V + T[VP TV TP]] > [TP T VP] \]

(Roberts – Roussou 2003).

This is a labeled bracketing to show the reanalysis for such sentences as *Some hit me illumpen > Soon it may happen* (Roberts – Roussou 2003: 40). It is a reanalysis from a biclausal structure to a monoclausal structure. *Mei* is in the first clause and *illumpen* is in the second clause. The first clause shows a V-to-T movement. (13c) shows that move and merge in this reanalysis is a parametric change. So the mark * is put for them as T *Move > T *Merge. (13d) shows that the cause for this change is loss of the infinitive marker -an (later -en), which produces a morphological deficiency and the change of parametric value. (13e) shows that this parametric change is caused by language acquirers who have chosen a simpler representation for this morphological deficiency. (13f) shows that this change consists of two important changes: Merge (lexicon being inserted) and Move (another morpheme being attracted). It is triggered by the realization of a feature in the functional head. Thus Roberts and Roussou (2003) show not only structural changes towards grammaticalization but also motivations for them. Roberts and Roussou (2003) treated 18 cases but among them the *ge*-PP is not included.

Now I find that the *ge*-PP grammaticalization is also a good example. It satisfies what is described in (13). Therefore I have tried to explain it as in (14). In (14a) traditional explanation is repeated and in (14b) mainpoints of my analysis are shown, though the labeled bracketing is tentative.7

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7 It is difficult to show the perfect mechanism of this change though my analysis shows it to some extent. I have dared to do it, expecting future revision. Furthermore, there is another difficulty in assuming the change from Goth. to OE and G, because they are cognate but far differentiated languages. But there are many similarities in the function of *ga*- and *ge*-, so it is possible to assume the development of PP by the deductive method.
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b. Categorial hierarchy : TP- AktP - VP
c. Structural change:
   i. [AktP ga-V [VP t ga-V ‘together’]] > [AktP ga-V]
   ii. [TP ge +V-ans [AktP t ga-V]] > [TP ge- +V-en [vp t ge- +V-en]]
d. Parametric change:
   i. Akt *Move, *Merge
   ii. T *Move, Merge > *Move
e. Cause:
   i. Unstablleness of ga- ‘together’
   ii. Morphological deficiency of PP inflectional endings; From a syntactic affix to a lexical affix.

(14a) is a traditional explanation for the development of the ge-PP. The ga-
added to a verb in Goth. reserved its original meaning ‘together’ but soon came
to acquire an aspectual meaning (we call it Aktionsart (Akt), because it did not form a system of Aspect as a marker). In OE and G, besides Akt, it newly de-
veloped the grammatical meaning as a marker of PP (cf. (2)). As for the PP inflectional marker, as treated in (11a), Goth. showed it only by rich endings (-ans, etc.), while in OE and G it was shown both by the prefix ge- and weakened endings -en, etc. Especially in G, ge- has become a perfect PP marker.

(14b) shows my hierarchy of categories. I add AktP between VP and TP. AktP takes that position because it is on the way towards TP from VP.

(14ci) shows that ga-V in VP moves to the head of functional category AktP by reanalysis. This is a change which happened between Goth. and OE, G. (14ci left side) shows that ga- which becomes ge- is attracted by TP V-ans

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8 In OE and G ge- showing Akt also remains though less, but is omitted here to show the developmental road of PP.
9 As for ga- ‘together’ Wright (1949: 172, §367) says “originally a preposition meaning together, which in prim. Germanic was no longer used as an independent word. It was especially used in forming collective nouns, but at a later period it often had only an intensive meaning or no special meaning at all”. He also says, in §413, “ga- originally added to verbs to impart to them a perfective meaning, see §367, as ga-bairan ‘to bring forth’…” (1949: 172). It is not clearly ex-
pressed, but it appears that the noun prefix ga- and the verb prefix ga- are regarded as the same.
10 As for the difference of Aspect and Aktionsart, see Niwa (1973: 14).
11 The reason why I set up Akt under TP is that the ge-PP is regarded as a kind of tense inflection. One may set up only VP and AktP, because ge- is always the expression of Aktionsart even in PP. But I do not take this because ge- in Aktionsart has a difference from ge- in PP. I assume this difference is a temporal one. Without this assumption, it is hard to explain why ge- developed toward a marker of grammaticalization. Aktionsart alone should have developed into Aspect as in Slavonic. This temporal feature in ge- made a development in OE possible and more strongly in G but did not exist in Goth. ga- at all, though in the latter an aspectual feature made much development as pointed out by Streitberg (1891).
which becomes V-\textit{en} (PP) and moves to TP from AktP and merges with V-\textit{en} in OE and G by reanalysis. This is a syntactic affixation (cf. Roberts – Roussou 2003: 49). (14cii right side) shows the reanalysis of the syntactic affix as a lexical affix, that is, a feature of V and the corresponding reintroduction of the V-to-T movement in PP. Thus ge-V-\textit{en} becomes a marker of PP. That is, PP is shown by the prefix ge- and weakened endings -\textit{en}, etc. This is a grammaticalization and is neatly attained in G (and to some extent in some dialect in OE).

(14d) shows that these moves and merges are parametric because they are triggered by misvaluing of language acquirers.

5. Conclusion

What I would like to insist on finally is the similarity in explanation of grammaticalization by my CT approach and Roberts and Roussou’s (2003) minimalist approach. That is, both reach the same goal, saying that the cause is the weakening of the inflectional system. Another similarity is that both make use of features as a trigger. My CT approach uses a cumulative feature\textsuperscript{12} and their minimalist approach, a functional feature. The latter approach is superior in showing the change by structure\textsuperscript{13} and parameter and also it is plausible that Roberts and Roussou (2003) seek for the real cause being in language acquirers. However, it must be pointed out also for future study that there is a difference in the quality of universality. One is a quality of strengthening by cumulation and the other is the quality of making simpler by misvaluing. Probably both will work in language acquirers.

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\textsuperscript{12} See notes 3 and 4.

\textsuperscript{13} Niwa (2002: 371) criticized the generative grammar because it shows only structures and lacks the semantic motivation for linguistic change. Now in Roberts and Roussou (2003) both structures and semantic motivations are introduced.
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