



Universiteit
Leiden

The Netherlands

Prehistoric loanwords in Armenian: Hurro-Urartian, Kartvelian, and the unclassified substrate

Nielsen, R.T.

Citation

Nielsen, R. T. (2023, November 7). *Prehistoric loanwords in Armenian: Hurro-Urartian, Kartvelian, and the unclassified substrate*. Retrieved from <https://hdl.handle.net/1887/3656151>

Version: Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/3656151>

Note: To cite this publication please use the final published version (if applicable).

Prehistoric loanwords in Armenian:
Hurro-Urartian, Kartvelian, and the unclassified substrate

Prehistoric loanwords in Armenian:
Hurro-Urartian, Kartvelian, and the unclassified substrate

Rasmus Thorsø
PhD dissertation
Leiden University, The Netherlands

Typeset with Brill using X_YT_YL_AX.
Printed by Print Service Ede

Copyright © 2023 Rasmus Thorsø. All rights reserved.

This research was funded by the European Research Council under the European Union's Horizon 2020 research and innovation programme (grant agreement № 716732).

Prehistoric loanwords in Armenian: Hurro-Urartian, Kartvelian, and the unclassified substrate

PROEFSCHRIFT

ter verkrijging van
de graad van doctor aan de Universiteit Leiden,
op gezag van de rector magnificus prof.dr.ir. H. Bijl,
volgens besluit van het college voor promoties
te verdedigen op dinsdag 7 november 2023
klokke 11:15 uur

door

Rasmus Thorsø Nielsen
geboren te Augustenborg, Denemarken
in 1990

Promotores: Prof.dr. G.J. Kroonen
Prof.dr. A.M. Lubotsky

Promotiecommissie: Prof.dr. D. Kölligan (Universität Würzburg)
Dr. H.K. Martirosyan
Prof.dr. B.A. Olsen (Københavns Universitet)
Prof.dr. M. Peyrot

Acknowledgements

This dissertation concludes five eventful years. Although I feel confident about the conclusions presented here, the safest conclusion I can make is that I would not have made it this far without all those colleagues, friends, and family who supported me along the way. My sincerest gratitude goes to my supervisors, Guus Kroonen and Sasha Lubotsky, who not only did their best to keep me on track, but also empowered me when my faith wavered. This dissertation would not have been realized without the scientific umbrella of the research project EUROLITHIC, financed by the European Research Council. I am deeply indebted to my fellow project members, Anthony Jakob, Andrew Wigman, Cid Swanenvleugel, Paulus van Sluis, Axel Palmér, and Yvonne van Amerongen. My research and my stay in Leiden would not have been the same without their kindness, wit, good ideas and bad jokes.

I was incredibly fortunate to work at Leiden University during a golden age for Indo-European linguistics. I spent every day at the office and about Leiden being in touch with so many gifted and friendly colleagues, who were never shy to help, chat or just have a good time. I thank the ‘imperishable’ quiz team, fellow alcohol and/or tobacco enjoyers: Kate Bellamy, Louise Friis, Stefan Norbruis, and Aljoša Šorgo. I thank Chams Bernard, not least for his lucid Persian poetry classes, and I thank the rest of the regular lunch bunch: Simon Poulsen, Niels Schoubben, Abel Warries, and Jesse Wichers Scheur. Xander Vertegaal played a big part in kindly introducing me to the campus in my first year and helping me with intricacies of \LaTeX . Thanks to all other LUCL staff, PhD’s, and faculty members for good colleagueship.

Many other people kindly provided assistance and input, which helped improved this work tremendously. Apart from those already

mentioned, my sincerest thanks go to Lucien van Beek, Jost Gippert, Frits Kortlandt, Kristian Kristiansen, Hrach Martirosyan, Vahagn Petrosyan, Tijmen Pronk, Peter Schrijver, Zsolt Simon, and Thomas Wier for various kinds of help and correspondences, in person and in writing. I am grateful to Ben Fortson and Kelly Askew for warmly welcoming my wife and me to Ann Arbor upon our relocation in late 2022. The Center for Armenian Studies at the University of Michigan kindly provided me with access to library resources. I thank David Reich and his colleagues at Harvard University for a brief, but memorable research stay in March 2023. Finally, I thank all of my formidable teachers at the University of Copenhagen for leading me into the wonderful world of Armenian and Indo-European historical linguistics.

I am most grateful to Julie, my wife and guiding **h₂stér*. Thank you for shining bright even when skies are overcast. Many, many more people have undoubtedly left their indirect mark on this work. Those I have not mentioned by name are not forgotten.

Շնորհակալութիւն:

Contents

Acknowledgements	i
Contents	iii
Abbreviations and symbols	vii
Languages and sources	vii
Grammar	x
Other	x
Symbols	xi
List of figures	xiii
List of tables	xv
1 Introduction	1
1.1 Aim and method of this work	5
2 Hurro-Urartian	7
2.1 Hurro-Urartian loanwords in Armenian	10
2.1.1 Probable loanwords	11
2.1.2 Uncertain and conjectural loanwords	14
2.1.3 Rejected proposals	20
2.2 Results	30
2.3 Armenian loanwords in Urartian?	31
2.4 Analysis	33
2.4.1 The chronology of the sound shift	34
2.4.2 Semantics	36
2.4.3 Context	37

3	Kartvelian	39
3.1	Phonology	41
3.2	Indo-European, Armenian, and Kartvelian	45
3.3	Kartvelian loanwords in Armenian	49
3.3.1	Zan loanwords	50
3.3.2	Zan or Georgian loanwords	56
3.3.3	Rejected proposals	61
3.3.4	Results	63
3.3.5	Analysis	63
3.4	Archaic Armenian loanwords in Kartvelian	66
3.4.1	Georgian	68
3.4.2	Georgian-Zan	76
3.4.3	Proto-Kartvelian?	78
3.4.4	Rejected proposals	81
3.4.5	Analysis	84
3.5	Loanwords with unknown trajectory	85
3.6	Shared loanwords from a third source	86
4	Shared substrate	89
4.1	Methodology	90
4.2	Sources	92
4.3	Structure of the entries	93
4.4	Material	94
4.5	Results	220
4.5.1	Accepted substrate words	220
4.5.2	Uncertain substrate words	220
4.5.3	Rejected substrate words	220
4.6	Analysis	223
4.6.1	*ou ∞ *o/u	223
4.6.2	*D ^h ∞ *D	224
4.6.3	Tenues aspiratae	224
4.6.4	*VsC ∞ *VC	225
4.6.5	Relative chronology	225
4.6.6	Root nouns	225
4.6.7	Semantics	226
4.6.8	Geographical distribution	228
5	Evaluation and outlook	231
	Bibliography	237

Bibliographical abbreviations	269
Indices	273
Samenvatting	279
Curriculum vitae	285

Abbreviations and symbols

Languages and sources

Ab.	Abkhaz
Adg.	Adyge
Aeol.	Aeolic Greek
Akk.	Akkadian
Alb.	Albanian (G = Gheg)
Arab.	Arabic
Aram.	(Common) Aramaic
Arm.	Armenian
Ass.	Assyrian
Att.	Attic Greek
Av.	Avestan
Bal.	Balochi
Bsq.	Basque
Ch.	Chechen
Chg.	Chirag
ClArm.	Classical Armenian
Cret.	Cretan Greek
Cypr.	Cypriot Greek
Cz.	Czech
Da.	Danish
Du.	Dutch
E	English
Fal.	Faliscan
Far.	Faroese
Fi.	Finnish
Fr.	French

G	German
Gaul.	Gaulish
Ge.	Georgian
Gk.	Greek
Gmc.	Germanic
Go.	Gothic
GZ	Georgian-Zan
Hat.	Hattic
Heb.	Hebrew
Hit.	Hittite
HLuw.	Hieroglyphic Luwian
Hom.	Homeric Greek
Hsch.	Hesychius
HU	Hurro-Urartian
Hu.	Hurrian
Hung.	Hungarian
IE	Indo-European
IIr.	Indo-Iranian
Ing.	Ingush
Ion.	Ionic Greek
Ir.	Iranian
It.	Italic
Kab.	Kabardian
Khin.	Khinalug
Khot.	Khotanese
Khwar.	Khwarezmian
Lat.	Latin
Lezg.	Lezgian
Li.	Lithuanian
Ltv.	Latvian
Luw.	Luwian
Lyd.	Lydian
Mac.	(Old) Macedonian
MEA	Modern Eastern Armenian
Meg.	Megrelian
MHG	Middle High German
MidA	Middle Armenian
MIr.	Middle Irish
MLG	Middle Low German
MP	Middle Persian

Mun.	Munji
MWe.	Middle Welsh
Myc.	Mycenaean Greek
ND	Nakh-Daghestanian (East Caucasian)
NP	New Persian
Nw.	Norwegian
OCS	Old Church Slavonic
OE	Old English
OFr.	Old French
OGe.	Old Georgian
OHG	Old High German
OIr.	Old Irish
ON	Old Norse
OP	Old Persian
OPr.	Old Prussian
ORu.	Old Russian
OS	Old Saxon
Oss.	Ossetic (D = Digor, I = Iron)
PA	Proto-Armenian
PAlb.	(Pre-)Proto-Albanian
Pash.	Pashto
PC	Proto-Celtic
PD	Proto-Daghestanian
PGm.	Proto-Germanic
Phr.	Phrygian
PIE	Proto-Indo-European
PIIr.	Proto-Indo-Iranian
PIr.	Proto-Iranian
PIt.	Proto-Italic
PK	Proto-Kartvelian
PND	Proto-Nakh-Daghestanian
Pol.	Polish
PSl.	Proto-Slavic
Pth.	Parthian
PU	Proto-Uralic
PWC	Proto-West Caucasian
PZ	Proto-Zan
Rom.	Romanian
Ru.	Russian
RuCS	Russian Church Slavonic

SCr.	Serbo-Croatian
Skt.	Sanskrit
Sln.	Slovenian
Sogd.	Sogdian
Sum.	Sumerian
Sv.	Svan
Sw.	Swedish
Syr.	Classical Syriac
Tab.	Tabasaran
ToA	Tocharian A
ToB	Tocharian B
Ub.	Ubykh
Umb.	Umbrian
Ur.	Urartian
WC	West Caucasian
We.	Welsh
YAv.	Young Avestan

Grammar

ABL	ablative
ACC	accusative
ADJ	adjective
AOR	aurist
DAT	dative
DEF	definite
GEN	genitive
LOC	locative
NOM	nominative
OBL	oblique
PL	plural
PTC	participle
SG	singular
TANT	tantum (only)

Other

BCE	before common era
c.	century

CE	common era
cf.	compare
dial.	dialectal
ed(s).	editor(s)
e.g.	for example
et al.	and others
etc.	et cetera
fn.	footnote
i.a.	among others
i.e.	that is
lex.	lexicographical hapax
lit.	literal(ly)
p.c.	personal communication
PN	personal name
s.v.	under the lemma
TN	toponym
var(s).	variant(s)
vel sim.	or similar, or the like
viz.	namely
vs.	versus, against

Symbols

<	developed by sound change from
>	developed by sound change to
⇐	derived (analogically) from
⇒	derived (analogically) to
←	borrowed from
→	loaned to
*...	reconstructed form or quasi-form
...*	reconstructed form of attested lexeme
**...	counterfactual form
◦	omitted part of a form
/	morphological alternation
∞	irregular alternation
√	lexical root
-	morphological boundary
#	word boundary

Ø	zero
V	vowel
C	consonant
P	labial stop
T	dental stop
K	(palato)velar stop
D	voiced stop
R	resonant
N	nasal
H	laryngeal
S	alveolar sibilant/affricate
Š	palatal sibilant/affricate

List of figures

3.1 Phylogeny of the Kartvelian languages 40

List of tables

2.1	Hurro-Urartian loanwords in Armenian	30
2.2	Uncertain Hurro-Urartian loanwords in Armenian . . .	31
3.1	Correspondences of Kartvelian sibilants and affricates .	42
3.2	Stops and affricates in Classical Armenian and Old Georgian	49
3.3	Kartvelian loanwords in Armenian	64
3.4	Armenian-Kartvelian mutual loanwords with unknown direction	86
3.5	Armenian-Kartvelian shared borrowings from a third source	87
4.1	Accepted and new proposals of substrate words	221
4.2	Geographical overlap of substrate words	229

