

## The etymology of English *shower*

1. Gothic *skura* ‘storm’ and Old Norse *skúr* ‘shower’ continue a feminine Proto-Germanic noun *\*skūrō*<sup>1</sup>. In Gothic, *skura* appears twice in nearly the same context in the passages Mark 4:37 *jah warþ skura windis mikila* ‘and a big storm rose’ and Luke 8:23 *jah atiddja skura windis in þana marisaiw* ‘and there arrived a storm at the lake’; in both cases, *skura windis* translates Greek λαίλαψ ἀνέμου ‘a storm of wind’. Most of the West-Germanic languages point to a masculine cognate *\*skūra-*, e.g. Old English *scūr*, Middle Dutch *reghenschuyr* ‘rain-shower’ and Old High German *scūr*. However, the noun is also attested as a feminine, viz. in Middle High German *schüre* (cf. Lexer 1876: 828, Grimm 1893: 2321) and Middle Dutch *scure* ‘shower’, *donrescuere* ‘thunderstorm’. Furthermore, feminine gender is attested in modern continental dialects, e.g. in Hessa (Berthold 1967: 106) and in most dialects in the Ripuarian Rhineland and in the Dutch and Belgian provinces of Limburg. The feminine gender in Limburg and the adjacent Rhineland is shown by Dutch dialect enquiries (which are referred to in the caption to the map), and by various local dialect dictionaries, e.g. from the towns of Krefeld (Hermes 1978: 154), Maastricht (Endepols 1955: 383), Venlo (Alsters c.s. 1993: 236), and Weert (Hermans c.s. 1998: 315). Another clue to the reconstruction of f. *\*skūrō* is the fact that this word has tone accent 1 in most Limburg dialects, which points to original disyllabicity of the word.

The most frequent meaning of the West-Germanic words is ‘shower’, usually of rain or hail; in north-eastern Dutch, the word especially means ‘thunderstorm’ (Weijnen 1951: 13). The meaning ‘heavy shower’ of Old Norse *skúr* and Old English *scūr* is sometimes used metaphorically as ‘a shower of missiles’, or with a more general meaning ‘trouble, disquiet’; a similar use is attested for Middle Dutch *scure*. In Frisian, *skúr* or *skuor* has specialized to the meaning ‘gust of wind, squall’, but on the island of Ameland the meaning ‘shower of rain’ has been preserved in *un skoe(ie)r* ‘a heavy rain-shower’ (Oud 1987: 216).

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2. Within Germanic, *\*skūrō* has remained without certain etymological connections. Most scholars connect *\*skūr-* with words for 'north' or 'north wind' in other branches of Indo-European: Latin *caurus* 'showery north-west wind'; Lith. *šiáurė* 'north' and Slavic words for 'north' such as Old Church Slavonic *sěverŭ*, SCr. *sjěvēr*, Slovene *séver*, etc.; Armenian *c'owrt* 'cold'; cf. Pokorny 1959: 597, De Vries 1977: 507, Beekes in Mallory-Adams 1997: 644, Kluge-Seebold 1999: 714. However, not all scholars are completely convinced of this connection, as appears from the hesitant formulation of Kluge-Seebold: "Im Falle der Zusammengehörigkeit wäre *\*(s)kēwero-* anzusetzen." Indeed, there are reasons to doubt that Germanic *\*skūrō* is cognate either with the Balto-Slavic words and Latin *caurus*, or with Armenian *c'owrt*.

3. The connection between Lith. *šiáurė* and OCS *sěverŭ* on the one hand and Latin *caurus* on the other seems the least problematic one. The different ablaut of the Lith. (*\*keh<sub>1</sub>ur-*) and the Slavic (*\*keh<sub>1</sub>uer-*) forms may point to an original noun *\*keh<sub>1</sub>u(e)r-* 'north'. Latin *caurus* can be connected with the Balto-Slavic words by reconstructing *\*kh<sub>1</sub>uer-o-*, according to Schrijver 1991: 252.

It does not seem obvious to me that Gm. *\*skūrō* 'shower' must be cognate with the root *\*kh<sub>1</sub>ur-* 'north (wind)' of the previous words. One may think in very broad terms of 'showers' being 'bad weather' and of cold, northern winds which also bring 'bad weather', but a common denominator of two meanings is only a paper reconstruction: it is preferable to derive one attested meaning from the other. However, it seems difficult to derive either 'north' from 'shower' or 'shower' from 'north'. The latter possibility might be assumed if most showers were brought by northern winds, but in the homeland of the Germanic peoples, it is rather the western winds which bring showers. A formal obstacle to the connection of Gm. *\*skūrō* 'shower' with a root *\*kh<sub>1</sub>ur-* is *s-* mobile in the Germanic word. Of course, *s-* mobile is quite a productive phenomenon in Germanic, which on its own does not suffice to reject the connection; but added to the different meaning, it further compromises the proposed etymology.

The connection of Armenian *c'owrt* with Gothic *skura* (but not with the Balto-Slavic words) was proposed in just one sentence by Scheftelowitz (1904: 294), who adduced Arm. *c'owrt* as one of his examples that PIE *\*sk-* yields Armenian *c'*. He did not attempt to reconstruct a preform for *c'owrt*. The connection between *c'owrt* and *skura* was adopted by other scholars, and Pokorny 1959: 597 reconstructs *\*skūr-do-* for Arm. *c'owrt*. However, Pokorny's translation of Arm. *c'owrt* as 'kalt; Kälte, Schauer' is wrong because Arm. *c'owrt* does not mean 'shower'. Pokorny has either misread Scheftelowitz' translation "*c'urt* 'kalt, kälte, schauder': got. *skura* 'schauer'",

or maybe he assumed that the word *schauder* 'shiver' was a printing error for *schauer* 'shower'. As a result, the meaning of Arm. *c'owrt* 'cold' does not in any way command a connection with 'shower'. The form of *c'owrt* may indeed reflect PIE *\*skuHr-*, but without any semantic backing the formal correspondence with Gm. *\*skūrō* does not suffice to make the etymology convincing. Armenian *-t-* remains problematic; Pokorny's suffix *\*-do-* is completely gratuitous.

One might be less averse to connect *c'owrt* with Balto-Slavic and Latin *\*kh<sub>1</sub>ur-* 'north'. Adding *s-* mobile, a preform *\*skūr-* yielding Arm. *\*c'owr-* 'north' could be assumed; final *-t-* could represent a suffix *\*-do-* responsible for the change in meaning of 'north' to 'northern' → 'cold'. Nevertheless, in the absence of *s-* mobile in Balto-Slavic and Latin, and in view of unclear *-t-*, this scenario is hardly more than a wild guess<sup>2</sup>.

4. We may conclude that a connection of Germanic *\*skūrō* with any of the forms outside Germanic is questionable. In its stead, I would like to propose an alternative, inner-Germanic etymology which better explains form and meaning.

The noun *\*skūrō* can be derived from the Germanic root *\*skur-* 'to break, tear', which is attested in various nominal derivatives: Gothic *winþiskauro* 'winnowing fork' < *\*-skurōn-*, OIc. *skora* f. 'notch, cleft', OHG *scorro* 'rock, cliff, crag'; OIc. *bergskor* f. 'chasm', English *shore*, MiDutch *score* 'shore, prop, trestle' < *\*skurō*; MoDutch *scheur* 'crack, tear' < *\*skuri*. The root *\*skur-* is undoubtedly the zero grade of *\*sker-* 'to cut, tear', the root of OIc. *skera* and OHG *skeran*; the derivation of words for 'rock' or 'shore' from 'to cut, tear' is well attested.

The formation of *\*skūrō* on the basis of a root *\*skur-* belongs to a productive ablaut pattern in Germanic. Secondary *-ū-* on the basis of roots in *\*u* is well-known in the verb systems of the Germanic dialects, where *\*ū* represents the root vowel of several second class strong verbs, e.g. Goth. *ga-lūkan* 'to close'. In the other Old Germanic languages, we find more examples of this type, e.g. Old English *brūcan* 'to use', *būgan* 'to bend', *scūfan* 'to shove', *strūdan* 'to rub', *sūcan* 'to suck', etc.<sup>3</sup>. This formation type probably follows the model of the first class of Germanic strong verbs. The

<sup>2</sup> Formerly, many scholars have proposed a connection of *c'owrt* with Plr. *\*(s)čarta-* 'cold' (Av. *sarāta-*, MoP *sard* 'cold'), cf. the collection of etymologies in Ačaryan 1926-35 IV: 463f. However, the expected outcome of a PIE preform *\*skorto-* would rather be Arm. *†c'ord*.

<sup>3</sup> Seebold 1970: 48 provides a list of 27 second class strong verbs which have *\*-ū-* instead of *\*-eu-* in the present. The list shows that this type is best attested in Old English, Old Frisian and Old Saxon (+ Middle Low German and Dutch), somewhat less in Old High German and Old Norse, and hardly at all in Gothic.

PGm. monophthongization of \**ei* to *i* made that the first class had \*-*i*- in the present, \*-*ai*- in the past sg. and \*-*i*- in the past pl., which caused some of the second class verbs with an original ablaut \*-*eu*- : \*-*au*- : \*-*u*- to replace \*-*eu*- by \*-*ū*- in order to maintain the parallism with the first class (thus e.g. Campbell 1959: 303).

Less attention has been devoted to secondary -*ū*- in nominal forms, but the etymological dictionaries betray numerous instances of this phenomenon in Germanic. A well-known example is the word 'loud', OHG (*h*)*lūt*, OS, OFri., OE *hlūd*, which must go back to PIE \**klutó-* as attested in Skt. *śrutá-* 'heard, famous', Gr. *κλυτός* 'famous', etc. A short list of examples is given by Lühr 1988: 319, e.g. \**stūba-* 'stump' next to \**stubba-*, \**prūta-* 'throat' next to \**struttōn-*, etc.<sup>4</sup>. As Lühr argues (p. 257, 319f.), long -*ū*- will have spread analogically from a smaller nucleus of forms with inherited \*-*ū*-. We may conclude that the derivation within Germanic of nouns in \**skūr-* from a root \**skur-* corresponds to a well-known pattern.

The semantic link between the verb \**skur-* and the noun \**skūrō* 'shower' lies in PGm. \**skūra* 'shelter, shed', as attested in MoIc *skurr*, Norse, Danish *skur* 'lean-to; wooden hut', OHG *scur* n. 'lean-to', MHG *schūr* m. 'shelter, shed', MoHG *Schauer* m./n. 'Überdach, Wetterdach, Schuppe, Scheune' (Grimm 1893: 2328). A feminine \**skūrō* of the same meaning is reflected in OIc. *skúr* 'almond shell', Norse dial. *skūr* 'upper layer of a haystack', OHG *skura* 'granary, shed'. The word for 'shed' has been replaced by \**skūrjō* in many dialects of West-Germanic, yielding OHG *sciura*, MHG *schiuere*, MoHG *Scheuer*, MiD *schure*, MoD *schuur* 'granary, shed'<sup>5</sup>.

Thus, there were two nouns \**skūra* and \**skūrō* in PGm., both of which had the meaning of 'lean-to, shelter, cover'; this meaning may easily be derived from the root \**skur-* 'to split off'.

5. It seems to me that PGm. \**skūrō* 'shower' is the same word as \**skūrō* 'shelter': the basic notion of a 'shelter' is its 'cover', and one of the characteristics of a shower is that the sky becomes 'covered', overcast. The existence of a PGm. homonym \**skūrō* meaning both 'shelter' and 'shower' seems unproblematic: in modern German, *Schauer* still has both meanings: *Regenschauer*, but also *Schauer und Schirm*.

<sup>4</sup> I have discussed another such form, viz. \**rūpō* 'caterpillar' (German *Raupe*) from a non-laryngeal root \**rūp-*, and its Germanic relatives in De Vaan 2000: 171.

<sup>5</sup> In theory, a reconstruction \**skiurjō* is also possible; this would imply positing an extra ablaut grade \**skeur-*, which is not impossible. However, such a preform would deviate in two ways (viz. by means of its root ablaut and its suffix) from the most basic form \**skūra*, so that \**skiurjō* seems less likely than \**skūrjō*.

6. The proposed semantic development from 'shelter' to 'shower' has a parallel at a later stage of continental WGM. In a continuous area on the border of Low Franconian and Ripuarian, stretching from near Maastricht to Düren in the south and from Roermond to near Mönchen-Gladbach in the north, PGm. \**skūrō* 'shower' has been replaced by reflexes of \**skūlō*. The area in which this replacement has happened is outlined on the map. The actual form is mostly [/*u*:/] (f.) with tone accent 1, which indicates original disyllabicity. Originally, \**skūlō* had the meaning 'lean-to, shelter', as it had in OFri. *skule* f. 'shelter', and still has in eastern Dutch and Low German *skūle* f., MoD *schuil* 'shelter'. Another derived meaning is shown by the Early MoHG word *Schuhl(e)*, *Schouhle* 'castle-tower', attested in Palatian charters from 1594, 1613 and 1617 (Post c.s. 1987-93: 898). The stem \**skūl-* dates back to PGm., as shown by OIc. *skýli* 'hiding place' and *skúli* 'protector'.

The meaning 'shower' is not attested for \**skūlō* anywhere in continental WGM. outside the area indicated on the map, and this is a clear indication that 'shower' has secondarily developed from 'shelter'. Most of the dialects with [/*u*:/] 'shower' preserve the verb [/*u*:lə] with the meaning 'to take shelter'.

Due to the later origin and the less wide spread of the semantic shift, \**skūlō* presents a very clear case of the metaphorical use of 'shelter' for an 'overcast' sky; this case also shows that no intermediate steps in the semantic shift need to be assumed. The original meaning of \**skūl-* 'cover' is also shown by another derivative, viz. \**skūl(j)ō* 'mouth-disease, blisters or ulcers covering the mouth', which is variously found to apply with horses (MHG *schüle*, Dutch dialects), sheep (Swiss dialects) or children (*schuil/schoel* 'swollen gums' in many Dutch dialects); thus already van Haeringen 1936: 150.

The root \**skūl-* will be the secondary full grade to the root \**skul-* 'to split off', which yields e.g. German *Scholle*, Dutch *schol* 'clod of earth, lump' < \**skullōn-*. In its turn, \**skul-* may without hesitation be derived from PGm. \**skel-* 'to split, separate'.<sup>6</sup> Thus, the semantic chain of derivation from 'to split off' → 'cover, shelter' → 'shower', which we assumed for \**sker-* → \**skur-* → \**skūr-*, also explains \**skūlō* 'shower':

<sup>6</sup> Most etymological dictionaries separate \**skul-* and \**skel-*, and connect the former with PIE \**skeu-* 'to cover'. The only one who directly derives \**skūl-* from \**skel-* is Berns 1983: 196, discussing *schuil* 'swollen gums'. His explanation seems to me the better solution; it is also accepted by Weijnen 1996: 176.

PIE root	PGm.	'shelter'	'shower'
	zero-grade		
*sker-	*skur-	PGm. *skūra m/n., *skūrō f.	PGm. *skūrō f. (→ WGm. *skūra m.)
*skel-	*skul-	PGm. *skūl-; WGm. *skūlō f.	Rhenish *skūlō f.

7. Finally, we may consider the Old Saxon word *skion* 'cloud, pack of clouds', which is used in Genesis 17 *haglas skion* as a translation of Old English *hægles scūr*. Århammar 1964: 26 has shown conclusively that *skion* reflects a PGm. *a*-stem \**skeuna*-. This implies that *skion* may be connected with MLG *schune*, MoGerman *Scheune* 'shelter, shed'. The etymology of the latter word is regarded as unknown. In OHG, it is attested in glosses as *scuginna*, *scuginne*, *scugina*, for which most scholars (from Grimm 1893: 2625 to Kluge-Seebold 1999: 719) consider the possibility that it contains a root \**skug*-. However, it seems unlikely that intervocalic *-g-* and geminate *-nn-* would have disappeared from the MLG and modern reflex, if they really were pronounced. It seems more probable that *scuginna* and *scugina* are the OHG preforms of *Scheune*. We may assume that the spelling *-ugi-* is a variant of *-ui-* (cf. Muspilli *vugir* 'fire'), the grapheme which was used beside *-iu-* to write front rounded /y:/ (Braune-Eggers 1987: 52, 110). These observations imply a reconstruction of *Scheune* as \**skiunjō*.

To my mind, *Scheune* cannot be separated from MLG *schün*, Dutch *schuin* 'slanting, oblique', which Franck-van Wijk 1912: 603 reconstruct as \**skūn(i)a-* or \**skiunia-*'. They compare Norse dial. *skøyno* 'to cut obliquely' < \**skaunian*, which shows us the common source for \**skiunja* 'slanting' and \**skiunjō* 'shelter', viz. a PGm. root \**skeun-*, \**skaun-* 'to cut, split off'.

In conclusion, we may reconstruct PGm. \**skaunjan* 'to cut obliquely', PGm. \**skeunjō* 'oblique, slanting; shelter, shed', and PGm. \**skeuna* 'cloud'. These words thus provide a third instance of the semantic chain of derivation 'to split' → 'shelter' → 'cloud'. Although the suffix of OS *skion* and German *Scheune* is different, it is unproblematic to assume either that \**skeunjō* 'shelter' had beside it a noun \**skeuna* 'shelter' (cf. \**skūra* and \**skūrjō* 'shed'), or that \**skeuna* 'cloud' continues an earlier *jō*-stem \**skeunjō* 'cloud' (cf. \**skūrō* and \**skūra* 'shower').

#### 8. Old Saxon *scuron* and OHG *scurim*

In this final section, we turn to the alleged attestation of *skur* 'shower' in the Old Saxon Heliand, viz. in the passage Heliand 5135-36:

*that man ina uuitnodi wapnes eggion,  
scarpon scuron*

'daß man ihn mit der Schneide der Waffe, mit scharfen *scuron* bestrafen solle' (translation by Lühr 1982: 703).

This passage may be compared with the closely parallel use of *scurim* in the OHG Hildenbrandslied, viz. line 59-60:

*do lēttun se ærist asckim scritan,  
scarpē scurim, dat in dem sciltim stont.*

'Da liessen sie zuerst [die Pferde] mit den Speeren,  
mit scharfen *scurim*, traben, so daß es an den Schilden zum Stehen kam'  
(translation by Lühr 1982, except for *scurim*).

Both *scuron* and *scurim* are used as appositions to a preceding noun in the dative, viz. *eggion* 'blade' and *asckim* 'spears'. It is commonly assumed that *scur* is used metaphorically as a 'shower of arrows' or 'weapons', especially since Müllenhoff-Scherer 1873: 263 have pleaded in favour of this etymology. They argue that *scuron* and *scurim* may be compared with the metaphorical use of *scūr* 'shower' in Old Norse and Old English, where we find e.g. OE *flāna scūras* 'showers of arrows' and OIc. *eggja skūrir* 'showers of blades'. The notion of 'sharpness' would have extended to the noun *scur* itself. However, the use of *scuron* and *scurim* is not exactly parallel, because they do not indicate a collection of 'spears' or 'arrows', as in the OE and OIc. passages, but rather occur as (near) synonyms of *eggiun* and *asckim*, i.e. of the words for sharp weapons themselves. As Lühr 1982: 700ff. has rightly pointed out, the word 'sharp' never occurs as an epithet of \**skūr*- 'shower' in the Old Germanic languages, except – if Müllenhoff-Scherer's explanation were accepted – in the two passages we are discussing here.

Therefore, we may return to the explanation of *scuron* and *scurim* which was already given earlier in the 19<sup>th</sup> century, viz. that they may be translated as 'with cuts, tears'. More precisely, OS *scuron* may represent the dat.pl. of \**skurōn-* (with short \**u*), which occurs e.g. in Gothic *winþiskauro*, whereas OHG *scurim* will be the dat.pl. of the *i*-stem \**skuri-* 'tear, cut' which yields Dutch *scheur*. It was probably the unfamiliarity with this stem \**skuri-* which led earlier German scholars to reject this possibility; in any case, Müllenhoff-Scherer p. 263 talk about "ein unerweisliches *scur* 'schnitt'". Lühr 1982: 703 argues that OHG *scurim* may have to be emended to *scurun*, so that both the Heliand and the Hildebrandslied would have used the same stem \**skurō*. This is possible, in view of the two surrounding forms *asckim* and *sciltim*; but since both \**skurō* and \**skuri* existed side by side in P(W)Gm., it is perfectly legitimate to accept both OS *scurun* and OHG *scurim* without emendation.

The translation of Heliand 5135-6 will then be *that man ina mitodi wapnes eggjun, skarpun skurun* 'that they should punish him with weapon-blades, with sharp cuts'. For the translation of Hildebrandslied 59-60, I see two possibilities: *do lettun se ærist asckim scritan, scarpun scurim, dat in dem sciltim stont* 'Then they first let [the horses] trot with the spears, among sharp cuts, so that it halted against the shields' or 'Then they first let the (ash-)spears fly, with sharp cuts, until it halted in the shields?'

Dept. of Comparative Linguistics  
Leiden University  
P.O. Box 9515  
2300 RA Leiden  
The Netherlands

Michiel de Vaan

#### References:

- Ačariyan, H.  
1926-1935: *Hayeren armatakan bararan*, 4 vols., Erevan (reprint 1971-1979).
- Alsters, A. c.s.  
1993: *Verloos Woordenboek*, Venlo.
- Århammar, N.  
1964: Altsächsisch *skion* m. 'Wolke' und altenglisch *scēo* (?), *Niederdeutsches Jahrbuch* 87, 24-28.
- Berns, J.  
1983: *Namen voor ziekten van het vee*, Amsterdam.
- Braune, W. and H. Eggers  
1987: *Althochdeutsche Grammatik*, 14. Auflage bearbeitet von H. Eggers, Tübingen.
- Campbell, A.  
1959: *Old English Grammar*, Oxford.
- Endepols, H.J.E.  
1955: *Woordenboek of diksjenaer van 't Mestreechs*, Maastricht.
- Franck, J.  
1910: *Mittelniederländische Grammatik. Mit Lesestücken und Glossar*<sup>2</sup>, Leipzig (reprint Arnheim 1971).

<sup>2</sup> Meier (1990: 128) points to the fact that the verb \**skrtdan* is sometimes used in Old Germanic languages in the meaning 'to fly', viz. of weapons such as spears and arrows. He adds that the instrumental case (*asckim*) may simply indicate the object. In the present passage, this would have the advantage that we would not need to assume an object 'horses' which remains unexpressed in the text.

- Franck, J. and N. van Wijk  
1912: *Franck's etymologisch woordenboek der Nederlandsche taal. Tweede druk door Dr. N. van Wijk*, 's-Gravenhage.
- Grimm, J. and W. Grimm  
1893: *Deutsches Wörterbuch. Achter Band: R-Schiefe. Bearbeitet von und unter Leitung von Dr. Moriz Heyne*, Leipzig.
- van Haeringen, C.  
1936: *Franck-van Wijk: Etymologisch woordenboek der Nederlandse taal. Supplement*, 's-Gravenhage.
- Hermans, P. c.s.  
1998: *De Weertlandse dialecten*, Weert.
- Hermes, W.  
1978: *Kriewelsch van A bes Z. Mundartwörterbuch*, Krefeld.
- Kluge, F. and E. Seebold  
1999: *Etymologisches Wörterbuch der deutschen Sprache*<sup>23</sup>, bearbeitet von E. Seebold, Berlin-New York.
- Lexer, W.  
1876: *Mittelhochdeutsches Handwörterbuch*, volume II, *N-U*, Leipzig.
- Lühr, R.  
1982: *Studien zur Sprache des Hildebrandsliedes*, two volumes, Frankfurt am Main.  
1988: *Expressivität und Lautgesetz im Germanischen*, Heidelberg.
- Mallory, J. and D. Adams  
1997: *Encyclopedia of Indo-European Culture*, London - Chicago.
- Mayrhofer, M.  
1986-96: *Etymologisches Wörterbuch des Altindoarischen*, Heidelberg. Two volumes.
- Meier, H.  
1990: Die Schlacht im 'Hildebrandslied', *Zeitschrift für deutsches Altertum und deutsche Literatur* 119/2, 127-138.
- Müllenhoff, K. and W. Scherer  
1873: *Denkmäler deutscher Poesie und Prosa aus dem VIII-XII Jahrhundert*, Berlin.
- Müller, J., M. Zender, H. Dittmaier, K. Meisen (ed.)  
1948-58: *Rheinisches Wörterbuch*, seventh volume, Berlin.
- Oud, A.G.  
1987: *Woa'deboek fan ut Amelands*, Leeuwarden.
- Pokorny, J.  
1959: *Indogermanisches etymologisches Wörterbuch*, Bern.
- Post, R., S. Bingenheimer, J. Schwing  
1987-93: *Pfälzisches Wörterbuch*, fifth volume (N-Schw), Stuttgart.

Scheftelowitz, J.

1904: Zur altarmenischen Lautgeschichte, *Beiträge zur Kunde der indogermanischen Sprachen* 28, 282-313.

Seebold, E.

1970: *Vergleichendes und etymologisches Wörterbuch der germanischen starken Verben*, The Hague - Paris.

De Vaan, M.

2000: Reconsidering Dutch *rups*, German *Raupe* 'caterpillar', *Amsterdamer Beiträge zur älteren Germanistik* 54, 151-174.

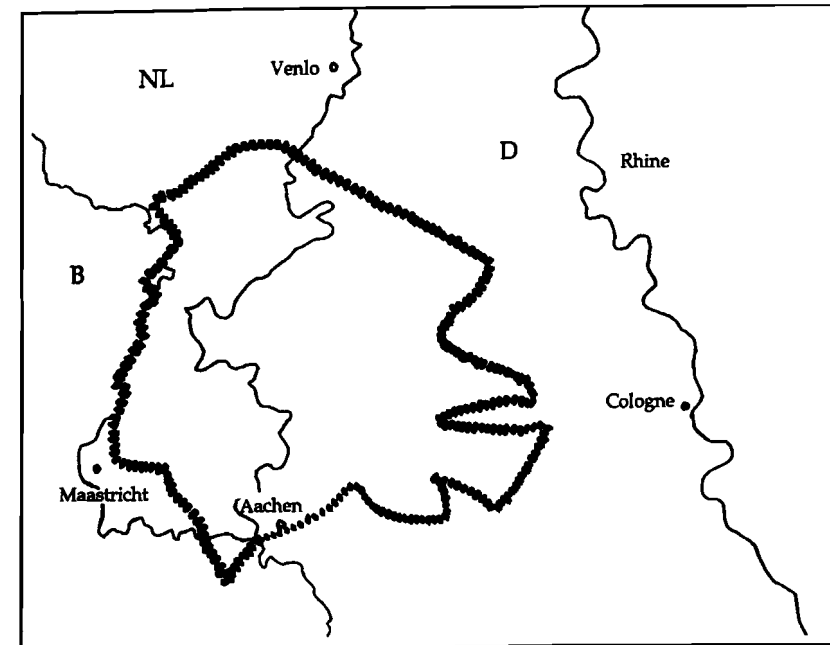
De Vries, J.

1977: *Altnordisches etymologisches Wörterbuch*<sup>2</sup>, Leiden.

Weijnen, A.

1951: *Taalgeografie en interne taalkunde* (= *Bijdragen en mededelingen der dialectencommissie der KNAW* 12), Amsterdam.

1996: *Etymologisch dialectwoordenboek*, Assen.



Map:

In the area within the dotted line, the reflex of Gm. *\*skulō* means 'shower'. For Dutch and Belgian Limburg, the map is based on the words for 'thunderstorm' and 'rainshower' in two dialect enquiries: *University of Nijmegen*, questionnaire 22 (1963), question 15a 'rainshower'; *Dialectencommissie* (Meertens Instituut, Amsterdam) questionnaire 56B, II (1981), questions 4 and 15 'the shower accompanying a thunderstorm', question 1 'thunderstorm' and questions 2 and 3 'dark clouds promising bad weather'. The German part of the area is after map 20 in Müller c.s. 1948-58: 955, for which the data were gathered in the year 1931.