SCANDINAVIAN UMLAUT, SÁMI METAPHONY AND SWEDISH-NORWEGIAN LEVELLING (JAMNING): A WANDERING SCANDINAVIAN-SÁMI FEATURE

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1. Introduction

The Scandinavian tradition distinguishes two kinds of distant regressive vowel assimilation. The earlier of the two, dating back to Common Nordic, and corresponding to similar changes in the West Germanic languages, is called umlaut. The second one is found only in the north-eastern Swedish and eastern Norwegian dialects and dates from the sixteenth century. It is commonly referred to, in Swedish, as tilljämning, Bokmål tiljevning, Nynorsk jamning, “levelling”.

Finno-Ugric languages usually have vowel harmony, yet the Sámi languages have instead a rule which corresponds to the Germanic umlaut and Swedish-Norwegian levelling. The traditional term for this phenomenon is metaphony.

The similarities between Scandinavian umlaut and Sámi metaphony (Hesselman 1945, 7; Korhonen 1967, 21), as well as those between Sámi metaphony and Swedish-Norwegian levelling (Bergsland 1992, 8-9), have been noted earlier. However, these have been regarded as no more than typological parallels.

Kylstra, who does not mention the Swedish-Norwegian levelling, considers two possible explanations for the similarity between Sámi metaphony and Germanic umlaut. He wavers between a parallel development and the influence of an unidentified substrate (Kylstra 1983, 161-
admitting, however, that the assumption of the latter is too hypotheti-
cal and “nicht wissenschaftlich” (ibid., 161). Yet Kylstra does not mention
a third possibility, arguably the most obvious one: Sámi-Scandinavian
language contact. But in order to specify the kind and direction of the po-
tential borrowing, we have to take into consideration a number of criteria,
apart from geographical neighbourhood, namely: 1. comparison with relat-
ed languages, 2. age of the development, 3. area and direction of spreading,
4. function, 5. structural connection with other changes, 6. existence of
other borrowings in the same direction. If all these criteria indicate the
possibility of a borrowing in one direction we have to prove 7. the socio-
linguistic possibility of this borrowing.

In this paper I wish to employ the above-mentioned criteria in order
to identify the kind of connection between Scandinavian umlaut, Sámi
metaphony and Swedish-Norwegian levelling.

2.1 Scandinavian umlaut

The earliest instance of umlaut in the Scandinavian languages affected the
opening grade of short e/o and i/u. The main rule was “high before high”,
“mid-low before low”, i.e. e and o before an a, but i and u before an i or u,
cf. Run. *horna*, *heldaR* but *gudija*, *gibu*, *irilaR*. Short a in the stem
syllable did not take part in the alternations (cf. -gastiR, laþu). The rule
“high before high”, “mid-low before low” was lexicalised already at the
time of the runic inscriptions in the elder futhark. Here, we find several
analogical forms.

The second Scandinavian umlaut affected the position of the tongue
(fronting, i-umlaut) and the position of the lips (rounding, u-umlaut). It is
generally treated as a continuation of the trend of the first umlaut. The i-
umlaut affected short and long back vowels and \( a \). The rounding umlaut affected first of all long and short \( a \). The connection between the phonologization and the reduction of the second syllable is here much clearer than in the first umlaut (cf. Run. –\textit{gastiR, alu, OI gestr, öl}). The second umlaut has caused the appearance of new phonemes, /\text{y}/, /\text{o}/, /\text{æ}/ and /\text{ø}/ (short and long). Even in this case, the phonologization can be seen in several analogical exceptions from the original umlaut rule.

The rule for opening grade umlaut would have been operating in the first centuries A.D., if not earlier. It is often dated to the time before the splitting of West and North Germanic into different language branches.

The fronting umlaut is traditionally dated to the 7\textsuperscript{th} or even to the 6\textsuperscript{th} century (Schulte 1998, 257). The rounding umlaut in Scandinavian as well as the backing Umlaut in English is dated to the 8\textsuperscript{th} century.

\subsection*{2.2 Sámi metaphony}

The first Sámi metaphony corresponds to the first Scandinavian umlaut of opening grade (Kylstra 1983). The rule affected the distribution of \( *e \) - \( *\epsilon \) and \( o^* \) - \( *\AA \). Originally, short \( e \) and \( o \) were lowered to \( *\epsilon \) and \( *\AA \), respectively, before an open vowel in the next syllable; originally short \( a \) and \( \ddot{a} \) were raised to \( o \) and \( e \) before \( e \) and \( o \) in the next syllable, cf. \( *\text{pes}\ddot{a} > *\text{pe}`\text{s}ä, NS \text{bass}e \text{“nest”}, \text{Fin. pes}ä \text{but *kåte > *ke`te, NS giehta, Fin. käsi “hand”} \) (Korhonen 1969, 1988).

We can see that both the direction and the type of the assimilation (grade of opening), as well as the quantity (short), of the affected vowels of the first Scandinavian umlaut and the first Sámi metaphony are identical. As to the difference between the vowels of the second syllable, it is not as large as we might assume from their traditional designation. In both lan-
guages the highest vowels of the second syllable, $e$ and $o$ in Proto-Sámi (Korhonen 1988: 271) and $i$, $u$ in the Proto-Scandinavian, required a high vowel in the first syllable, while the low vowels of the second syllable required the lower vowels in the first syllable.

The first Sámi metaphony, like the Scandinavian umlaut of opening grade, affected only short vowels. In some modern Sámi dialects this rule is still valid, but in others, the metaphony rule was extended to the long vowels (Lagercrantz 1926, 188-190; Wickman 1997, 97).

The second Sámi metaphony consisted of a further generalization of the metaphony rule, but this development could be different in various Sámi areas. In Northern Sámi, the opening grade umlaut can be traced only in the historical alternations opening diphthong – monophthong, as in guolli “fish” – gulliid (gen. pl.). In Southern and Eastern Sámi we find a well developed metaphony of opening grade combined with a fronting of the vowel $a$.

In many dialects the narrow vowels $i$ and $u$ influence the root vowel in the same way. In some dialects we find the change $a>e$ before $i$ and $u$ (Collinder 1938, 60-64). In others, the development goes even further and leads to an additional narrowing of $a$ to $i$ before $i$ and $u$; cf. atnet “to have, to use” itnin 3. pl. pret., itnut pass. inf. (Wickman 1997, 93). In Røros, we have a complete assimilation $a > i$ before $i$ and $a > u$ before $u$ (ibid. 1997, 95).

In Southern Sámi, the fronting metaphony affected the rounded back vowels and resulted in the development of /y/ or (and) /ö/; cf. Røros, 1.sg. pres. boåtam – pret. böt’əm (Korhonen 1967, 16-17). Many forms are different here only because of metaphonic alternations. The fronting of the
rounded back vowels is in this case connected with the original preterit suffix -j/i- (ibid., 194-211). The similarity to the Scandinavian i/j-umlaut is obvious.

Although metaphony occurred rather consistently, especially in Southern Sámi, and affected many grammatical alternations, it is not a regular phonological rule (McRobie-Utasi 1981). Nevertheless, the metaphony alternations in the morphonological system are characterized as “well developed and highly organized” (ibid., 179).

The fronting of o or u can be found only in the southernmost Sámi dialects. The main regularity of the geographical spread of the Sámi metaphony is: the further to the south, the stronger the metaphony. This geography indicates that Sámi metaphony has spread from the south to the north (Wickman 1997, 96).

Korhonen dates the first Sámi metaphony of opening grade to the Proto Sámi period, i.e. to the time between 1000 B.C. and 800 A.D. (Korhonen 1969, 80; 1988, 269). According to him, the second Sámi metaphony begins after 800 A.D. (ibid.).

2.3 Swedish-Norwegian levelling

Swedish-Norwegian levelling is characteristic of the eastern Norwegian and the northern to central Swedish dialects with vowel balance and only affects the vowels in originally short syllable words. It first of all affects the opening grade (vaet, vätta < vita), but other directions of assimilation are also possible, e.g. rounding or fronting (vø:tå < vita) – (Borg 1973). In those dialects which preserve original short syllables, the levelling rule is still an operating phonological rule (cf. tålå inf. – tælær pres. or dræpa inf. - dřipit sup.). The levelling can be complete, as in vata, vátå < vita, vuku <
viku, or partial as in væta < vita, lædu < ladu. In some northern and central Swedish dialects u does not affect rounding or velarization but only the opening grade (lædu < ladu), which is not typical for the second Germanic u-umlaut but corresponds exactly to the Sámi metaphony.

Levelling is characteristic of dialects with vowel balance. The reduction of the third mora, in combination with lengthening (as in viku>viku:, cf. Kolsrud 1974, 10-11; Wessén 1970, 69) or qualitative strengthening (as in talâ > tâlâ) of the second mora, makes it possible only in originally short syllable words. Level stress (as in vuku) and earlier oxitonic stress (as in viku: > vuku:) have contributed to the development of vowel levelling in short syllable words.

The main difference between the Germanic umlaut and the Swedish-Norwegian levelling consists in the connection of the umlaut with a reduction of the second syllable while the levelling is caused by a strengthening of the second syllable in short syllable words.

The first examples of the levelling are found in the 15th century (Larsen 1913, 29), but the strongest levelling is characteristic of the 16th and 17th centuries (Hovda 1954).

3. Comparison with related languages
Apart from Gothic, all Germanic languages display the first umlaut of opening grade. It is much more evident in West Germanic than in the Scandinavian languages, cf. OHG, OS biru 1. sg. Pres.– beran (inf.), OE bir(e)þ (3. sg. pres) – beran (inf.). The opening grade umlaut was carried out most consequently in OHG where we not only have several forms with a-umlaut (cf. Germ. Gott, Horn, Bock, voll), but also a lot more examples of i- and u-umlaut of opening grade than in the Scandinavian languages.
The fronting umlaut of a and the fronting of originally rounded back vowels is also characteristic of all Germanic languages except for Gothic. But whereas the u-umlaut has caused rounding in the Scandinavian languages and backing in English, it has not affected German.

The opening grade umlaut is characteristic of all Sámi languages, the fronting of the back rounded vowels is characteristic only of Southern Sámi. Fronting umlaut is also found in Livonian, but here it is of later origin (Kylstra 1983) and can be treated as the result of German–Livonian contact in the late Middle Ages.

As to the Scandinavian levelling, we cannot find a corresponding phenomenon in the other Germanic languages. Even the High Alemannic German dialects, which have preserved the original short syllable words, do not have any vowel assimilation corresponding to the Swedish-Norwegian levelling.

4. Connection with other changes

The lexicalisation of the umlaut rule in the Germanic languages is connected to the reduction of the second syllable. The function of the Germanic umlaut was to shift information from the second syllable to the root syllable. The model of vowel alternations in the root syllable was known in the Germanic languages due to the grammaticalization of ablaut alternations. In Proto-Sámi, however, the metaphony rule is not connected to the reduction of the second syllable. On the contrary: after the first Sámi metaphony of opening grade a lengthening of vowels (apart from e) took place both in the first and in the second syllable (cf. *kota > *ko:ta: - Korhonen 1981, 92). We can conclude that the Scandinavian umlaut is more naturally incorporated into the process of language change within the
Germanic languages than the Sámi metaphony.

5. Conclusion

5.1 Scandinavian umlaut > Sámi metaphony

Considering the similarity of the rules for the first Germanic umlaut and the first Sámi metaphony, the existence of the first Germanic umlaut in all Germanic languages and its spread from the south to the north, the deeper connection of the umlaut with other structural changes within the Germanic languages, as well as the restriction of the opening grade metaphony to the Sámi languages alone amongst the Finno-Ugric languages, only one conclusion can be possible: that the first Sámi metaphony was borrowed from the Scandinavian languages. The dating of the first Sámi metaphony (especially at its upper border, 8th century) and that of the first Germanic umlaut does not contradict this conclusion.

The same applies for the connection of the second Sámi metaphony with the second Scandinavian umlaut. Here, too, the similarity in rules, dating, spread (strongest in Southern Sámi), the structural incorporation, and a comparison with the related languages show that only one direction of borrowing is possible: Scandinavian > Sámi.

The borrowing of the Scandinavian umlaut was only possible as long as it was an operating phonological rule, that is before its lexicalisation (or phonologization). After the borrowing, the rule became more and more generalized (as e.g. the spreading of the opening grade assimilation over a before u and i in Sámi). The modern Sámi languages show much more regularity in the metaphonic alternations than the Scandinavian languages in the umlaut alternation. The first step of this development, the borrowing of the rule, occurred in the Sámi language spoken by the Scandinavians, the
second step (the further spreading of the rule) in the language of the monolingual speakers.

Other examples of borrowings in the same direction are e.g. the change of the word order in the Sámi languages (SOV > SVO) and the loss of consonant gradation in Southern Sámi.

5.2 Sámi metaphony > Swedish-Norwegian levelling

Traditionally, the Scandinavian levelling has been treated as a realization of the same tendency that caused umlaut (Hesselman 1945), a tendency that made itself felt over and over again. But between the first opening grade umlaut and Swedish-Norwegian levelling there is a time span of more than a thousand years. We also have to take into consideration that there is not only a difference in time but also different rules. The rule of the Swedish-Norwegian levelling bears a closer resemblance to the Sámi metaphony than to the Scandinavian umlaut. These similarities concern the lack of reduction of the second syllable and the type and strength of the assimilation (complete assimilation being possible in both language groups and the identical influence of i and u on the root vowels, cf. Sw. dial. lädu < lardu, gälin<galin and Sámi Gällivare äluk < aluk, äviin<aviin). The Scandinavian levelling is, however, much more regular than the Sámi metaphony, both with regard to types and regularity. It is an operating phonological rule in those dialects which have preserved short syllables; the Sámi metaphony, on the other hand, though regular in comparison to the Scandinavian umlaut, is not without exceptions.

When comparing the structure, dating, and spreading area of the Sámi metaphony and the Scandinavian levelling, we can only come to one conclusion: in this case, the only possible direction of borrowing is Sámi >
Scandinavian (Kuz’menko 1982). The Sámi metaphony was borrowed into the Swedish and Norwegian dialects when it was an operating phonological rule, possibly at the time when the Sámi metaphony affected only short vowels (see above). This feature developed in the Scandinavian dialects of the Sámi and was probably connected to the Scandinavization of the speakers of Southern Sámi. After having been borrowed, the rule was more and more generalized, cf. complete assimilation in the Swedish and Norwegian dialects. The generalization of the rule was characteristic of the monolingual Scandinavian speakers.

The Scandinavian levelling is connected to vowel balance, especially in its oxitonic form. This oxitone in short syllable words is characteristic of all Sámi languages; it can also be treated as a Sámi borrowing into the Swedish and Norwegian dialects (Kusmenko, Rießler 2000, 211-213; concerning other borrowings in the same direction see Bull 2004; Kusmenko 2004).

As to the sociolinguistic situation, the relation between the Sámi and the Scandinavians at the time of borrowing was characterized by the mutual tolerance and lively cultural contact (Zachrisson 1997).

**Bibliography**
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