SOME EFFECTS OF THE HURRO-URARTIAN PEOPLE AND THEIR LANGUAGES UPON THE EARLIEST ARMENIANS

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Both the Hurrian and Urartian languages left a slight residue in Armenian. This collection of vocabulary, known of for more than half a century but most recently discussed in a Western language by Igor M. Diakonoff (1985), implies that the proto-Armenians must have been influenced by the Early Trans-Caucasian culture in its later stages. This vocabulary is reviewed here, and its correspondences with the languages of the northeast Caucasus, spoken in the area from which the Hurrians descended in the third millennium, are provided. This affords us firmer evidence for the Hurrian relation to the Early Trans-Caucasian culture, and the Armenian rapport with Hurro-Urartian.

Additional notes to this paper have been extracted from an extensive commentary on it by I. M. Diakonoff dated October 4, 1989. I thank Prof. Diakonoff for allowing me to incorporate some of his comments.

THE HURRIANS SEEM TO HAVE descended, in the third millennium, from the northeast into Syria where their names are read in Old Akkadian tablets¹ from as early as 2300 B.C.² That sub-mountainous land whence they arrived was the seat of a local civilization called the Kura-Araxes culture or the Early Trans-Caucasian culture, a civilization that existed from 3400 B.C. until about 2000 B.C.³ The earliest evidence for this culture is found on the Ararat Plateau; thence it spread to Georgia by 3000 B.C., and during the next millennium

it proceeded westward to the Erzurum plain, southwest to Cilicia, and to the southeast into an area below the Urmia basin and Lake Van, down to the borders of present day Syria. Altogether, the Early Trans-Caucasian culture, at its greatest spread, enveloped a vast area approximately 1000 km by 500 km.

The Early Trans-Caucasian culture was characterized primarily by its pottery, at first with coarse incised markings, spirals and bold decorations, and later with more refined designs composed of birds and animal motifs on a black burnished ware. There was a specific house construction style as well, a rounded abode with a hearth next to the door, presumably for the venting of smoke; throughout Early Trans-Caucasian I the size of the dwelling increased, and by Early Trans-Caucasian II rectangular buildings, which were more common in western Early Trans-Caucasian, penetrated to the east, especially in Georgia. A stylistic consistency is noted in the retention of the hearth alongside the door.

Burials in Early Trans-Caucasian I and Early Trans-Caucasian II were frequently collective and initially did not reveal any distinction of social class or wealth.⁴

The first reading, of a single Hurrian name, appeared in BE I 11, and further details can be found in Gernot Wilhelm (1975: 42-43).

² It was shortly after this that we can also assume contact between the Hurrians and the Luvians. In 2100 B.C. a new painted pottery introduces itself in Kizzuwatna (Cilicia), another form of Hurrian presence in Luwian territory. This penetration marked the start of Cilician Early Bronze Age IV.

³ The Early Trans-Caucasian culture was not uniformly replaced; rather, following 2000 B.C., various pockets of Early Trans-Caucasian culture remained in peripheral areas, especially to the northeast and northwest, as noticed by I. M. Diakonoff (1984 and earlier). It is not clear what brought an end to the Early Trans-Caucasian culture, but early Indo-European activity could have been significant, although there is no firm evidence that the Indo-Europeans played such a role.

⁴ Simple copper artifacts, however, are found in graves in Early Trans-Caucasian I-II, such as at Kvatskhelebi in Georgia. In Early Trans-Caucasian III there was a marked increase in metallurgy.

By and large, the deceased were buried on their sides, unlike in the Kurgan graves in which the bodies are laid on their backs with knees drawn up, often accompanied by symbols of wealth. This Kurgan burial type is noted at such well-studied sites as Lchashen on Lake Sevan as late as Early Trans-Caucasian III,5 though, as the Trans-Caucasian Middle Bronze Age progressed into the second millennium, distinctions became apparent. Significantly, this whole Early Trans-Caucasian area reveals little discontinuity during the late third millennium, though there is evidence for a southward passage through it by a vigorous people, said by some to be the Hittites, or at least an Indo-European people. (See Diakonoff note A, below.) These people brought changes in burial practices of the so-called Kurgan type, timber-graves after the pattern known in the Pontic area and otherwise alien to Early Trans-Caucasian sites. The tombs at Trialeti, forty miles southwest of Tbilisi (2300-2000 B.C.), were of this type and perhaps were anticipated by the royal burials at Maikop (2500 B.C.), in the Kuban valley just northwest of the Caucasus. The third phase of the burials at Lchashen on Lake Sevan corresponds in part to the last period at Trialeti. Numerous particular Early Trans-Caucasian sites survived for long periods of time. At Kültepe II in Nakhijevan, there are fourteen levels of habitation; at Yanik Tepe, eleven levels.

During the late third millennium, the Early Trans-Caucasian culture declined, giving way to the Trans-Caucasian Middle Bronze (2000–1200 B.C.) with a parallel Colchidic culture in Georgia and Abkhazia (1700–600 B.C.). (See Diakonoff note B, below.) The distinctive Early Trans-Caucasian culture was vanishing as it increasingly merged with the Araxes Late Bronze Age culture. Following the dark ages parallel to the collapse of the Hittite empire, new elements intruded, and only the more remote uplands of eastern Anatolia clung to the old ways of the Early Trans-Caucasian civilization.

Charles Burney (Burney and Lang 1971: 44, 48–51; Burney 1978: 132), performing the usual rituals of hesitation and equivocation, reluctantly suggests that the Early Trans-Caucasian culture is Hurrian, and unreasonable idea since the Hurrians were the mightiest people to descend from the northeast during the Early Trans-Caucasian period. Burney hastens to assure us that though this contention is unprovable, it has logical merit, and it is hard to disagree, either with the merit of his proposal, or with the point that it is as yet unprovable.

The Hurrian culture, along with its kindred but considerably later Urartian state, ¹⁰ weighs heavily upon early pre-literate Armenia, and a principal reason for this suspicion is the existence of Hurro-Urartian words in Armenian, which will be discussed at length shortly. There is no clear point in time that can be posited for the advent of these loanwords, though most were certainly part of the Armenian lexicon before the Bible was translated in the early fifth century. We also cannot say whether this Hurro-Urartian vocabulary is specifically Hurrian or specifically Urartian. ¹¹ There is one

⁵ Specifically from 2200 to 1200 B.C.

⁶ There we have large limestone slab graves, one and a half meters deep, with a length and width five meters by four meters. In them were found vessels of gold and silver, and other examples of wealth, thus showing a divergence from the modest Early Trans-Caucasian graves, though there was found, amidst this Maikop wealth, Early Trans-Caucasian pottery. The similar graves at Tsarskaya are deemed Kurgan IV (2100 B.C.) by Gimbutas.

Differences in housing and in pottery developed throughout Early Trans-Caucasian. Urban life also began, though eastern Anatolia remained sparsely settled.

⁸ It seems entirely clear that the Hurrian language is not related to either the so-called Proto-Euphratic or Proto-Tigridic language groups, such as were spoken in the cities of Uruk, Lagash, Adab, etc. In the few instances where we have god names in those families that are known in Hurrian, the forms differ (Haas 1975: 9).

⁹ And indeed, there are other views. Japaridze (1978) claims that, at least by the third millennium, the culture was Kartvelian.

¹⁰ The Urartians were by no means through with the south Daghestani region, and as Melikishvili points out (1980: 35), they reverted and made conquests there at least by the ninth century.

¹¹ Though it remains tempting to say that Urartian is simply a later form of Hurrian, this does not seem to be the case. The question, though, often appears to be a difficult one. Early on, Speiser (1941: 10) deferred to Friedrich (1939: 59-62) who, at that time, could only say that Hurrian and Urartian were related (a very early opinion was that Urartian was unrelated and simply had a large number of Hurrian loan words in it); Diakonoff does not confront the issue in his chapter (1967: 163-65; 1971: 157ff) on the geneology of Hurrian and Urartian (there he is more interested in the prospect that Hurro-Urartian can be related to the Daghestani languages) but his opinions are abundantly known from elsewhere (1961: 419-23). Melikishvili (1971: 10) clearly states that Urartian is not a descendant of Hurrian, but that both are separate languages from a common source, a statement reinforced by Salvini

piece of evidence that implies that at least some of the vocabulary cannot be Urartian, but the physical presence of the Urartians in the Lake Van area and west from the ninth to the sixth century, immediately before the Armenians are known in this region, supports a logical notion that Urartian could well have had an effect on the Armenian lexicon.

It is certain, though, that the Armenians cannot be a people who resulted from an Indo-European overlay upon a Hurro-Urartian people. Were this true, we would find considerably more Hurro-Urartian linguistic detritus in Armenian, not only lexical material, but remnants of their syntax and perhaps phonology. Hurro-Urartian, an ergative language with great agglutinative powers, is considerably different from Armenian, and there have been no claims that its syntax left scars on the Armenian language, such as Old French did on English. Further, the Hurro-Urartian loan

(1975: 44) and more recently by Khachikian (1985: 22) and Neu (1988: 34). One of the more interesting differences is that Hurrian forms a contrast between glottalized and non-glottalized consonants, while Urartian forms apposition between long and short consonants (Thiel 1975: 49).

12 This view contradicts Burney (1971: 177-79) who speaks of a possible ethnic affinity between the Hurrians and the Armenians. He also mentions, doubtfully, a further Hattic relationship, but this has absolutely no linguistic support. Recent efforts by Ivanov (1985) to relate Hattic to the languages of the northwest Caucasus are also unpersuasive. We must also admit, at this point, that the details of Armenian origin remain vague, conjectural and controversial; Igor Diakonoff's provocative hypothesis (1984) is the most detailed theory yet advanced, but many remain unconvinced. (See Diakonoff note C, below.)

13 Although it was first thought that Armenian got its odd phonetic shape by some sort of areal transmogrification from the neighboring Caucasian languages, we now might have a more precise alternative. It is possible that the wide range of the Armenian palatal and dental affricates resulted from an ancient Hurro-Urartian influence. And indeed, though Hurrian and Urartian writing had to conform to the cuneiform values of the Akkadian system, Diakonoff has suggested (1961: 378-79; 1967: 123-32; 1980: 7-12) that there was a rich series of affricates, a point further discussed in Khachikyan 1985: 39.

¹⁴ Here one might note the present two-fold patterns for forming the English possessive. The form with apostrophe -s is of Germanic origin, while the of pattern is derived from Old French, which uses de to express possession.

vocabulary in Armenian is the type that exists when two cultures have a small approximation, as well as clear social and economic distance.¹⁵

It does seem, though, that Burney's suggestion that Early Trans-Caucasian is the culture from which Hurrian evolved has new merit, an observation based on the recent argument by Diakonoff and Starostin (1986)¹⁶ that Hurrian and Urartian are related to the languages of the Daghestan.¹⁷ In the meantime, Braun and Klimov (1954) had produced a survey of the same matter, and Djahukian (1967) went a step further and added Indo-European to the relationship of Caucasian and Kartvelian. These languages are high in number but low in recognizability; they are, in fact, obscure.

There are three principal groups within the Northeast Caucasian family. In the far north, in the area abutting the northwestern part of the Caspian Sea, is the Avar-Andi-Dido group with eleven principal languages within the three sub-groups. Some of these individual languages have very few speakers; one might note, in the Dido sub-group, Gunzib with 600 speakers, and Khvarsh with a thousand. Avar itself is a large, well-described language, the sole member of that subgroup, and has over 385,000 speakers. The second group, Lak-Dargwa, comprises only those two languages and has over 300,000 speakers. The Lezghian group has the greatest diversity, with ten principal

¹⁵ The loanwords, detailed later, are largely nouns of precise and unique meaning, representing actual things rather than abstraction.

¹⁶ Though connections between Hurrian and the East Caucasian languages have been claimed before (Kluge 1907, with Dargwa; Bork 1909: 68–82, as a link between NEC and SEC; and Friedrich 1933: iv), this is the first time that precise linguistic support has been adduced, for now we can establish an at least primitive format for Proto-East-Caucasian, along with Proto-Hurro-Urartian (for agreement, see Wilhelm 1989: 4).

¹⁷ Early efforts had been made to relate Urartian to Kartvelian (Marr 1921: 23ff; Tsereteli 1953: 37-39), a proposal seconded by Meshchaninov as early as 1927: 110-16, and gives its fullest development in Meshchaninov 1962: 54-72. This seconding is, of course, with reference to Marr's Japhetic theory. The correspondences, however, are not entirely attractive. Note Ur. *U-rur-dan* 'proper name', Grg. *Ber-den* 'Greek', Grg. *den-a* 'to give birth'.

¹⁸ Alekseev (1988: 9-12) would separate the Dido sub-group, composed of five rather small languages, from Avar-Andi-Dido, and establish it as a separate group.

languages, and they with their own dialectal subdivisions. Lezghian itself is the largest, with over 300,000 speakers; next is Tabasaran, with nearly 55,000 speakers; other languages are much smaller, like Budukh and Khinalugh, with hardly a thousand speakers each. The similarities between the languages of the Lezghian group are immediately obvious, both on a lexical and morphological level, though Khinalugh and Archi, which are considerably divergent, might be part of the Lak-Dargwa group, or language isolates within the Daghestani group.¹⁹

These three principal Daghestani groups, Avar-Andi-Dido, Lak-Dargwa, and Lezghian, ²⁰ were undoubtedly not as diverse in the fourth millennium B.C., at the very beginning of the Early Trans-Caucasian period, ²¹ as they are now; further, there could have been other subgroups that now are lost. Of all these languages, we have few records of any before the nineteenth century, except for Udi, which seems to be the modern continuant of Caucasian Albanian, a language for which

we have some inscriptions²² and residual literary vocabulary from before the tenth century.²³ This current distribution of the Northeast Caucasian languages can only be noted, and it is of course impossible, at this stage of our understanding of the relationship of these languages, to propose that Hurro-Urartian was more likely derived from one northeastern Caucasian group than another. We can only say that the greatest number of superficially likely correspondences seem to stem from the ten languages of the Lezghian sub-group.²⁴

Let us now look at the evidence for Hurro-Urartian loan words in Armenian.²⁵ The evidence is small but

Following are some Hurro-Urartian words that others have suggested as corresponding with Armenian, yet which I reject.

1) Ur. ul- 'go', Arm. uli 'road'; rejected as root etymology;

¹⁹ This is the view expressed by Starostin in his study of the Ket language (1982), though it is not universally held. Talibov (1980: 170), in his comparative phonology of the Lezghian group, holds that Khinalugh is indeed part of the Lezghian group but is simply the most limited in correspondences, a view stated earlier by Kibrik et al. (1972: 5). Talibov explains this by referring to the territorial isolation of Khinalugh, and its absence of dialectal division. However, Khinalugh has developed vowel harmony, necessarily an influence from Azerbaijani (Magometov 1982). Azerbaijani is the language of culture for the Muslim Khinalugh people, and most are fluent in it (Comrie 1981: 5); indeed, the Khinalugh regard themselves as Azerbaijani, though they speak Khinalugh; this attitude has a parallel in the Christian Udi speakers of Oktemberi, Georgia, who consider themselves Georgians, though by chance their native tongue is Udi. On Archi, see Kibrik et al.

²⁰ To these three divisions of the Daghestani group other scholars, including Starostin (1982), add the so-called Nakh group, composed of three languages: Ingush, Chechen and Tsova-Tush, spoken to the northwest of the Daghestani languages. Their exact relationship to the Daghestani languages continues to be debated. Fähnrich (1984 and 1988) places the Nakh languages between Lak and the Dido sub-group. For the purpose of this paper, the Nakh group will be placed with the Daghestani languages, and together will be called Proto-East-Caucasian (PEC), conforming to the view of Diakonoff and Starostin (1986).

²¹ If more than one group existed at all!

²² For a discussion of the disagreement about these inscriptions, see Mnatsakanian 1970.

²³ A Caucasian Albanian alphabet exists, which now appears to be valid, in various manuscripts, among them one dated 1440 (Codex Matenadaranis [Yerevan] 7117, f. 142rv); a Caucasian Albanian calendar is known in manuscripts from at least the 1600s (Macler 1908: 132), and it has clear parallels with the Georgian calendar (Mač'avariani 1970: 6); and in Daskhurantsi's History of the Caucasian Albanians, written in Classical Armenian and dating perhaps in part from the tenth century but possibly also from the seventh, there are Caucasian Albanian words used within the Classical Armenian (Ghukasian 1968); a few very brief inscriptions exist, parts of which may be translated, and which stem from the twelfth and thirteenth centuries (Abrahamian 1964: 3); an overview of the reconstruction of Caucasian Albanian can be found in Greppin 1982. On Movses Daskhurantsi (or Movses Kaghankvatsi), see Etmekjian 1985: 232-34 and Dowsett 1961.

²⁴ However, this volume of evidence might exist only because there are so many Lezghian languages. There is also some cause to think (Desheriev 1963: 41-51) that the greatest phonetic similarity is now found between Hurro-Urartian and the three Nakh languages. But the examples Desheriev cites (1963: 45) exclude the Hurrian data and seem to follow, in addition, Marr's odd Kartvelian views.

²⁵ This field was earlier plowed, in a Western language, without reference to the Proto-East-Caucasian data and with different examples, by Diakonoff 1985. There he mentioned numerous Akkadian terms that, he argued, came into Armenian via Hurrian. Though the idea is interesting, and possibly true in some instances, we cannot unarguably show that the bulk of the Akkadian-Hurrian-Armenian words came from Hurrian. Indeed, in many instances, they might have passed into Armenian via Aramaic or Persian (Greppin 1989).

compelling. I will mention sixteen etymologies, eight between Hurrian and Armenian, and the same number between Urartian and Armenian.²⁶

HURRIAN ETYMOLOGIES

1. Arm. $agarak^{27}$ 'field'. Bible, 5th century (= Gk. ἀγρός). Hurr. $awari^{28}$ 'id.'

Ghapantsian 1948: 16.2) Hurr. pal-'beg', Arm. pal-at-em'id.'; rejected since the Hurrian word doesn't seem to exist (Laroche 1976 vacat); Ghapantsian 1951: 39.3) Hurr. puh(ugari) 'to change', Arm. $p^cox-em'id.$ '; rejected since it is an odd word to borrow when the inventory of loanwords is otherwise so precise; it has no specific function; Ghapantsian 1951: 39, Diakonoff 1985: 599. (See Diakonoff note D, below.) 4) Hurr. tuldi 'a type of plant', Arm. tult 'marsh-mallow, g. malva'; rejected since the word also doesn't seem to exist (Laroche 1976 vacat); Ghapantsian 1951: 33. (See Diakonoff note E, below.) 5) Hurr. šarri 'slave', Arm. caray 'id.'; rejected because of unresolved phonological problems; Ghapantsian 1951a, Diakonoff 1985: 598. (See Diakonoff note F. below.) 6) Hurr. alahhenni 'a keeper, male or female, of that which pertains to the master of the house', Arm. alaxin 'servant girl', alx 'household property'; rejected because the semantic value of Hurrian is not clear; cf. Laroche 1976. Diakonoff 1985: 598. (See Diakonoff note G, below.) 7) Hurr. tiwe 'word, thing', Arm. t'iw 'number'; rejected because of unresolved semantic difference; Diakonoff 1985: 599. One might also see Diakonoff 1961: 370 for some Hurro-Urartian proper names transferred to Armenian.

²⁶ Because we have parallels separately between Hurrian and Armenian, and Urartian and Armenian, it does not mean that Armenian derived its term from that one language; it only means that we might have lost the equivalent in the other language. It is also important to note that we previously had no decent competing etymologies for any of the proposed Hurro-Urartian/Armenian correspondences; they are surely not Indo-European. But by providing Proto-East-Caucasian cognates in most instances, we can show quite clearly the original Hurro-Urartian nature of these terms; they could not have been lost words from Akkadian, or from a Euphratic or Tigridic language, loaned into Armenian by some indirect process. One will also note that the loanwords exchanged between Hurro-Urartian and Armenian are usually for specific objects, a type of word most easily loaned. For further clarification, see Greppin 1991.

²⁷ This light r, rather than dark \dot{r} , is the standard Armenian reflex of Hurro-Urartian r.

²⁸ Pre-Armenian prevocalic *w- always passes to g: e.g., gini 'wine'. Note also a loan from Armenian to Grg. agaraki 'field.'

PEC * wVrV-, Rutul 'Iur' lawn', Lak ar(e) 'flat land', Avar 'uru' virgin soil, turf', Chechen, Ingush ārie' 'field, flat-lands'. 29

Arm. astem 'to reveal one's ancestry'. Tract,³⁰ 6th century, hapax.
 Hurr. asti 'woman, wife'.³¹
 PEC *\(\beta(V)dV\)-, Dargwa cade, Ingush s\(\bar{e}\), Chechen

stē 'female', Tsova-Tush p-st⁻ie³² 'woman, wife'.

Arm. art³³ 'field'. Bible, 5th century (= Gk. ἀγρός).
 Hurr. arde, Ur. ardi-ne 'town'.
 PEC *³VrdwV-, Chechen urd 'peasant's share of land', Ingush urd³⁴ 'district'.

Arm. xnjor 'apple'. Bible, 5th century (= Gk. μῆλον).
 Hurr. hinz-orə 'apple'.
 PEC 'lämćo-, Agul hač, Archi alnš, Lezghian ič, Dargwa 'inc, Khinalugh myč, Lak hiwč, Andi inči, Avar 'eč, Ingush x²ežorga³6 'apple'. 37

²⁹ A long \bar{a} can indeed be derived from loss of intervocalic -w-, but one would expect rounding from the *-w-. I must here thank Johanna Nichols of Berkeley for her most helpful observations on the Nakh languages.

³⁰ Timothy Aelurus, Refutation (Ejmiadzin, 1908), 283. I Dawt^cay ēr Koysn, ew Yovsēp^c, or ardar elov ew pahapan awrini, yiwrmē hayrenoy ew i tanē astēr iwr zKoysn, "The Virgin was from (the house) of David; and Joseph, who was just, and an observer of the law, reveals his Virgin to be from his ancestry and house."

³¹ The use of foreign terms, when referring to women as sex objects, is common. When the Armenians were still in eastern Anatolia, dialects of both Turkish and Kurdish used the Armenian term alfik 'young girl' in the same way the British used Arabic bint to refer disrespectfully to a young female. The Armenian use of a Hurrian term with implied carnal intentions is consistent with this use.

³² This segmentable p- is conservative, and serves sometimes as a gender marker with livestock terms.

³³ In spite of attempts to the contrary, Arm. *art* cannot be shown to be of Indo-European origin (Greppin 1987).

³⁴ This -rd- might be a simplification of a larger cluster since root final -rg and -rb seem not to occur, according to Johanna Nichols.

³⁵ For a semantic parallel, see Slavic *gord ω 'town,' ONorse garð-r 'yard, farm.'

³⁶ It is difficult to imagine that this Ingush term would be a loan from Armenian, rather than a direct continuant of Proto-East-Caucasian. It is most likely a compound of x^2ez -and -orga.

Note also Chechen and Ingush hamč 'plum'.

5. Arm. kut³⁸ 'grain'. Hexaemeron, 5th century. (= Gk. σπερμο-).

Hurr. kade 'barley'.

PEC *d²d²aįV-, Lezghian gad 'grain', Lak č:ati 'food made from flax seed'. Andi, Tindi ĉĉeţu-'(flax) seed'. ³⁹

6. Arm. maxr, in dialects marx, 'resinous conifer, pine'. Geoponica, 40 10th century.

Hurr. mahri 'fir, juniper'. 41

PEC marx-/q-.42 Chechen max 'aspen',43 Ingush

- mixa, 'id.', Avar maxx 'birch', Dargwa maq 'id.', Tabasaran murx 'id.', Budukh märx 'id.'
- Arm. salor, šlor⁴⁵ 'plum'. Galen,⁴⁶ 6th century (= Gk. κοκκυμηλέα).
 Hurr. > Akk. šallūru, šannūru 'plum, medlar'.
 PEC *swynē, Rutul syn, Tsakhur suna 'barberry', Lak sunuw 'pomegranate', Dido zin, Gunzib synu, Avar sani, Andi, Tindi sani 'barberry', Chechen stōm 'fruit'.⁴⁷
- Arm. tarma-jur 'spring-water'. 48 Vardan Geography. 49
 Hurr. tarmani 'source', Ur. tarmanlə 'id'. 50
 PEC vacat.

URARTIAN ETYMOLOGIES

Arm. arciw 'eagle'. 51 Bible, 5th century (= Gk. ἀετός).
 Ur. Arşibə the name of Menua's horse, presumably 'Eagle'. 52

³⁸ This -u- vowel could stem from an original *- \bar{o} -, which harmonizes better with the Hurrian form.

³⁹ But here also note Lyk. $\chi\theta\theta\alpha$, $\chi\alpha\delta(\alpha)$ 'a grain' (Ivanov 1978: 158–159). (See Diakonoff note H, below.)

⁴⁰ The edition of Venice, 1877: 132: ew ar jiwt ew kveni kam marxi p ayt słoc k "saw wood for the pitch of the larch and the pine."

⁴¹ Compare here also Per. markh 'resinous wood', North Kurdish markh 'juniper'. This word is also known in Akk. meḥru 'type of pine' (Royton 1967: 273). The Armenian word, because of its vocalism, is more likely from Hurrian, and indeed, Akkadian loans in Armenian are most dubious (Greppin 1989). Contrary to Diakonoff (1985: 599, n. 16), Armenian maxr cannot be from Iranian since there we have only the metathesized form marx, though metathesis of this sort is known in Iranian from early times; note Avestan čaxra-'wheel', NPer. čarx, 'id.'

⁴² The juniper is not common in the area to the west of the Caspian sea. Note should be made, though of the *Juniperus sabina* L. (a prostrate shrub usually not more than one meter tall), which is found in the Caucasus between 1500 and 3000 meters, and has some concentration in the mountainous area directly west of Baku; it does not appear at all in the Nakh area, nor south of Azerbaijan or eastern Armenia, nor near the Urmia Basin (Browicz 1982: 11 and plate 8). The *Juniperus communis* L., appears in subspecific form (*J. c. nana*), and, like the *J. sabina*, is shrub-like, low and dense (Browicz 1982: 8 and plate 2). These two Caucasian species of juniper are not highly observable plants, and might simply not have had a common name that has been continued to modern times.

⁴³ This etymology, phonetically most happy, has a semantic weakness. Where, in Indo-European, the juniper word took a different meaning in another Indo-European dialect, the word would still designate a berry-related tree (cf. Gk. ελάτη 'juniper' but Eng. elder; see Friedrich 1970: 48). One would reasonably expect the PEC *maxr to follow this semantic path or one close to it, yet it doesn't. Only if we consider *maxr to be a generic term for 'conifer' can we accept a passage, in a mountainous area, to or from aspen or birch.

⁴⁴ The original -r- may drop in the Nakh and the northern Daghestani languages in this environment, but is frequently retained in the Lezghian group.

⁴⁵ These are the only instances of a light *l* in these loanwords; dark *l* appears elsewhere.

⁴⁶ Greppin 1985: 59-60. (See Diakonoff note I, below.)

⁴⁷ And note also Sumerian šennur 'plum, medlar'.

⁴⁸ Until this Hurrian correspondence was known, Arm. tarmajur was most difficult to translate. Arm. tarma is the standard Armenian term for 'flock', but 'flock-water' meant nothing. Later, on the basis of tarma-haw 'starling'—literally 'flocking-bird'—tarma-jur was called 'starling-water', also most perplexing. The Hurrian correspondence has allowed us to find an appropriate meaning for this otherwise unusual term.

⁴⁹ From the Istanbul 1729 edition, p. 523: ew ayn ē tarmajurn ur or tanin, "and where is this spring-water which they give?"

⁵⁰ For semantic parallel, note Arm. albiwr 'spring, source'.

⁵¹ Etymologies relating Arm. arciw to Skt. rjipyá 'moving straight upward' (of a hawk) Av. ərəzifya- 'eagle', are doubtful for phonological reasons.

⁵² The calling of the horse of Artashes II as an 'Eagle', is found in Khorenatsi II.50 (Ghapantsian 1940: 153-54, Friedrich 1931: 146), and Thomson 1978: 192). The Urartian passage reads: inukani esinini ANŠU.KUR.RA Arşibini tini Menua pii aištibi 22 1 Ú, "Von der Quelle, die zur Arşibi-Pferde-Weide gehört, sind dem Menua durch Kauf 22 Maßeinheiten zugeteilt" (König 1957: 84).

PEC * wārççim V-, Agul març, Dargwa arçime, Lak barzu, Avar. ççum, Andi ççû i, Tsova-Tush arçib, 53 Chechen, Ingush ärzū 'eagle'. 54

10. Arm. xarxalem 'to destroy'. Bible, 5th century (= Gk. σαθρόω).

xarxarič^c 'one who destroys'. 5th century. Ur. <u>harhar-š</u>⁻⁵⁵ 'to destroy'. PEC vacat.

11. Arm. cai^{56} 'tree'. Bible, 5th century (= Gk. δένδρον).

Ur. sara 'tree, orchard, garden'. 57 PEC vacat.

12. Arm. cov 'sea'. 58 Bible, 5th century (= Gk. θά-λασσα).

Ur. şûə 'sea'. PEC vacat.⁵⁹

 Arm. ult 'camel'. Bible, 5th century (= Gk. κάμηλος).

Ur. *ulțu* 'camel'. PEC vacat.⁶⁰ pełem 'dig, excavate'. Bible, 5th century (= Gk. ἀνασκάπτω).

Ur. pîlə 'canal'. 61

PEC *³-̄-pīlV-, Avar, Andi, Tindi pula 'pipe', Dido pelu 'pipe, reed pipe'. Chechen āpari 'wooden mill gutter'. ⁶²

- Arm. san 'kettle'. Bible, 5th century (= Gk. λέβης)
 Ur. šani 'vessel, pot'.
 PEC vacat.
- 16. Arm. sur 'sword'. Bible, 5th century (= Gk. ξίφος). Ur. šurə 'sword'. PEC unclear.⁶³ Chechen, Ingush *ors- 'knife', Ingush šalta 'dagger', Chechen šälta 'id.', Tsova-Tush šalt 'id.'⁶⁴

All in all, this vocabulary is of the variety that most easily transfers itself by loan. Significantly, and in spite of a lexicon of decent size for Hurrian and Urartian, we have a rather small number of loan correspondences in evidence. Perhaps when we have a more precise form of Proto-Hurro-Urartian, reconstructed from Proto-East-Caucasian vocabulary (that is otherwise lacking in Hurro-Urartian), we will be able to generate Hurro-Urartian forms from the existing East Caucasian lexicon; through the reconstructed Hurro-Urartian words, we could then form more Armenian correspondences. Even for now, however, it seems difficult to deny that the Armenians had contact, at an early date, with a Hurro-Urartian people.

NOTES AND COMMENTS BY I. M. DIAKONOFF

A. p. 721. This route for the Hittites (and Palaians, and Luvians) seems highly improbable. Maikop-Trialeti should most probably be ascribed to the Georgians,

⁵³ The word appears as a loan, from Armenian, in Georgian and Mingrelian as *arcivi*, Svan *arciv* 'eagle'. There is, though, clear evidence for Daghestani loans in Svan (Fähnrich 1983). The Tsova-Tush term is an obvious loan from Georgian.

⁵⁴ These two Nakh terms show a regular development from Proto-East Caucasian.

⁵⁵ If the Armenian was derived from this Urartian form, with r- \tilde{s} , we would expect an Armenian dark \dot{r} . Perhaps Arm. xarxar- (rather than * $xarxa\dot{r}$) is from a suffixless Hurrian form instead, though that word has not survived. (See Diakonoff note J, below.)

⁵⁶ It is not clear why we have a dark r here. (See Diakonoff note K, below.)

⁵⁷ The word appears as a loan in Grg. c³aravi 'bushy', c³arapi 'small grove of willows'.

⁵⁸ There is no satisfactory etymology for this term, and Barić 1969 may be dismissed.

⁵⁹ Though few of the Daghestani or Nakh people lived near the Caspian Sea, or Lake Sevan, all should have known of the sea, and had a word for it.

The camel is not found in the mountainous area of Daghestan, and an early native Proto-East-Caucasian form would be surprising. It is almost sure, then, that the Urartian word is borrowed from elsewhere. It is probably related, somehow, to Akkadian udru/utru/utru (Diakonoff 1985: 600), Avestan uštrō 'camel', Skt. uṣtra- 'buffalo, camel'. Chechen stu and Ingush ust 'bull', would be possible Iranian loans.

⁶¹ For semantic parallel, cf. OFr. trenchier 'dig'. (See Diakonoff note L, below.)

⁶² Johanna Nichols informs me that there is no obvious segmentability for the Chechen form, by which to explain the initial *a*-.

⁶³ There are a multitude of Daghestani words meaning 'sword' which have a shape approximating *tur*. Yet I know of no way to join a Daghestani *t* to a Hurro-Urartian *š*, and an Arm. *s*. (See Diakonoff note M, below.)

⁶⁴ Actually, it is perhaps unlikely that Hurro-Urartian would share a common form for 'sword' with Proto-East-Caucasian since the sword is a late bronze age invention, and would not have existed at the time of the separation of Hurro-Urartian from Proto-East Caucasian.

who did not belong to the North Caucasian linguistic phylum (the latter not even belonging to the Nostratic superphylum, while Georgian is obviously Nostratic with many links to Indo-European). This push to southward might also be ascribed to the Urartians, a people akin to the Hurrians but decidedly different from them.

B. p. 721. The Colchidic culture, since it is apparently quite different from the central Transcaucasian situation, may be connected with the northwest Caucasians, including the Adyghe (Circasso-Kabardians), the Ubykhs (who emigrated to Turkey), the little nation of the Abaza, and of course the Abkhaz. Since there exists a theory that the Kashka and the Hatti in northeast Anatolia also belonged to the same linguistic group, it would be worthwhile to determine if there are any archaeological links.

C. p. 722. Here Greppin seems to accept the Gam-krelidze-Ivanov idea, that the Armenians, though Indo-Europeans, were autochthonous in eastern Anatolia. Since (even if we discount such obscure Balkanic languages as Phrygian or Thracian) Armenian is the nearest linguistic cognate of Greek, and has only a few traits in common with Indo-Iranian (of course, the innumerable medieval borrowings do not count), that the Armenian language is autochthonous in eastern Anatolia is extremely implausible.

It is not the people or language Armenian which is first mentioned in the sixth century B.C., but a country or satrapy Armena (Persian), or Urashtu (Babylonian, in the Besitun inscription). The origin of the toponym is probably the Hurrian country-name Arme, ethonymplural, Armina. The Greek Armenioi is obviously from the Persian office language: the nation itself never used the term as an autonym, and in early Greek inscriptions the Armenians were apparently called the Melittēnioi. Under this or any other name the Armenians might have lived (and probably did live) from about the late twelfth century B.C. in eastern Anatolia.

Greppin claims, "The Armenians cannot be a people who resulted from an Indo-European overlay upon a Hurro-Uratian people." Why not? All the Hurrian borrowings in Armenian refer to Anatolian (= Hurrian) social conditions of the second millennium B.C. and to Anatolian flora and fauna, which shows that the Armenian language borrowed from Hurro-Urartian, and not vice versa. Besides, the terms in question are Proto-East-Caucasian in a Hurro-Urartian modification and could hardly be borrowed to the entire Hurrian linguistic area from the then limited Armenian habitat. Also, some of the terms in question are attested in

Akkadian, which could have got them only from eastern Anatolia or the Zagros: alahhinnu, lahīnatu, lahinā is a case in point.

I think I have suggested a plausible explanation for the appearance of the proto-Armenian people in eastern Anatolia in my The Prehistory of the Armenian People (New York, 1984), a book J. A. C. Greppin himself edited; the relatively few references to it strike me as somewhat strange. Further, I think that since Sardui II liberated from military services the elite group shurele, that is, the Urartians proper (cf. "the men of Hurri" in Mitanni, "the men of Hattusa" in the Hittite kingdom, and note the expression "king of the shurele" in the Urartian royal title), the main obligation of military service fell upon the hurādele 'warriors' = LUA.SI, from Hittite A.SI-ash, misread from A.SI.RUM 'captured'; i.e., the main conquered population of the Urartian empire; it would, since the 11-10 centuries B.C., probably be the proto-Armenians, a part of the northern movement parallel to the 'Peoples of the Sea' in the Mediterranean—the Musa, or with the Armenian plural, Mus-k^ca: the Moesi in the Balkans, the Mysai in the Troad, and Musa and Muska in the Phrygian inscriptions, the Mushki for Phrygia in Assyrian and Urartian sources. However, the eastern group of the Mushki (= the Musk^ca), who passed over the Euphrates in 1165 B.C. under Tiglath Piliser I, and who are attested in about the region of medieval Ałgnik (= Arzanene), were, no doubt, the proto-Armenians.

D. p. 724. Hurr. puh(ugari) 'loan (noun)', Arm. $p^{c}oxem$ 'to loan'. The reason for the rejection is curious: 'loan' is actually one of the obvious words to borrow when two ethnic entities meet for barter. Cf. English loan from Old Norse; borrow from Old Saxon, and grant from Middle French.

E. p. 724. Hurr. tuldi (with Akkadian flexion tuldû) 'a sort of plant', is rejected since the word does not exist in Laroche 1976. The rejection may be valid, but one must remember that Laroche 1976 is by no means "Webster's New International Dictionary for Hurrian Unabridged." It is to be found in W. von Soden Ahw, s.v. tuldu.

F. p. 724. Hurr. šarri/sarre, sarrae/, Arm. caray 'id.' J. A. C. Greppin is unhappy because of the reflex of Hurr. š, Arm. c. But above, he himself pointed out that I was able to show that Hurro-Urartian had a number of affricates not noted in writing as such. Thus Hurr. š /s/ for Urartian š/s/c is all right. Arm. r for Hurr. -rris, of course, also all right.

- G. p. 724. Hurr. alla(e)henni 'a keeper, male or female, of what pertains to the master of the house'. Analysis: Hurr. allar/i 'lady (of the house), queen'; -ahhe-possessive-relative suffix, -enni/inni adjective suffix. The Armenian alaxin (n.b. l = -ll-!) is a one-to-one reflex. The fact that the word was no longer used for a male keeper of household goods is, of course, due to the social evolution of the Armenian people (from extended family dwelling or tower to one-family, one-storey adobe house!); Arm. alx has no apparent pair in Hurrian but it is a precise reflex of the Hurr. *all(ae)-hhe which is a trivial possessive relative adjective form from allae/i 'lady of the house'.
- **H.** p. 725. Hurr. kut 'grain' should not be connected with PEC $dzdz\bar{z}t$. No PEC forms contain a u (or \bar{o}).

- I. p. 725. May not the l instead of l, or better n/n, be explained as a partial assimilation *-annur > -alur?
- J. p. 726. The original Urartian form is *harhar* 'to be destroyed'; -in is a morphological affix.
- K. p. 726. Cf. Hurr. carcar- with a similar sense. But Urart. cara is only 'garden'.
- L. p. 726. Arm. *pełem* should be rejected on phonological grounds.
- M. p. 726. The equation of Arm. sur with Urart. šuri is somewhat insecure because the Hurrian form is šauri, and hence the Urartian should be read /sori/.

BIBLIOGRAPHY

- Abrahamian, Ashot G. (Абрамян, Ашот Г.). 1964. Дешифровка надписей Кавказских Агван. Yerevan: Mitk.
- Alekseev, Mikhail Ye. (Алексеев, Михаил Е.). 1988. Сравтельно-историческая морфология Авар-Андийских языков. Moscow: Nauka.
- Barić, H. 1969. "Eine armenisch-thrakische Wortparallele." Архив за Арбанаску старину, језик и етнологију, књига 4, св. 1. Х. Барић (уред). Prishtinë: Instituti Albanologik i Prishtinës
- Bork, F. 1909. "Die Mittanisprache." Mitteilungen der Vorderasiatischen geselleschaft. Vol. 14.
- Braun and Klimov (браун, И., Георгии А. Климов). 1954. Об историческом взаймоотношении урартского и иберийско-кавкавских языков: Тезисы доклада. Тбилиси. (Non vidi.)
- Browicz, Kazimierz. 1982. Chorology of Trees and Shrubs in South-West Asia and Adjacent Regions. Vol. 1. Warsaw, Poznan: Polish Scientific Publishers.
- Burney, Charles, 1978. From Village to Empire: An Introduction to Near Eastern Archaeology. Oxford: Phaidon.
- Burney, Charles, and David Marshall Lang. 1971. The Peoples of the Hills: Ancient Ararat and Caucasus. London: Weidenfeld and Nicolson.
- Comrie, Bernard. 1981. *The Languages of the Soviet Union*. Cambridge: Cambridge University Press.
- Desheriev, Yu. (Дешериев, Юныс Д.). 1963. Сравнительноисторическая грамматика нахских языков и проблемы происхождения и исторического развития горских кавказских народов. Chechen-Nakh Institute for Scholarly

- Research in History, Languages and Literature. Groznij: Chechen-Ingush Book Publishers.
- Diakonoff, Igor M. 1958. "Материалы к фонетике урартского языка." In *Вопросы грамматики и истории восточных языков*. Pp. 27–53. Moscow: Press of the Soviet Academy of Sciences.
- _____. 1961. "Сравительно-грамматический обзор хурритского и урартского языков." In *Переднеазиатский сборник: Вопросы хеттологий и хурритологий.* Pp. 369–423. Moscow: Eastern Literature Press.
- _____. 1967. Языки древней передней азий. Moscow: Nauka.
- . 1971. Hurrisch und Urartäisch. Munich: R. Kitzinger.
- . 1980. "Towards the Pronunciation of a Dead Language: Akkadian." Assyrological Miscellanies I. Pp. 7–12. Copenhagen: Institute of Assyriology.
- _____. 1984. The Prehistory of the Armenian People. Delmar, N.Y.: Caravan Books.
- ______. 1985. "Hurro-Urartian Borrowings in Old Armenian."

 Journal of the American Oriental Society 105:597-603.
- Diakonoff, Igor M., and Sergei A. Starostin. 1986. *Hurro-Urartian as an Eastern Caucasian Language*. Munich: R. Kitzinger.
- Djahukian G. B. (Джаукян, Геворк Б.). 1967. Взаймоотношение индоевропейских хурритско-урартских и кавказских языков. Yerevan: Press of the Armenian Academy of Sciences.
- Dowsett, Charles J. F. 1961. *The History of the Caucasian Albanians*. London: Oxford University Press.

- Etmekjian, James. 1985 (1988). History of Armenian Literature: Fifth to Thirteenth Centuries. New York: St. Vartan Press.
- Fähnrich, Heinz. 1983. "Nachisch-daghestanische Lehnwörter in der swanischen Sprache." *Georgica* 6:22–24.
- . 1984. "Zur Stellung des Nachischen in der nachishdaghestanischen Sprachfamilie." Sprachen Kaukasiens, ed. Bernd Wilhelmi, Heinz Fähnrich. Jena: Wissenschaftliche Beiträge der Friedrich-Schiller-Universität. Pp. 16–26.
- . 1988. "Zu den nachisch-daghestanischen Lehnwörten im Swanischen." Jena: Wissenschaftliche Beiträge der Friedrich-Schiller-Üniversität. Pp. 117–21.
- Friedrich, Johannes. 1931. "Beiträge zu Grammatik und Lexicon des Chaldischen." 2. Teil. Caucasica 8:114–50.
- ______. 1933. Einführung ins Urartäische: Grammatischer Abriss und ausgewählte Texte mit sprachlichen Erläuterungen. Mitteilungen der vorderasiatisch aegyptischen Gesellschaft. (E.V.) 37. Band, 3. Heft. Leipzig, J. C. Hinrichs'sche Buchhandlung.
- _____. 1939. Kleine beiträge zur churritischen Grammatik.

 Mitteilungen der vorderasiatisch-aegyptischen Gesellschaft
 (E.V.). 42. Band, 2. Heft. Leipzig: J. C. Hinrichs.
- Friedrich, Paul. 1970. Proto-Indo-European Trees. Chicago: University of Chicago Press.
- Ghapantsian, Grigor A. (Капанцян, Григор А.; Łap'anc'yan, G. A.). 1940. *Urartui patmut'iwn*. Yerevan: Yerevan State University Press.
- _____. 1948. Хайаса колыбел армян. Yerevan: Press of the Armenian Academy of Sciences. (=1956: 5-259).
- ______. 1951. "Хурритские слова армянского языка." Teghekagir 5:35-50 (reprinted in Archiv Orientální 19 [1951]: 579-605).
- ______. 1951a. "К установлению хурритского термина šarr-/zarr- в значении 'слуга, раб', по данным армянского и грузинского языков." Teghekagir 3:21–28 (reprinted in Archiv Orientální 19 [1951]: 321–28 [=1975: 306–16]).
- ______. 1956. Историко-лингвистические работы к начальной истории Армян. Древняя малая Азия. Yerevan: Press of the Armenian Academy of Sciences.
- _____. 1975. *Историко-лингвистические работы* 11. Yerevan: Press of the Armenian Academy of Sciences.
- Ghukasian, Voroshil (Гукасян, Ворошил). 1968. Удинские слова в 'Истории Албан.' Baku: Press of the Azerbaijani Academy of Sciences.
- Greppin, John A. C. 1978. Classical and Middle Armenian Bird Names: A Linguistic, Taxonomic and Mythological Study. Delmar, N.Y.: Caravan Books.
- _____. 1982. "The Language of the Caucasian Albanians." Folia Slavica 5:162-80.
- _____. 1985. Bark' Galianosi: The Greek-Armenian Dictionary to Galen. Delmar, N.Y.: Caravan Books.

- _____. 1987. "Armenian art 'field', and Arm. acem 'drive'."

 Journal of Indo-European Studies 15:393-96.
- ______. 1989. "'Akkadian' Load Words in Armenian." Annual of Armenian Linguistics 10:74-84.
- _____. 1991. "The Survival of Ancient Anatolian and Mesopotamian Vocabulary until the Present." *Journal of Near East Studies* 50:203-7.
- Haas, Volkert. 1975. "Völker und Sprachen des alten vorderen Orients: Ein Überblick." *Das hurritologische Archiv*, ed. Volkert Haas and Hans-Jochen Thiel. Berlin: Altorientalisches Seminar der Freien Universität. Pp. 9–15.
- Haas, Volkert, and Hans-Jochen Thiel. 1979. "Ein Beiträge zum hurritischen Wörterbuch." *Ugarit-Forschungen* 11:337–52.
- Ivanov. V. V. (Иванов, Вяч. Вс.). 1978. "Разыскания в области анатолийского языкознания, 3–8." Этимология 1976: 153–62.
- _____. 1985. "Об отношение хаттского языка к северозападнокавказским." In *Древняя Анатолия*. Pp. 26–59. Moscow: Nauka.
- Japaridze, Otar (Dshaparidse, Otar). 1978. "Über die ethnische Zugehörigkeit der Träger der Kura-Arax-Kultur." Georgica 2:15-17.
- Khachikian, Margarita L. (Хачикян, Маргарита Л.). 1985. Хурритский и урартский языки. Yerevan: Press of the Armenian Academy of Sciences.
- Кіbгік, А. Е. *et al.* (Кибрик, А. Е., С. В. Кодзасов, И. П. Оловянникова). 1972. *Фрагменты грамматики хиналугского языка.* Moscow: Moscow University Press.
- _____. 1977. Арчинский язык: Тексты и словари. Moscow: Moscow University Press.
- Kluge, Theodor. 1907. "Studien zur vergleichenden Sprachwissenschaft der kaukasischen Sprachen: Die Sprache der urartäischen Inschriften und ihre Stellung in kaukasischen Sprachenkreise." Mitteilungen der Vorderasiatischen Gesellschaft 12:5:176–221.
- König, Friedrich Wilhelm. 1957. Handbuch der chaldischen Inschriften. Archiv für Orientforschung, ed. Ernst Weider. Beiheft 8. Two volumes. Graz: Im Selbstverlage des Herausgebers.
- Laroche, Emmanuel. 1976. Glossaire de la langue hourrite = Revue Hittite et Asianique 34-35 (1976-1977).
- Mač'avariani, Muxrami. 1972. Mtiebi saqmač'vilo k'alendari. Tbilisi: Press of the Georgian Academy of Sciences.
- Macler, Frédéric. 1907. Catalogue des manuscrits arméniens et géorgiens de la Bibliothèque Nationale. Paris: Imprimerie Nationale.
- Мадотеtov, А. А. (Магометов, А. А.). 1982. "Влияние азербайджанского языка на вокализм хиналугского языка." Ежегодник иберийско-кавказского языкознания 9:177— 89.

- Магг, Nicholas Ya. (Марр, Николай Я.). 1921. "Надпись Русы II изъ Маку." Записки Восточнаго Отделенія: Русскаго археологическаго общества, 25 (1917–1920): 1–54.
- Melikishvili, G. A. (Melikišvili Georgi A., Melikischwili Giorgi A.). 1971. Die Urartäische Sprache. Rome: Biblical Institute Press.
- . 1980. "Urartu und das südliche Transkaukasien." Georgica 3:35-36.
- Meshchaninov, Ivan I. (Мешанинов, И. И.). 1927. Халдоведение: История древнего Вана. Baku: Publications of the Society for the Investigation and Study of Azerbaijan.
 ______. 1962. Грамматический строй урартского языка.
- ______. 1962. Грамматический строй урартского языка. Moscow: Nauka.
- Mnatsakanian, A. Sh. (Mnac'akanyan, A. Š.). 1970. "Aluanic' grer ew oč' t'e 'Alvanagir'." Lraber 10:66–72.
- Neu, Erich. 1988. Das Hurritische: Eine altorientalische Sprache in neuen Licht. Mainz: Akademie der Wissenschaften und der Literatur.
- Royton, M.B. 1967. "The Woodlands of Ancient Western Asia." Journal of Near East Studies 26:261-77.
- Salvini, Miroslavo. 1975. "Die sprachlichen und historischen Beziehungen zwischen Hurrern und Urart äern." Das hurritologische Archiv, ed. Volkert Haas and Hans-Jochen Thiel. Berlin: Altorientalisches Seminar der Freien Universität. Pp. 44–48.

- Speiser, Ephraim A. 1941. *Introduction to Hurrian*. New Haven, Conn.: American Schools of Oriental Research.
- Starostin, Sergei A. (Старостин, Сергей А.). 1982. "Праенисейская реконструкция и внешние связи енисейских языков." *Кетский сборник: антропология, этнография,* мифология, лингвистика. Leningrad: Nauka.
- Talibov, Bukar B. (Талибов, Букар Б.). 1980. Сравительная фонетика лезгинских языков. Moscow: Nauka.
- Thiel, Hans-Jochen. 1975. "Zu den genealogischen Beziehungen des Hurrischen." Das hurritologische Archiv, ed. Volkert Haas and Hans-Jochen Thiel. Berlin: Altorientalisches Seminar der Freien Universität. Pp. 48–57.
- Thomson, Robert W. 1978. Moses Khorenats'i: History of the Armenians. Cambridge, Mass.: Harvard University Press.
- Tsereteli, G. V. (Церетели, Георгий В.). 1953. "К вопросу об отношении урартского языка к иберийско-кавказской группе языков." IV (X) научная сессия. Института языкознания. Посвященная третьей годовшине выхода в свет гениального труда И. В. Сталина "Марксизм и вопросы языкознания." План работы и тезисы докладов. Tbilisi: Press of the Georgian Academy of Sciences.
- Wilhelm, Gernot. 1975. "Zur Geschichte der hurrischen Völker."

 Das hurritilogische Archiv, ed. Volkert Haas and HansJochen Thiel. Berlin: Altorientalishes Seminar der Freien
 Universität. Pp. 38–43.
- _____. 1989. The Hurrians. Warminster: Aris and Phillips.