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Albanian and Armenian

0. It has long been recognized that there must have existed a particular relationship between the pre-Albanian and the pre-Armenian dialects of Indo-European (cf. Pedersen 1900 b). A specification of this relationship requires the clarification of certain theoretical, factual, and chronological aspects. In the following I intend to make a contribution to this problem.

1. From a theoretical point of view, one can distinguish between three different types of linguistic development, which may, by way of convention, be labelled 'genetic', 'contactual', and 'structural', and connected with Schleicher's *Stammbaumtheorie*, Schmidt's *Wellentheorie*, and Martinet's *Économie des changements phonétiques*, respectively. The first type of development presupposes a chronologically identical series of identical innovations. A perfect example is the origin of the Romance languages, for which no dialectal features can be established for the period from Indo-European up to Vulgar Latin. The second type of development is exemplified in a chronologically not identical series of identical innovations, or in a series of historically connected but not identical innovations. Thus, both Czech *brázda* and Upper Sorabian *brózda* show metathesis and lengthening in the Common Slavic CorC-group, but not with the same chronology. The lengthening preceded the rise of new timbre distinctions in Czech, whereas it was posterior in Sorabian. The lengthening affected the initial diphthong in Slovak *laket'*, but not in Czech *loket* or in Slovak *robit'*, while all of these words underwent the metathesis. The third type of development links up

a set of identical but historically unconnected innovations, such as the rise of [x] in Spanish *dije* and Old Bulgarian *řěxъ*.

All of the possibilities mentioned in the preceding paragraph represent some kind of generalization beyond the immediately observed facts. It should be clear that a single observed phenomenon cannot be classified without taking into account the framework in which it plays its part. Consequently, there remains quite a bit of freedom for the investigator to interpret the facts one way or another. On the one hand, one may even deny the reality of a period of common Indo-Iranian development and explain the facts in terms of IE dialectal innovations (Makaev 1971). On the other hand, one can attribute such diverse phenomena as the labialization of the labiovelar in Rumanian *patru* and the comparable development in Welsh *pimp* to one and the same 'wave' (Solta 1965). A final solution to these problems requires at least some agreement about the criteria on the basis of which the choice between various possibilities is made, and this is only partly a question of terminology.

In the formulation presented above a *Stammbaum* is characterized as a series of common innovations with a common chronology. This does not imply that the language is in all respects homogeneous during the period of common development. The metathesis of liquids does not mark the end of the Common Slavic period, even if it affected different areas to a varying degree. The essential point is that there is a series of common innovations with a common chronology which are posterior to the metathesis. Thus, the presence of dialectal differences does not break up the linguistic unity. In this conception, there can hardly be any doubt about the reality of an Indo-Iranian or Balto-Slavic period.

The distinction between 'structural' and other developments is only meaningful if the historical connectedness referred to in the above definitions is understood in the narrow sense of the word. Though the assimilation of the initial fricative in Skt. *śvāsuraḥ* and Lith. *šėšuras* is the same, it can hardly go back to a common development. If the apparent identity originates from independent innovations in Indic and Baltic, these are historically unconnected in the sense advocated here, and the development is 'structural' rather than 'genetic' or 'contactual'.

Some of those phenomena which at first sight seem to be explicable in terms of a wave theory, turn out to involve real *Stammbaum* developments on closer inspection. The well-known retraction

of IE *s after *i u r k* left fewer traces in Baltic than in Indo-Iranian. Yet isolated instances like Lith. *mìrštu* show that the development fully affected the Baltic area and that the absence of retraction in the majority of the cases where it should be expected is due to posterior analogical levellings. A close examination of the chronological relations is imperative in such a case.

The chronology of sound changes must be understood as the temporal order of their phonemicization. Words like Lith. *kultūra* do not imply that de Saussure's law was posterior to their being borrowed into the language. It is by no means correct to infer from Bulg. *pládne* (= Russ. *pólden'*) that the metathesis of liquids was posterior to the loss of the *jers* in this language. The establishment of a chronology must be based on less marginal words. Subphonemic changes cannot, as a rule, be reconstructed.

2. One of the most characteristic facts about Albanian and Armenian from the Indo-European point of view is that both languages have led a number of authors to suppose that they have retained the distinction between the three series of velars which are generally reconstructed for the proto-language. As far as I can see, the idea that three phonemically distinct series of velars existed simultaneously in Proto-Indo-European is a fallacy. There are two decisive arguments against such a reconstruction which anybody who sticks to Bezenberger's three series should be ready to answer.

On the one hand, the 'pure velars' and the other series are largely in complementary distribution, as Steensland has recently shown in his important monograph on the subject (1973). One hardly finds a single environment where all series were opposed to each other. Even if one may not always agree with Steensland's comparisons, the large majority of which were taken from Pokorny, one cannot but subscribe to his conclusion that the proto-language had two series of velar phonemes only.

On the other hand, the cases of so-called "Gutturalwechsel" are far too numerous to be disposed of as incidental irregularities. In a recent article (1974), Čekman lists 70 instances of velar interchange in Baltic and Slavic, not counting the onomatopoeic cases. Though it does not seem possible to relate all instances to a single origin, I think that most examples can be accounted for if we assume that the palatovelars lost their palatal character before a resonant in Balto-Slavic. Thus, we find Lith. *šėšuras*, Skt. *śváśurah*, next to Slavic *svekry*, Skt. *śvaśrūh*. The regular development of the palatovelar is attested in Lith. *akmuõ* 'stone', Latv. *akmens*, whereas the

palatal feature was restored in Lith. *ašmuõ* 'edge (of a knife)', Latv. *asmens*, on the basis of *aštrūs* 'sharp'. The coexistence of Russ. *gus* and Lith. *žqs̥is* would seem to indicate an earlier alternation in the root of this old consonant stem. Cf. also Russ. *žěltyj*, *žerd* next to *zóloto*, *zoród*, and Prussian *balgnan* 'Sattel' next to *balsinis* 'Kissen'. The development of a svarabhakti vowel before the syllabic resonant is a relatively late Balto-Slavic innovation because it is posterior to Hirt's law (cf. Kortlandt 1975a: 52). In pre-Slavic the palatal feature was lost before **wo* but not before **we*, cf. Polish *kwiat*, *gwiazda* next to *święty*, *zwierz*. The palatal feature was restored in *świat*, *dzwon* on the basis of *świt*, *dźwięk*. The connection of Latv. *kuņa* with Lith. *šuõ* etc. is incorrect (cf. Būga 1922: 196).

The thesis that the three IE velar series remained distinct in Albanian was first put forward by Holger Pedersen (1900a: 305 ff.). According to this author, the labiovelars were palatalized by a following front vowel, whereas the 'pure velars' remained intact. Pedersen's most convincing examples of this palatalization are the following: ⁶

- (1) *pesē* 'fünf', Skt. *pāñca*, Gr. *πέντε*.
- (2) *si* 'wie' < **k^eei* etc.
- (3) *sy* 'Auge', Lith. *akis*, Arm. pl. *ač'k*.
- (4) *zjarm* 'Hitze', Skt. *gharmāh*, Arm. *šerm*, Gr. *θερμός*.
- (5) *s* 'nicht', Arm. (o)č̣.
- (6) *sjell* 'bringe', Gr. *ἐν-τέλλω*, Lat. *colō*.

To these can be added *zorrē* 'Darm' < **g^eērnā* (Jokl 1937: 141).

The main examples of 'pure velars' which were not palatalized by a following front vowel are the following:

- (1) *gjēnj* 'finde', Gr. *χανδάνω*, Lat. *pre-hendō*.
- (2) *dergjem* 'bin krank', Lith. *sergù*, OHG. *sorga*.
- (3) *ergjiz* 'kleine Laus', Lith. *ėrkė*.
- (4) *helq* 'ziehe', Gr. *ἐλκω*.
- (5) *kohē* 'Zeit', Slavic *časъ*.
- (6) *qell* 'bringe', Gr. *κέλομαι*.
- (7) *geth* 'schere', Lith. *kertù*, Gr. *κείρω*.

This material is not convincing. As Hermann pointed out in his discussion of the problem (1907: 47f.), the velars may have been restored analogically in these words. This is certainly the case with *qell*, which cannot be separated from *sjell* (cf. Jokl 1963: 126). The

word *ergjiz*, the closest cognate of which is Arm. *orjil*, offers various problems in several IE languages.

Though the overall view is particularly reminiscent of Armenian, there is a considerable difference in the details. Elsewhere I have pointed out that in Armenian, where we find the same palatalization before a front vowel, the original velar was restored wherever there was a model for its restoration (1975c). It is remarkable that Alb. *qeth* agrees with Arm. *k'ertem* (next to *k'erem* and *k'orem*), just as Alb. *zjarm* agrees with Arm. *jerm*, *jer*. There is no agreement between Alb. *pesë* and Arm. *hing*, and between Alb. *ergjiz* and Arm. *orjil*. In the abovementioned publication I suggested that the preceding nasal prevented the palatalization in Arm. *hing* 'five', where the velar cannot have been restored because there was no model for such an analogical development. Similarly, one could ascribe the absence of palatalization in Alb. *dergjem*, *ergjiz*, *helq* to the preceding resonant. The restoration of the velar in *qell* and *qeth* must have taken place on the analogy of other apophonic degrees of the root.

The word *gjënj* does not really fit into the above list because there is no evidence against a palatovelar in this root outside Albanian. It has been suggested that palatovelars lost their palatal feature before a resonant (cf. Hamp 1960). This may have been a common development of Albanian and Balto-Slavic. In the present case the velar may have been taken from those forms which had zero grade in the root, cf. Gr. *ἔχασον*.

Finally, I have to discuss the word *kohë*. In his etymological dictionary, Gustav Meyer wrote: "Ist vielleicht mit asl. *časъ* 'Zeit, Stunde' verwandt" (1891: 194), and in his *Lautehre* he characterized this comparison as "Zweifelhaft" (1892: 86). Pedersen had less doubts on this point ("läßt sich kaum bezweifeln"), but adds: "Allerdings ist dies das einzige Beispiel für inlautendes *h* aus idg. *s*; sonst herrscht *š*" (1900a: 279). There is counter-evidence against intervocalic **s* > *h* in *o*-stems like *vesh* 'Ohr' and in the abl. pl. ending *-sh*. Jokl regarded the comparison as "eine evidente Wortgleichung" and rejected the connection of the Slavic word with Gr. *τηρέω* because the latter shows a labiovelar (1937: 159n.). In fact, the reconstructed pre-Albanian form **kēsā* is not attested in Balto-Slavic, and the comparison must possibly be abandoned. Jokl's connection of the Albanian word with Gr. *κλω* etc. may indeed be correct and leads us to another analogy with the Armenian development. Elsewhere I have suggested that the absence of palatali-

zation in Arm. *keam* 'I live' must be attributed to the presense of an intervening laryngeal (1975c). The same factor may have been responsible for the absence of palatalization in Alb. *qis*, *qoj* 'wecke', Gr. *κῑνέω*, Lat. *ciēō*.

3. The non-identity of the palatalization in Albanian and Armenian seems to be corroborated by the internal chronological evidence of the latter language. As I have pointed out elsewhere (1975b), the oldest stage of prehistoric Armenian is characterized by the rise of new labialized consonants. I think that in this language the palatalization must be dated between the loss of the labialized affricates resulting from IE **kw*, **ǵhw*, which was posterior to the rise of *h* from IE **s*, and the loss of the labialized dentals resulting from IE **tw*, **dw*. It was probably posterior to the former development because the palatalized labiovelars did not merge with the labialized palatovelars. It was certainly anterior to the latter development because the velar was not palatalized in *k'ez*, Skt. *tvām*. Since there is agreement between the internal and the comparative evidence, we must reject the possibility of genetic identity between the Albanian and the Armenian palatalization. On the other hand, the facts are too much alike in the two languages not to suggest some kind of historical connectedness.

Two other developments which date from the earliest stages of the Armenian language are the rise of *h* from IE **s* and the assimilation in *skesur*, Gr. *ἐκυσυρᾶ*. Neither of them was shared by Albanian. Pedersen attributes the Albanian rise of *h* from IE **s* to historical times (1900a: 340), which does not seem to be in accordance with his analysis of the word *shoh* 'sehe' (1900a: 283). The retraction of IE **ē* can hardly be that recent. Anyhow, the development of *h* from IE **s* in Albanian is limited to the position before an unstressed back vowel and has been proved for word-initial **s* only. Since it was posterior to the split of IE **s* into a voiced and a voiceless reflex, once again we find agreement between the internal and the comparative evidence to the non-identity of the development in Albanian and Armenian.

The alleged assimilation in Alb. *vjehërrë* 'Schwiegermutter' has nothing to do with the one in Arm. *skesur*. The influence would be progressive in the former language, while it is regressive in the latter. Moreover, the Albanian assimilation is improbable because of two reasons. First, the development of intervocalic **s* into *h* is supported by the questionable etymology of *kohë* only, whereas it is contradicted by *o*-stems like *vesh* and the abl. pl. ending *-sh*.

Second, there is a regressive dissimilation in *thi* 'Schwein', Lat. *sūs*, and in *thanj* 'trockne', Lith. *saūsas*. In the case of *vjehërrë* it seems correct to stick to Meyer's phonetic explanation (1891: 475), which was also accepted by Pedersen (1900a: 339).

There are two developments which may indeed have been common to Albanian and Armenian, and which are anterior to the ones discussed so far according to the Armenian internal evidence (cf. Kortlandt 1975b: 96). Pedersen established for Albanian that IE **sw* yields *d* before a stressed vowel and adduced the following examples (1900a: 286ff.):

- (1) *diell* 'Sonne'; Skt. *svār*.
- (2) *dergjem* 'bin krank', Lith. *sergù*.
- (3) *diršë* 'Schweiß', Gr. *ἰδρώς*, Arm. *k'irtn*.

This remarkable development, the result of which differs considerably from the normal reflex *gj* from IE **s* before a stressed vowel, e.g. in *gjumë* 'Schlaf', Gr. *ὑπνος*, suggests that **sw* became monophonemic at a relatively early stage. The difference between the loss of buccal features in the reflex of **sw* before an originally unstressed vowel, e.g. in *vjehërrë*, Gr. *ἐνωρά*, and the loss of the labial element in the words listed above is structurally analogous to the difference in Armenian between the retracted articulation in *šun* 'dog', Gr. *κύων*, and the early loss of labialization in *jayn* 'voice', Russ. *zvon*.

The suggestion that IE **sw* became monophonemic in Albanian at an early stage is supported by the development of **kw* and **ghw* in this language. Here again we have to assume early monophonemicization. The only reliable examples are *sorrë* 'Krähe' < **kwërnā* (Jokl 1937: 146), Bulg. *svrāka*, Lith. *šárka*, and Tosk *zë*, Geg *zā* 'Stimme', Russ. *zvon*, Arm. *jayn*. The hypothesis that IE **k* before **u* yielded the same reflex cannot be maintained (cf. Ölberg 1968: 113f.). Thus, the agreement with Armenian is perfect. It encompasses not only the conditions, but also the chronology of the labialization. As Jokl pointed out (1937: 161), the Rumanian borrowing *cioară* < Alb. *sorrë* proves that the affricate was preserved up to historical times. It follows that the rise of new labialized consonants was anterior to the assibilation of IE **k* in clusters. The same chronology must be assumed for Armenian. In contrast with the latter language, the palatalized labiovelars merged with the labialized palatovelars in Albanian.

Apart from the labialization, we thus find that the chronology of the assibilation of IE palatovelars coincides in the two languages. In my discussion of Arm. *skesur* (1975b: 97) I demonstrated that the assimilation in this word requires a stage where IE **k̑* had been assibilated while the reflex of IE **k̑w* was an affricate. The Rumanian word *cioară* shows that this stage may have been Albano-Armenian. The preservation of the occlusive element in the palatovelars before **w* may have been common to a larger area, cf. Ukrainian *dzvin*, *dzvir* next to *zvir*. These cases can hardly be attributed to "affective affricatization" (Shevelov 1964: 145) in view of the correspondence with Polish *dzwon* and Macedonian *dzvonec*, *dzver*.

Postscript

When I wrote this article in 1975, E. Çabej's important contribution in: Die Sprache 18 (1972) 132–154 (Über einige Lautregeln des Albanischen) had escaped my attention. I quote from his article (145): „Zusammenfassend sieht man, daß der jetzige Palatal bei Substantiven wie *ergjēz* und bei Verben wie *dergjēm*, *gjej*, *qell*, *qeth* noch kein Beweis für das Bestehen von idg. Reinvelaren vor hellen Vokalen und eine besondere Behandlung derselben im Albanischen ist.“ Ölberg's assertions "Zusammenfassend läßt sich also sagen, daß wir nicht umhin kommen, drei Gutturalreihen im Albanischen vorauszusetzen" (Scritti in onore di Giuliano Bonfante II, Brescia 1976, 567f.) and "Vor allem aber unterschätzt er [= Steensland] die Beweismöglichkeiten für die drei Phonemreihen seitens der kleineren Sprachen wie Albanisch" (ibidem, 569) cannot be maintained: they are based on two instances of non-palatalization before **e* (*qeth* and *gjal̑m*), which allow other explanations. In my view, these two words contain an original palatovelar which was regularly depalatalized before a following resonant (cf. Recent Developments in Historical Phonology, edited by J. Fisiak, The Hague 1978, 242). The depalatalized variant was subsequently introduced analogically into the apophonic alternants of the root. It is not correct to project every formal distinction which is found in the daughter languages back into the proto-language, especially when there is an obvious explanation in terms of analogic change. Thus, the so-called 'pure velars' arose partly from the delabialization of the labiovelars before rounded vowels in the western IE languages, and partly from the depalatalization of the palatovelars before resonants in the eastern IE languages.

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Tocharisch *ñkät/ñakte* 'Gott'

Vorbemerkung zur Schreibung des Idg.-Uridg.: prinzipiell wie in KZ 91, S. 171ff., abgesehen davon, daß die Aspiration der (asp. Allophone der) stimmlosen und stimmhaften Okklusive, da phonologisch irrelevant, unbezeichnet bleibt und die Unterscheidung zwischen ehemaligen Uvularen und Velaren, die für die Kentumsprache Tocharisch belanglos ist, vernachlässigt wird; außerdem wird *kw*, *gw*, *kw*, *xw* statt *k^w* etc. geschrieben.