Gmc. kann 'know' Revisited: A Possible New Explanation

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https://doi.org/10.15017/6796385

出版情報：言語科学. 35, pp.1-14, 2000-02-29. The Institute of Languages and Cultures, Kyushu University
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Gmc. **kann* `know` Revisited: A Possible New Explanation

Toshiya Tanaka

1. Introduction

Reconstruction of the history of Gmc. **kann-* (> OE *can(n)*, etc.) is accompanied by complicated matters. In approaching this, one is undeniably involved in the interpretation of other related items having similar meanings and/or forms. With regard to the issue of what PIE base underlies **kann-*, two different views have so far been provided by scholars. One ascribes this preterite-present to a Germanic innovation (Specht, Meid, Bammesberger, etc.) and the other to a PIE origin (Seebold, Lehmann, etc.). Below we attempt to present critical examinations of each view, and thereafter provide our own proposal concerning the history of Gmc. *kann-* (i.e., from what PIE base(s) it derived, what relationships stand between this verb and other related lexical items, etc.).

2. Criticism

Those who claim that the preterite-present **kann-* is an innovation in Germanic rest their grounds mainly on the observation that no other IE dialect shows the form directly corresponding to Gmc **kann-*, i.e., the supposed *o*-grade form of the shape **ĝen-*, cf. Bammesberger (1984b: 87), etc. This view is accompanied by the claim that the plural form **kunn-um* is based on **ĝn̥-n-ə-*, the zero-grade variant of the base **ĝnō-* with a nasal affix, and that the singular **kann* is newly created by analogy with

**man/*munum*, etc., cf. Specht (1935: 69ff.), Bammesberger (1984b: 87ff.), etc.[1] Let us first consider the extent to which this view is realistic.

It seems suitable to start by examining the following observation by Specht (1935: 70):

> Ein Paradigma *kunnais -- kunnum -- kunþa -- kunþs* hat aber im Got., da es aus jeder Systematik herausfiel, nicht bleiben können. Da *kunnais* wie *habais* aussah, so wurde es nach diesem umgestaltet, blieb aber auf die Komposition beschränkt. So entsatnd ein Partizipium *-kunnaiþs* und ein Präteritum *-kunnaida*. Der Plural *kunnum* und das Partizipium *kunþs* stimmen der Bildung und der Bedeutung nach zu *witum -- wiss*. Daher wurde auch *kunnum* als Präteritopräsens aufgefaßt und *kann* neu dazu gebildet.
>
> But the paradigm *kunnais -- kunnum -- kunþa -- kunþs* could not be preserved in Gothic, since it was deviant from any system. Since *kunnais* looked like *habais*, it was remodelled after this, but still limited to compounding. Thus, a participle *-kunnaiþs* and a preterite *-kunnaida* took place. The plural *kunnum* and the participle *kunþs* accord with *witum -- wiss* in form and meaning. Hence, *kunnum* was also interpreted as a preterite-present and in addition *kann* was newly formed. (My translation: T.T.)

According to this view, the form $*\hat{g}n_{\text{o}}\text{-}n\text{-}\partial\text{-}$ first constituted a paradigm whose present singular was equivalent with that of the third class weak verbs, i.e., **kun-n-ē-j-* (pres. sg.), **kun-n-* (pres. pl.), **kun-þ-* (pret.), **kun-þ-* (p.p.). A cognate verb belonging to Weak Class 3 is actually attested in Gothic (*ana-kunnan*, etc.) and OHG (*kunnēn*). However, a question remains: How was the present singular **kun-n-ēj-* created? There is no independent evidence to show that Germanic class 3 weak verbs could be involved with a nasal affix. Nasal affixation is, rather, a feature of class 4 weak verbs. Why was it not ***kun-nōj-*? Thus, the idea may be regarded with suspicion that nasal affixation is involved with the formation of *kann/kunnum*.

More importantly, the observation that no IE verb reflects the Type I base $*\hat{g}enh_3\text{-}$ may also be suspect. Seebold (1970: 290), Lehmann (1986: 222), etc. suggest that

Lith. *pa-žįstu, žìnti* `know, learn to know`, Gk. *γέ-γωνα* `tell out, proclaim`, OInd. *jānāmi* `I know`, etc. somehow reflect the original Type I base **ĝenh₃-*. Among these materials, Greek *γέ-γωνα* will be most difficult to return to the base **ĝnō-* or **ĝneh₃-*. Although its signification `tell out, proclaim` suggests a meaning shift, its form is interpretable as reflective of the Type I base **ĝenh₃-* (i.e., **ĝonh₃-* > **γον-* ⟶ *γων-*, presumably due to a polarisation or morphological dissimilation from *γέ-γονα* `I have been born` < **ĝonh₁-h₂e*)[2]. There is also some evidence to show that the Type I base **ĝenh₃-* was used to form nominals, e.g., Lith. *žénklas* `sign` (< **ĝenh₃-tlo-*; cf. Pokorny 1994: 377)[3].

As Gamkrelidze and Ivanov (1995: 203) correctly observe, the PIE bases for `give birth` and those for `know` show different distributions. The former show up more frequently in the Type I base **ĝenh₁-* than in the Type II **ĝneh₁-*[4], while the latter appear predominantly in the Type II base **ĝneh₃-*. But the fact should not be unduly disregarded that there *are* materials suggesting the existence of the Type I base **ĝenh₃-* and the Type II base **ĝneh₁-*, though they might be only marginally attested. From this fact in combination with others, a plausible picture emerges of how the relevant bases were distributed in the proto-language. The base for `give birth` must have tended to be generalised into the Type I **ĝenh₁-*, whereas the base for `know` was largely generalised into the Type II **ĝenh₃-*, though both types of bases must have been used for either verb at an earlier period.

3. Further Problems

Will it, then, be enough if we simply postulate that the preterite-present **kann-* reflects PIE **ĝenh₃-*, marginal as it was, while the synonymous Class VII verb (> OE *cnāwe*, etc.) reflects PIE **ĝneh₃-*? No, the history of these two forms (underlying English *can* and *know*) seems far more complicated. There are two problems so far left untouched. One is that the pre-form of the Class VII verb is **knė-j-*

rather than **knō-j-* (cf. NWGmc. **ā* < Gmc. **ē$_1$*). The other is that the past participle (or, rather, verbal adjective) of **kann-* shows an apparent exception to Verner's Law, i.e., **kun-þás* (> Go. *kunþs*, ON *kūþr*, OE *cūþ*, OHG *kund*) but not ***kun-đás* (cf. Wright and Wright 1914: 284).

Let us first approach the former problem. A possible view to be readily invoked would be that OE *cnāwe*, etc. go back to the form **ĝneh$_1$-* rather than **ĝneh$_3$-* or that the original PIE base **ĝneh$_3$-* `know` was somehow supplanted by **ĝneh$_1$-* at the pre-Germanic period[5] (cf. Bammesberger 1984a: 132; etc.). However, there is another possible view which does not presuppose this kind of base replacement and which seems more plausible. Consider the following remarks by Meid (1971: 82):

> Da der Praesensstamm vom germanischen Standpunkt aus eine *j*-Bildung war, was durch außergermanische Entsprechungen noch erhärtet wird ..., ist der Infinitiv-Praesensstamm auf *-w-* des Altenglischen eine retrograde Bildung vom Praeteritum her. Dazu kommt im Fall von *cnāwan*, daß auch der Praesensvokal unursprünglich ist. Die idg. Wurzel hatte primäres *ō*: **gnō-*; ein *ē* ist nirgends bezeugt -- es mus daher in ae. *cnāwan* analogisch sein, rückgebildet aus dem *ō*-Vokalismus des Praeteritums nach dem Muster solcher Verba, die bei primärem *ē* im Perfekt abgetöntes *ō* aufwiesen. Dieser Prozess ist allerdings schon für das Germanische vorauszusetzen, wie ahd. *knāen* "erkennen", *ur-knāt* "Erkenntnis", an. *knár* "tüchtig" zeigen.
>
> Since from the Germanic standpoint the present stem was a formation with *j*, which is corroborated by extra-Germanic correspondences ..., the infinitive-present stem with *-w-* in Old English is a back-formation from the preterite. In the case of *cnāwan*, it must be added that the vocalism of the present stem is also not original. The IE root basically had *ō*: **gnō-*; *ē* is nowhere attested. Thus, the vocalism of OE *cnāwan* must be of analogical origin, formed backwardly from the *ō*-vocalism of the preterite after the model of those verbs which, having basically *ē*, showed ablauted *o* in perfect. This process is certainly to be posited in Germanic, as OHG *knāen* "recognise", *ur-knāt* "recognition", ON *knár* "capable" show. (My translation: T.T.)

Although it remains a moot point whether the vocalism of the preterite *cnēow* truly reflects the original **ō* in **knō-*

(cf. Wright and Wright 1914: 263f.), this argument seems largely tenable as a whole. There are many instances of *verba pura* (or verbs from an open-syllable base) in the form **(C)Cē-* among verbs to be classified into the Germanic Strong Class VII, but the number of verbs from the base **(C)Cō-* is rather small, cf. Meid (1971: 71 and 83ff.). From this, it can be conjectured that the original shape **knō-j/w-* changed into **knē-j/w-*, due to the greater productivity of the form **(C)Cē-*, in comparison with the form **(C)Cō-*, in the Germanic Strong Class VII. This type of transition, i.e., from a less productive (sub-)class to a more productive (sub-)class, is actually attested elsewhere, say, in Old English weak verbs transferring from class 1 to class 2, cf. Stark (1982: 16 et passim). Moreover, there is another instance from the Germanic Strong VII verbs that would hint at this change. As Meid (1971: 84) suggests, the PIE base for Gmc. **krē-j/w-* `crow` (> OE *crāwan, crēow;* cf. OHG *krāen,* a weak verb) is reconstructible as **grā-* rather than ***grē-* (cf. Lith. *gríoju,* OCS *graju, grajati* `croak, caw`, Lat. *grāculus* `jackdaw`). Thus, the inherited base from **krō-* (< **grā-* or **greh$_2$-*) seems to have been replaced by **krē-* in Germanic. This would suggest that the transition from the **(C)Cō-* subclass to the **(C)Cē-* subclass in the Germanic Strong Class VII was by no means a single occurrence in **knō-* > **knē-* `know`[6].

To the extent that no cogent motivation is detectable to postulate that **ĝneh$_1$-* was substituted for the original PIE base **ĝneh$_3$-* at the pre-Germanic period, we should take the view that the inherited base **knō-* transferred to **knē-(j/w-)* at the (Proto-)Germanic period.

Now let us move to the other problem, i.e., why the verbal adjective **kunþás* shows an apparent exception to Verner's Law. Traditional (or pre-laryngealist) treatment, possibly assuming nasal infixation for the verbal adjective as well, could not give a principled account of this phenomenon. The pre-form **kn̥-n-þás* would only yield ***kun-n-đas* > ***kun-đas* (simplifying the consonant cluster, cf. Voyles 1992: 62). Even assuming that a nasal formant is

not affixed in the case of the verbal adjective, it yields the same result, **kn̥-þás* > ***kun-đas*. At best, one could resort to analogy to arrive at the extant **kunþás*. But this is obviously unmotivated, for no productive class of verbal adjectives with **-þ(a)s* is found in Germanic[7].

It seems, instead, that the existence of the stem-final laryngeal in **ĝenH-* provides a natural phonological explanation of the relevant phenomenon. The pre-form **kn̥H-þás* will yield **kn̥H-đás* by Verner's Law, but so long as the **-H-*, a fricative in nature (cf. Szemerényi 1990: pp. 134f., VI.4.7.1; etc.), is a voiceless consonant, it is likely to happen that this phoneme assimilates the neighboring **-đ-* into **-þ-* (i.e., **kunH-đás,* > **kunH-þás,* due to the progressive assimilation of the [-voice] feature) or possibly this voiceless phoneme inhibits Verner's Law. If this is true, the stem-final laryngeal must be **h₁* rather than **h₃*. The *o*-colouring laryngeal **h₃* is known to be a voiced phoneme by the fact that the cluster *T* + *h₃* changes into *D* + *h₃* in the parent-language (exemplified by the root **peh₃-* `drink`, **pi-ph₃-* > **pib-*; Vedic *píba-* `drink`, pre-Celt. **pi-bete* > Old Irish *ibid* `he shall drink!`), cf. Mayrhofer (1986: 143), etc. There is no such evidence at all for the voicedness of **h₁*. Although we have not yet spelt out what kind of motivation there was for the morphological replacement of **ĝenh₃-* by **ĝenh₁-* for **kann-* (but see immediately below in Section 4), the apparent exception to Verner's Law seems to require this assumption.

4. Proposed Explanation

In sum, I propose the following derivational history of Gmc. **kann-* and related items:

(1) Derivation of Gmc. **kann-*, **knē-*, etc.

	Type I	Type II	
a. PIE	*$\hat{g}$enh$_1$-	[*$\hat{g}$neh$_1$-]	`give birth`
	[*$\hat{g}$enh$_3$-]	*$\hat{g}$neh$_3$-	`know`
b. pre-Gmc.		[*$\hat{g}$neh$_1$-]	`give birth`
	*$\hat{g}$enh$_1$-	*$\hat{g}$neh$_3$-	`know`
c. Gmc.		*knōþs	`sex`
		(refelcting *$\hat{g}$noh$_1$-, cf. Note 4)	
	*kann- (sg.)	*knē-j/w-	`know`
(reflecting	*$\hat{g}$onh$_1$-)	(replacing *knō-j/w-)	
	*kunn- (pl.)		
	*kunþs (p.p.)		
(reflecting	*$\hat{g}_{\circ}$nh$_1$-)		

where square blackets enclose marginal forms. From this chart, it seems to me, a fairly lucid motivation emerges for why the original PIE Type I base *$\hat{g}$enh$_3$- `know` was morphologically replaced by *$\hat{g}$enh$_1$- in pre-Germanic. It may be surmised that the base *$\hat{g}$enh$_3$- `know` was marginal at the Late PIE period and was about to be nearly lost to the Type II counterpart *$\hat{g}$neh$_3$- when dialects started to split off. After the Germanic dialect diverged from the parent-language (or during the pre-Germanic period, cf. Note 5 above), a similar but different form, *$\hat{g}$enh$_1$-, which had always been a productive base since the PIE period, was substituted for the original but now, as it were, dying form *$\hat{g}$enh$_3$- `know`. This supposition is in harmony with the fact that neither a verb nor other categories of words that come from PIE *$\hat{g}$enh$_1$- `give birth` are attested in Germanic (with a single exception, i.e., the OE Wk. 1 *cennan* `beget, conceive`; cf. Pokorny 1994: 373ff.; see also Note 4 above again). It must be the case that lexical items which were descended from the PIE (Type I) *$\hat{g}$enh$_1$- and which had meanings related to `give birth` were gradually ousted from the lexis for some reason during the pre-Germanic period, and this must have made the relevant

morphological replacement feasible. (Germanic retained only a few lexical items reflecting the PIE Type II *$\hat{g}$neh$_1$- `give birth`, which was a marginal base just like the PIE *genh$_3$- `know`, e.g., *knōƀs `sex`, etc.)

In respect of the PIE (Type II) *$\hat{g}$neh$_3$- `know` (or, rather, `get knowledge of`), on the other hand, there was little or no motivation for it to be replaced with another form, since it had been a productive base, and therefore it survived into pre-Germanic (but later remodelled into *knē- for reasons discussed above in Section 3).

In Section 1 above, we criticised the view (advocated by Specht) that the nasal-infixed stem *$\hat{g}_{\underline{o}}$n-n- (> Gmc. *kunn-) underlies the class 3 weak verb *kunn-ē-j- (cf. Go. *ana-kunnan*, etc. and OHG *kunnēn*) and also the preterite-present *kann/kunn-, on the grounds that nasal infixation is incompatible with the formation of a class 4 weak verb but appertains to a class 4 weak verb. As seen from (1), our alternative idea on the derivation of *kann- is that PIE *$\hat{g}$onh$_3$- `know` (a marginal base) was morphologically supplanted by *$\hat{g}$onh$_1$- (a productive base) during the pre-Gmc. period, after which *kann- was yielded via the assimilation of the *h$_1$ to the preceding *n [8]. But it remains so far untouched how the historical derivation of the class 3 weak verb *kunn-ē-j- is reconstituted in our own framework.

I propose that the relevant class 3 weak verb should go back to the pre-Gmc. *$\hat{g}$enh$_1$- as well as the preterite-present *kann/kunn-. The zero-grade variant of this base attached by a stative suffix *-ē-j- (i.e., *$\hat{g}_{\underline{o}}$nh$_1$-ēj- > *kunn-ēj-) underlies the present stem of this weak verb. This process is free from nasal affixation and thus does not conflict with the formational pattern of the other class 3 weak verbs. Furthermore, this derivational history reminds us of the genesis of the Latin paradigm *vid-ē-* (< *wid-ē-je/o-; pres.) vs. *vīd-* (< *woid-; perfect). The difference between Latin and Germanic is that the former dialect created a new present from the (original) *o*-grade perfect-present by attaching the stative suffix *-ē-j- to the zero-grade stem and integrated them into a single

paradigm (i.e., it may be said that in Latin the present form of the `perfect` *vīdī* is *videō*), whereas in Germanic the counterparts formed different two verbs (i.e., a single paradigm was not constituted), or different `present` forms were created from the *o*-grade stem (i.e., **kann-*, for this is a preterite-*present*!) on the one hand and from the zero-grade stem with a stative suffix (i.e., **kunn-ē-j-*) on the other.

Notes

1. Although he regards *kann/kunnum* as a Germanic innovation from the base **ĝnō-*, Meid (1971: 24) gives a slightly different account of its origin. He rejects the idea of deriving *kunn-um* from **ĝn̥-nə-més* (i.e., IE nasal present with the suffix **-nā-/-nə-*, cf. Strunk 1967: 37ff.) but takes the view put forward by Seebold (1966) that the gemination of the nasal (*-nn-*) goes back to the assimilation of **ə* to the preceding **n*, as illustrated below (Meid 1971: 24):

(i) **mn̥-mé* > mun-um
but **gn̥ə-mé* > kunn-um

According to him, the original sg./pl. opposition **knō-/ kunn-*, unsuitable for any conjugational pattern, changed analogically into *kann/kunnum* after the model of *band/bundum*, etc. But why, then, did OE *cnāwe*, etc., somehow reflective of the original (Type II) base, survive into the historical period? Why was this verb not completely lost to the newly created *kann/kunnum*?

2. Lith. *pa-žį́stu, žìnti* suggests a stem in zero-grade, and therefore it is difficult to know whether the original base from which the verb derived was **ĝnVh₃-* or **ĝVnh₃-*. As for OInd. *jānāmi*, it is possible to posit **ĝn̥-nā-* < **ĝn̥h₃-neh₂-* as its pre-form (cf. Meid 1971: 122; etc.), from which it is not clear whether the original base was **ĝnVH-* or **ĝVnH-*.

3. We cannot accept the view that PIE was always devoid of the Type I base *$\hat{g}$*enh*$_3$- for `know`. Insomuch as the assumption is correct that the relationship between the velar **g* and the palatal **$\hat{g}$* in PIE was not phonemic but allophonic (cf. Lehmann 1993: 100; Sihler 1995: 152f.; etc.), the form **$\hat{g}$*neh*$_3$- (Type II base) could not be realised without presupposing the Type I **$\hat{g}$*enh*$_3$-. If the Type II base had stood alone, having nothing to do with the Type I counterpart, in which the front vowel **e* could follow the base-initial phoneme */g/, it would have been ***gneh*$_3$- (i.e., the base-intial consonant would have been realised as a velar allophone), which would have produced OInd. ***gñā-*, instead of the attested *jñā-*. For related sound changes, see Mayrhofer (1986: 104), etc.

4. Instances, both verbals and nominals, that reflect the Type I base *genh*$_1$- are readily found: OInd. pres. *jánati* `generates, gives birth to`, Gk. perf. *γέ-γονα* `I have been born`; OInd. *janitár-*, Gk. *γενετήρ*, *γενέτωρ* `progenitor, father`; OInd. *jána-ḥ* (m.) `sex`, Gk. *γόνος* (m.) *γονή* (f.) `offspring, a child`; etc. However, it is difficult to find verbal forms unambiguously ascribable to the Type II base *$\hat{g}$*enh*$_1$-. (For instance, Latin *nāscor* `am born` is analyable as inheriting the form **$\hat{g}$*n̥-skō-r*. The stem reflects the zero-grade **$\hat{g}$*n̥h*$_1$-, and it is not certain whether it comes from the Type I or Type II base, cf. Note 2 above.) But there are some non-verbal examples that are interpretable as reflecting the Type II base: Gk. *-γνητός* `born` (< **$\hat{g}$*neh*$_1$-t-); OInd. *jñātí-ḥ* (m.) `relative`, *γνωτός* `relative, brother`, Gmc. **knōps* (Go. dat. *knōdai*, OHG *knōt*, *knuot*, etc.) `sex` (< **$\hat{g}$*noh*$_1$-t-). See Pokorny (1994: 373ff.), Gamkrelidze and Ivanov (1995: 203), etc.

5. By the term pre-Germanic, we indicate a period not long after the Germanic dialect split off from the parent-language, but somewhat earlier than the period normally reconstructed as Proto-Germanic (or at least before the period when Verner's Law took effect).

6. It is also possible to regard Gmc. **lē-j-* `revile` (> Go. Str. VII **laian* `despise`) as having transferred from

**lō-* (< PIE **lā-*; cf. OInd. *rā́yati*, Lith. *lóyu*, OCS *lajǫ*, Lat. *lātrāre* `bark`), see Meid (1971: 84).

7. The stipulation that as far as the relevant verbal adjective is concerned, the accent shifted from the final syllable to the stem (cf. Wright and Wright 1914: 284; etc.), i.e., **kunþás* > **kúnþas*, prior to the period when Verner's Law operated is totally ad hoc. Prokosch (1939: 190) in this connection maintains that the accent shift is ascribable to the verb's frequent use as a modal auxiliary as early as the PGmc. period. But this view does not hold. In Old English, for instance, it is observable that *can(n)* was still fairly often used as a main verb, and that the frequency of *sceal* used with an infinitive was by no means lower than that of *can(n)* used with an infinitive. If **kann-* had been reinterpreted as a modal auxiliary already at the PGmc period, **skal-* would have been all the more reinterpreted as such. However, the alleged accent shift is not observable in the latter preterite-present at all. The preteirte of this verb in PGmc. was **skul-đa* (< **skul-þá*) but not ***skul-þa* (< ***skúl-þa*), and the verbal adjective or past participle was **skul-đs* (< **skul-þás*) but not ***skul-þs* (< ***skúl-þas*).

8. For other possible cases for **-RH-V-* > Gmc. **-RR-V-*, see Lühr (1976).

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