

The development of voiced labiovelars in Germanic

1. Introduction

- 1.1 The PIE series of labiovelar stops, /k^w g^w g^{wh}/, have undergone a range of phonetic and phonological changes in the daughter languages, including Germanic.
- 1.2 Initially, the entire series shifted according to Grimm's law to Germanic /h^w k^w g^w/, and /h^w/ would further voice to /g^w/ if affected by Verner's law. An old crux in Germanic linguistics has been to explain the further development of the voiced labiovelar /g^w/.

2. The origin of /g^w/

- 2.1 Proto-Germanic /g^w/ would, through Grimm's and Verner's law, have a dual origin, PIE /k^w/ and /g^{wh}/ . As is always tacitly assumed in the literature, this dual origin has no impact on the further development of Germanic /g^w/ . As an illustration, cf. the identical development of /g^w/ to /w/ before /n/ in **ag^wnōn-* 'to bear young' and **seg^wni-* 'vision' > OE *eānian*, *sīen*, where /g^w/ originates from PIE /g^{wh}/ and /k^w/, respectively (Pokorny 1948-69).
- 2.2 PIE differentiated between monophonemic labialized stops, e.g. /k^w/, and a biphonemic sequence stop+labial, e.g. /k^w/ . As a result, Germanic could theoretically have differentiated between a monophonemic /g^w/ and a biphonemic /gw/, depending on the origin. There is, however, no independent evidence for such a distinction, and the tacit assumption in the literature is that Germanic only had a monophonemic /g^w/.
- 2.3 Despite the wide range of possible origins for Germanic /g^w/, I will follow the standard approach of assuming that this itself had no impact on its further development.

3. The general development of /g^w/

- 3.1 Germanic /g^w/ proceeds in almost all cases to lose either its stop value to become /w/, or to lose its labial value to become /g/. This development depends on the phonetic environment – its preceding and following segments.
- 3.2 The generally accepted details of this development are laid out in Seebold 1967. To mention a few examples, /g^w/ develops to /w/ after front vowels (**snaig^wa-* > **snaiwa-* 'snow'), and before liquids and nasals (**neg^wran-* >

newran-* ‘kidney’), but develops to /g/ before round vowels (laig^wōn-* > **laigōn-* ‘hire, rent’).

4. The development of /g^w/ before /i/ and /j/

4.1 Most of the discussion in Seebold 1967 revolves around the development before /i/ and /j/. Both before and after Seebold 1967, there has been considerable disagreement on what happened to /g^w/ in this position. Since Seebold 1967 has been the only attempt to collect all the possible evidence and view them as a whole, it will necessarily serve as a base for my treatment here.

4.2 Seebold concludes based on *certain* etymologies that:

g^w > g /__ i

g^w > w /__ j

4.3 My proposal is that the exact opposite holds:

g^w > w /__ i

g^w > g /__ j

As such, I am reviving similar views expressed in Streitberg 1896:§122.4, §123.4, §129.6.

5. Seebold's evidence for g^w > g /__ i

5.1 Seebold's claim that /g^w/ became /g/ before /i/ is in reality based on *one* form only: the OHG *egithehsa* ‘lizard’, following the general etymology of *egi-* as coming from PIE **og^{whi}-* ‘snake’ (1967:125).

5.2 This conclusion faces several difficulties. First, *egithehsa* also appears in the form *ewithehsa*. Seebold suggests that the variant with *ewi-* has developed from an “irregular extension to a *ja*-stem” (1967:126). But naturally, this is possible only if his own postulated sound laws (4.2) are correct, which themselves are based on the form *egithehsa*.

5.3 Seebold tries to resolve the circular argumentation by inducing the workings of West-Germanic consonant gemination before /j/ and syncope of /a/, claiming that *if* /g^w/ had become /g/ before /j/ (as I claim in 4.3), then surely the /g/ would have been geminated and given a variant **eggithehsa* (1967:121).

5.4 Seebold's point of consonant gemination is, however, valid only if the gemination process is older than the syncope of /a/ (**agja-* > **aggja-* > **aggi-*). This stands at odds with the more common view that the chronology is exactly the opposite (**agja-* > **agi-*), cf. the discussion and references in Krogh 1996:289f. and Grønvik 1998:99.

- 5.5 In sum, it is simply not possible to independently know which variant, *egi-* or *ewi-*, comes from which proto-form, **ag^wi-* or **ag^wja-*. Furthermore, as pointed out by Cubbin (1979:229ff.), it is equally possible that the variants *egi-* and *ewi-* result from the fact that Proto-Germanic **ag^wi-* was a normally inflected *i*-stem, where /g^w/ thus sometimes would be followed by /i/ and sometimes by /j/.

6. Methodology and circularity

- 6.1 The lesson to be learned from the discussion above is that the postulated sound laws for the development of /g^w/ cannot be assumed *prior* to an investigation of what has happened in words where we can be sure that /g^w/ existed, since it is the observation of what /g^w/ has developed into that should form the basis for the postulated sound laws.
- 6.2 As a concrete example, let's again take **ag^wi-* 'snake'. Whether this word existed as an independent *i*-stem or only as the first member of a compound, it did alternate between a sequence **ag^wi-* and a sequence **ag^wj-*. The outcome of one of the variants was generalized, but since we have no predictive theory of which variants in a paradigm will undergo generalization, we will have no way of knowing which original variant our attested generalized form comes from.
- 6.3 The important conclusion from this is that *any* word with /g^w/ in it that we know had both /i/ and /j/ following the /g^w/ is *useless* as evidence for the regular development of /g^w/.
- 6.4 As a result, most words that are commonly used as evidence for a proposed sound law of /g^w/ before /j/ must be excluded, such as **mag^wjō-* 'girl', **sag^wēn-* 'say', **þeg^wjō-* 'maid', **wlg^wjō-* 'she-wolf', since none of these had /j/ after /g^w/ in all forms.

7. g^w > g /__ j - the evidence

- 7.1 There is only *one* word in Germanic where we know that /g^w/ was followed by /j/ in *all* forms, the *ja*-stem **sag^wja-* 'follower', a perfect match with Latin *socius* 'id.'. Since the forms in the Germanic daughter languages all require the reconstruction **sagja-*, it automatically follows that /g^w/ gave /g/ before /j/.
- 7.2 The clear development of **sag^wja-* > **sagja-* stands at odds with what appears to be the opposite development in the parallel **ag^wjō-* > **awjō-* 'island'. There has been no lack of attempts to explain why **awjō-* has a /w/ rather than /g/ (Cubbin 1979:232, Bammesberger 1990:113, Ringe 2006:111), all involving some kind of analogy.

8. **awjō-* as counterevidence?

- 8.1 A seemingly obvious approach to explain **awjō-* is to say that it originally declined like **mag^wjō-*, which had a nom.sg. in **-ī*. If there was a nom.sg. **ag^wī*, then **w* would regularly develop, which then could be generalized throughout the paradigm, just as it did in **mag^wjō-* ⇒ **mawjō-* (from the nom.sg. **mag^wī* > **mawī*).
- 8.2 There is, however, no evidence that **awjō-* ever had a nom.sg. in **-ī*, nor that there was ever any alternation in the suffix of this word. For further details why attempts to reconstruct **-ī* fail anyway, as well as other analogical explanations, cf. Johnsen 2007:20f.

9. Turning counterevidence into evidence

- 9.1 The key to understanding why **awjō-* has a /w/ lies in its derivational history. This section will show that its original stem was never **ag^wjō-*, but in fact **ag^wiō-* with /i/ following /g^w/ in all forms.
- 9.2 **awjō-* is best attested in ON, Middle Low German, and MHG, with the meaning 'island; peninsula; floodplain; land by the water; watery land' (Fritzner I:354f., Lasch/Borchling II:1213, Benecke/Müller/Zarncke II:454f.). Various place-names in Germany, Scandinavia and England also show the meaning 'land by the water; watery land' of **awjō-* (cf. Gelling 1984:34ff., Sandnes/Stemshaug 1997:507f., Aasen 2003:878, Löfdahl 2006:29). There is thus little doubt that the meaning 'island' is a secondary specification.
- 9.3 *jō-*formations in Germanic (and IE) generally form abstracts, but it is clear that **awjō-* 'land of the water' is not an abstract, but rather a genitival formation to **ah^wō-* 'water, stream' (Krahe/Meid 1969:§74.4). Since **awjō-* is the only certain genitival formation in **-jō-* in Germanic, whereas genitival formations in **-ja-* are commonplace, it is natural to assume a close relationship between the regular genitival formation in **-ja-* and this one case of **-jō-*.
- 9.4 Since the genitival formations in *-ja-* are substantivized adjectives (Krahe/Meid loc. cit., Torp 1974:9f.), the conclusion must be that **awjō-*, too, is a substantivized adjective, but in the feminine form **awjō-* rather than **awja-* 'of the water'.
- 9.5 This was suggested already by Kluge (1926:§74), who found a parallel in Germanic **mīdō-* 'mold', a substantivization in the feminine form of **mīda-* 'ground, pulverized'. He further assumed that the eclipsed noun for both **awjō-* and **mīdō-* was the Germanic word for 'earth', the feminine **erþō-*.

- 9.6 PIE possessed a *disyllabic* genitival suffix **-io-* (cf. Rubio Oricella 1995, Balles 1997), meaning that a regular genitival formation to PIE **ák^w-ā* ‘water, stream’ would be **ak^w-iō-* ‘of the water’, which in its feminine form would be **(értā) ak^w-iā-* ‘(land) of the water’ (cf. Lühr 2000:44). By the regular developments into Germanic, this would yield a Proto-Germanic form **ag^wiō-*.
- 9.7 Instead of being a severe problem for correctly understanding the development of */g^w/* before */i/* and */j/*, **awjo-* is now a crucial part of the solution. Having shown that its oldest Germanic form was **ag^wiō-*, */g^w/* would be followed by */i/* in all forms – in fact, it would be the *only* word where we can know this was the case. As such, the development of */g^w/* to */w/* in this word is entirely regular, and does not require any analogical explanation.
- 9.8 Only after */g^w/* has developed to */w/*, **ag^wiō-* > **awiō-*, does the form undergo Sievers’ law and become the form **awjō-* that we can reconstruct on the basis of the attestations in the daughter languages. For further indications that Sievers’ law is younger than this development of */g^w/*, see Johnsen 2007:19.

10. Conclusion

- 10.1 I have argued that an investigation into the regular development of */g^w/* before */i/* and */j/* can only use words where */i/* and */j/* did not alternate.
- 10.2 Only one word had the sequence */g^wj/* throughout the paradigm, namely **sag^wja-*. Its outcome **sagja-* speaks for the regularity of */g^w/* > */g/* before */j/*.
- 10.3 With a proper understanding of the derivational history of **ag^wiō-* ‘land of the water’, it now becomes the only case where we know there was a sequence */g^wi/* throughout the paradigm. Its outcome **awjō-* speaks for the regularity of */g^w/* > */w/* before */i/*.
- 10.4 Based on the consistent behavior of the words above and the complete lack of good counterexamples, I conclude that the sound laws for */g^w/* in Proto-Germanic are:

$$\begin{array}{l} g^w > w / _ i \\ g^w > g / _ j \end{array}$$

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