PRE-MASHTOTSIAN SCRIPTDECIPHERED: INSIGHTS FROM AN ANCIENT COLONY

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Abstract: Mashtots' invention of the modern Armenian alphabet in the fourth century CE is the earliest currently recognized form of Armenian alphabet. This study looked at the research question: Is it possible to reconstruct the alphabet that laid the foundation for the Mashtotsian script? Candidate rock engravings and pictograms of Greater Armenia from the fifth to the second millennia BCE cover various communication eras and scripts, and a lack of multilingual inscriptions makes the task difficult, but not impossible. Verbal desinential evidence connects mid-Holocene Greater Armenia and Southeast Asia including Australia via a linguistic substratum. Using this knowledge, an ocher painting on a cave wall in Australia became the focus, with what appears to be a form of Armenian script. Furthermore, the dot number system used in the painting corresponds to the deeply rooted and unique Biainian number system employed in Greater Armenia. Hypothesizing from the Armenian religious artistic style that a script above the pictographic subject's head is his name, the letters could be reconstructed. From those letters, it was hypothesized there was late vocalic development, and the original consonants were 90° right rotated compared to the modern forms. On this basis, it was possible to decipher the ancient script on a one of a kind menhir found in Shamiram. In total, eight of the original 22 letters were reconstructed, enough to give a feel for pre-Mashtotsian historical phonology, which caused the original alphabet to fall into disuse.

Key Words: *Armenian studies,proto-Armenian, Anatolian languages, Pama-Nyungan, Sydney Language*

Introduction

This article investigates the research question, is it possible to reconstruct the alphabet on which the modern Armenian one was based? It aims to adopt an evidence-driven grounded

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Շեյն Ռ. Բեքհեմ – բանասիրական գիտությունների թեկնածու, բիզնեսի, կրթության, իրավունքի և արվեստի ֆակուլտետի հետազոտող, Հարավային Քվինսլենդի համալսարան, Տուվումբա, 4350, Ավստրալիա

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theory perspective (Timmermans & Tavory 2012), rather than assuming the Armenian language branch developed in isolation (Maurer 1995: 690). Indeed, evidence is coalescing in favor of a mid-Holocene Southeast Asian linguistic substratum ('SEALS'), which migratory *sprachbund* would be expected to co-diffuse cultural information. Post(2015: 214) conceives of spheres of influence such as an India-Mainland Southeast Asia 'contact corridor', explained in terms of diffusional or 'areal-historical' spread. Potential super-phylogeny is now admitted between Kradai and Austronesian languages (Ostapirat 2005). Furthermore, Michaud's (2012: 14) linguistic 'substratum' crosses Sino-Tibetan, Tai-Kadai, Austroasiatic and Austronesian families. On the evolution of the Sino-Tibetan phylum, Blench& Post (2019, p. 89) state, "some spoke early Sino-Tibetan languages, other unknown languages present primarily as substrates" linked to what is now India. Schuessler (2007: 49) employs Old Khmer 'allofams' to reconstruct Old Chinese on the assumption of a shared substrate with the Austroasiatic.

Southeast Asian Language Substratum (SEALS)

A relatively recent superstrate of typological differences traverses Asian language families, obscuring the substrate. Consistently, agglutinative Old Khmer (600-800 CE) became analytic modern Khmer (Kamchana 1978: 183-200), synthetic Old Armenian ('OA' aka Old Armenian aka Grabar; 5th to 7th century CE) became mostly analytic modern Armenian('MA'; Haroutyunian 2011: 8), atonal Old Chinese (8th to 3rd century BCE) became four-tone modern Mandarin(Baxter & Sagart 2014) and three-tone Old Thai(1300-1600 CE)developed into six-tone modern Thai (Pittayaporn 2007). This change over the past 2-3,000 years is consistent with typological drift, resulting from incomplete acquisition by substantial second speaker populations (McWhorter 2016). This theory would expect lower language change in geographies less subject to historical invasion then Mainland Southeast Asia ('MSEA'), such as Australia's ergative agglutinative Pama-Nyungan family ('P-N'; Hale 1966a).

Verbal desinential evidence attests to a mid-late Holocene substratum of language connecting Greater Armenia, MSEA and Australia. Agglutinative 'traditional' Sydney Basin Gombeeree (cf. *Gom-beè-ree* (Tench, 1793, p. 83; cf. *barbarr* (Arm.) 'dialect' & *kreampheasaea* (Khmer) 'dialect'),recorded 1770-1840, is compared to synthetic-analytic MA, analytic Khmer, and tonal Thai in Table 1.Parts of speech are identified and standardized cross-linguistically by their presumed historical agglutinative role. Verb stems are bolded. The aorist (MEA. *ts'-* ; MWA *dz-*; Gmb. *di-* 'did'; Thai *di̱*), imperfect (MEA*ei*&c.; MWA *gë*; Gmb. *-alie*/*ilyi* &c*;* freeform *yoo*; Thai*xyừ*'were') and present (MWA *em*&c.; MEA *yem*&c., Khmer *ke*, Thai *pĕn*&c.)elements are underlined. The SEALS-wide 'will/shall' future split (MWA *bidi* 'will/would'; MEA *k-* 'shall/should'; Gmb. b- 'will') and conditional (MWA *bidi* 'will/would'; MEA*k-* 'shall/should'; Thai *k-* 'should'; Khmer *nung* 'will/would')elements are bolded and underlined. Resultatives are italicised. Perfectives (Arm. *vats*; Gmb. *banie* 'been'; Thai pi̱ *lêw*; Khmer *ban*) are italicised and underlined. Continuants, present participles and present passives (suppletive forms of 'to be') are bolded and italicized. Nominatives and current/fossilized ergatives are in regular type. Unrelated words are struck through.

Sentence comparison across the Southeast Asian linguistic substratum, showing the re-ordering and ablative impact of typological drift on the featured AIE languages

IE language		Ante-IE language (avulsar or late sigmatic)		
Eastern Armenian	Western Armenian	Gombeeree (aggl.)	Khmer (anal.)	Thai (ton.)
'I would have forgotten'				
Yes kmorran*ayi*	Yes mortsadz'ëllê*i*	Gnia maanaliedyaou[1]	Khnhom nungplech	C̄hạn²ǩkhnglūm *pilƕw*
'Thou hadst stolen'				
Du goghats'*el*eir	Tun koghts*er*êir	Ngieeniee karraa*ra*diemi[3]	Anak *ban*luoch	K̶h̶u̶n̶dikhmoy
'He is loved'				
Na sir*vats e*	An sir'*vets e*	Ngalla your*uri*[4]	Keat*trauvbanke*s ral*eanh*	K̄heā pĕnthȋr*ak*
'We were talking'				
Menk' khos*um*eink'	Menk'gëkhos*ei nk'*	Ngala gowalie*nna*[5]	Yeung *ban*n̶i̶y̶e̶a̶y̶[6]	Reā k̊alang̶p̶h̶ū̶d̶[7]xyȕ
'Ye will forget'				
Duk' kmorra*nak'*	Tuk'*bid*imor*nak'*	Goola maana*banga*[8]	A̶n̶a̶k̶nungphlech	P̶h̶w̶k̶ khuṇ ca*lūm
'They lost'				
Nrank' partve*ts'in*	Anonk' partve*ts'in*	Ngara bo parsbùg*'in*[9]	Puokke *ban*batbng	Phwk k̄heā phƕ

With a smaller agglutinative-synthetic-analytic typological transition verbal accidence points to an even closer connection between the Armenian branch and pre-British Australian.This is shown in Table 2,comparing Hittite (Held et al. 1987: 37), C Luwian (Melchert 1993: 3),OA (Roszko 1970: 54)and Gombeeree. The biggest difference is what might be called the ante-Indo-European (AIE) avulsar or pre-stigmatized phonology of the Sydney language, which is sibilant-fricative avoidant because of the difficulty of pronunciation without a front incisor. This is related to a

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[1] *Ɖia buŋalyıdyaóu yérı* (Dawes 1790-93b: 33; 'I did thus') I would have done thus; *Wȁlawi buŋalyıdyaóu* (Dawes 1790-93b: 33; untrnsl.) I would have done since; *mınyemalyıdyaóu* (Dawes 1790-93b: 18; 'I started') I would have made start/startled

[2] *Cǁhạn* is a fossilized Thai 1 sg. erg.; cf. Gmb. 1 sg. erg. *diam* (fr. *war-ran-jam-ora* (Dawes 1790-93c: 18) 'I am in Sydney Cove'); *Col-lin-djam* (Dawes 1790-93c: 57 SP l-l; 'names of native men') I am Collins

[3] *Wíngaradĭémĭ* (Dawes 1790-93a: 35; 'Thou [didst think or wast thinking]') Thou hadst thought

[4] *munaŋúrı*(Dawes1790-93b:24;'onseeing mescratchoutwhatIhadwritten')having beenmistaken; *Wy-a-jenurıga(*King1793:297;'giveme')having beenhelpedgiveme;*mānúrı*(Dawes1790-93b:17;'forgot')havingbeenforgotten

[5] cf. type I/II verb 2 pl. imf, *tungalene, as Minyering tungalene?* (Mann c.1884: 5; 'Why are you crying?') Why were you crying?; cf. type III verb 1 pl. aor., *gna-dıenna* (Dawes 1790-93c: 6) 'we saw'

[6] this is diachronically 'say'

[7] this is diachronically 'speak'

[8] *waunánga* (Dawes 1790-93b: 22; 'don't ye [lie?]') Ye don't lie?

[9] fr.*parsbuǁg'ı* (Dawes 1790-93b: 17) 'I have lost [it] a fish hook')& perfective suffix *-īn*, as*Tyenmíly1 bun'īn* (Dawes 1790-93b: 29; lit. was allowing/making play. I am come; 'I am come from play') I was playing around. I am come.

retentive great arc of tooth avulsion initiation from Australia (Collins 1798: 453) to China (Blench2008),which survived until 2,000 years B.P. This can be seen in the 2 sg. *-mi* compared to *-si* in Hittite and C Luwian. This indicates that intrusions of the Armenian Highlands by the Biainili, identified by an Urartian clay tablet ca. 900 BCE (Zimansky 1995),did not fundamentally alter the language except to trigger typological evolution from earlier Anatolian agglutinative-ergative languages to synthetic-analytic OA. The Gothic verb, *táujan* (Wright 1952: 152) 'to do' is included to show the consistency with Gombeeree of PIE dual form reflexes, which are absent in the Anatolian comparator languages.

Table 2

Indicative active present of 'to do' in Gombeeree, Hittite, C-Luwian, OA and Gothic

	Gombeeree	Hittite	C Luwian	OA	Gothic
1S	yangy /jaɳai/[10]	i-ya-mi	a-wi	aṙn-em	táuja
2S	yangami[11]	i-ya-ši	a-aya-ši	aṙn-es	táujis
3SM	yangi[12]	i-ya-zi	a-ti	aṙn-ē	táujiþ
1DI	yangangoon[13]				táujôs
1DE	yangaban[14]				
1TR	yanganye[15]				
1PL	yangala[16]	i-ya-u-eni		aṙn-emk'	táujam
2DU	yangaban[17]				táujats[18]
2TR	yanganie[19]				
2PL	yanganga[20]	i-ya-at-te-ni		aṙn-ēk'	táujiþ
3DU	yangaban[21]				
3TR	yangaoui[22]				
3PL	yangila[23]	i-ya-zi		aṙn-en	táujand

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[10] cf. type III verb *ni* (Dawes 1790-93a: 2) 'I see or look'

[11] cf. type III verb *yenmāmı* (Dawes 1790-93a: 6) 'Thou shalt or wilt go'

[12] dist. *Mulla tongi* (Dawes 1790-93c, 29) 'a man that cries' ; *Din tonge* (Dawes 1790-93c, 29) 'a woman that cries'; *yena* (Dawes 1790-93a, 6; 'He goes or is going') one goes; ….*yanga*… (Dawes 1790-93b: 33; untrnsl.) …does/fornicates [3SN]…

[13] *-angoon*, as type III verb *yenáɳoon* (Dawes 1790-93a: 5) 'we [go or walk]'

[14] cf. 2nd p. dual future class I/II verb *bogĭbában* (Dawes 1790-93a, 8) 'You two will bathe'

[15]*Yenmánye kaouwı kamarabú* (Dawes 1790-93: b12; 'We will return the same day') we three shall go here the same day

[16]*Wooroolbala!* (Mann c. 1888, 5; 'Whistle') Let's whistle!; *Cumbala!* (Mann c. 1888, 5; 'Leave it alone') Come [on]/Let's come!

[17] cf. 2nd p. dual future class I/II verb *bogĭbában* (Dawes 1790-93a, 8) 'You two will bathe'

[18] likelydeveloped from the 2 du. aor. cf. *yangadiaban (cf. Gomb. *Nādıaɳálamı* (Dawes 1790-93b: 25) 'We two [excl] saw thee'& consistently, *bogĭbában* (Dawes 1790-93a: 8) 'You two will bathe')

[19]*patabánıe* (Dawes 1790-93a: 21) 'Ye [shall or will eat]'; cf. type III verb *yenmánĭe* (Dawes 1790-93a: 5) 'Ye [will go or walk]'

[20] Type I/II verb, *Minyon bungink* (Mann c. 1888: 4; 'What are you going to do?') What are you doing?; type III verb, *waunánga* (Dawes 1790-93b: 22; 'don't ye [lie?]') Ye don't lie?

[21] cf. 3rd p. dual past tense *Mr Faddy yéla Mr Clark yen[d]yában Norfolk Island* (Dawes 1790-93b, 36) 'Mr Faddy with Mr Clark went to Norfolk Island'

[22] cf. 3rd p. trinal present tense *ınyám ɳal-w'i white men* (Dawes 1790-93b, 34; 'because the white men are settled here') white men are settled here; cf. 3rd p. trinal past tense *Major Ross, Mr Faddy Mr Clark yen[d]yaóuwı Norfolk Island* (Dawes 1790-93b, 36) 'Major Ross, Mr Clark (and) Mr Faddy went to Norfolk Island'

[23] cf. Type I/II verbs, *elabi-la-bo*(King1793:293;'tomakewater') theymakewaterall;*manila* (Dawes1790-93a:6)'theytakeorcatch'; cf. type III verb, *yeníla*(Dawes1790-93a:5SPí)'they [goorwalk]'

There exist even clearer linguistic links between OA and Gombeeree, confirmable by predictable translation rules. Table 3 compares the aorist inflection of OA verb, *mořanal* (Roszko 1970: 65-66; 70) 'to forget', MWA *morrnal*, MEA *morranal* and Gombeeree*maanana (fr. *m'ānaru* (Dawes 1790-93b: 17) 'to forget') being made to forget) 'to forget'. Translation rules can be inferred such as:

(i) Gmb. /-dj-/ > OA /tʃ/ > MEA /ts'/; MWA /dz/.
(ii) Gmb. /-anga/ > MWA /ak'/

Table 3

Active aorist of 'to forget' in Gombeeree, OA, MWA and MEA

	Gombeeree	OA	MWA	MEA
1S	maanadiaou[24]	moř-a-ç-i	mortsa	morrats'a
2S	maanadiemi[25]	moř-aç-er	mortsar	morrats'ir
3S	maanadia[26]	moř-aç	mortsav	morrats'
1DI	maanadyangun[27]			
1DE	maanadia(ban)[28]			
1TR	maanadyanye[29]			
1PL	maanadienna[30]	moř-aç-ak'	mortsank	morrats'ink'
2DU	maanadiaban			
2TR	maanadyanye[31]			
2PL	maanadyanga	moř-aç-ik'	mortsak'	morrats'ik'
3DU	maanadiaban[32]			
3TR	maanadiaoui[33]			
3PL	maanadiang(h)a[34]	moř-aç-in	mortsan	morrats'in

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[24] *yarrsbádiou* (Dawes 1790-93a: 33) ' I have wearied or did weary myself'; cf. *Pat-ta-diow* (Collins, 1798, p. 483) 'I have eaten'; *·Patadiou* (Dawes 1790-93a, p. 21) 'I did eat'; *Pat-ta-diow* (Dawes, 1790-93c, p. 19) 'I eat or have eat'

[25] *pa-tā-die-mi* (Collins, 1798, p. 483) 'you have eaten'; *:patadiémi* (Dawes, 1790-93a, p. 21) 'thou [didst eat]; *pattadiemy* (Dawes 1790-93c, p. 19) 'you have eat'; *mɩkoarsmadyēmíɳa* (Dawes 1790-93b, p. 18) 'You winked at me'; *Dýínadyɩmíɳa* (Dawes 1790-93b, p. 15; 'You stand between me and the fire') You did me

[26] cf. intrns. *:ngaradié:* (Dawes, 1790-93a, p. 40) 'she does or did hear'; cf. trns.*naadiáɳa* (Dawes 1790-93a: 2; 'he [did see or has seen (it)]…'; *Maanĭliediánga* Mrs Brooks (Dawes 1790-93a: 42; 'Mrs Brooks has taken it') Mrs Brooks would have taken it; *beraɳmùɳadyáɳa* (Dawes 1790-93b: 6; lit. belly-ache-did3n-to) 'My belly aches'; cf. passives, which take the accusative, *patadĭában* (Dawes 1790-93a: 21 SP nd) 'he [did eat]'; *bong-a-ja-bun* (Dawes 1790-93c: 17; 'he did paddle') he was paddling; *nangadiában* (Dawes 1790-93a: 16) 'she did sleep';

[27] cf. type III verbs, *naadiaɳun* (Dawes, 1790-93a, p. 2) 'we [(two incl) did see or have seen &c.]'; *wúlaboadyáɳun Paramatín* (Dawes 1790-93b: 26; 'something relative to coming from Parramatta') We did go back from Parramatta

[28] *Nādɩa(ban)ɳala* (fr. *Nādɩɳálamɩ* (Dawes, 1790-93b, p. 25) 'We two [excl] saw thee'; cons.w. 2nd p. dual future type I/II verb *bogĭbában* (Dawes, 1790-93a, p. 8) 'You two will bathe'

[29] cf. future type III verbs, *bangabánye* (Dawes, 1790-93a, p. 18; 'I think a future of some other person') We shall row to bring back; *yenmánye kaouwi kamarabú* (Dawes 1790-93b, p. 12; 'We will return the same day') we shall walk here the same day

[30] cf. type III verbs, *gna-dienna* (Dawes, 1790-93c, p. 6) 'we saw'

[31] cf. future type III verb, *patabánɩe* (Dawes, 1790-93a, p. 21) 'Ye [shall or will eat]'

[32] *:patadĭában* (Dawes, 1790-93a, p. 21) 'they [(two) did eat]'

[33] *yangadĭów-ĭ* (Dawes, 1790-93a, p. 38) 'They did'; *naadiouĭ* (Dawes, 1790-93a, p. 3) 'They [did see or look or have seen]'

[34] cf. type III verbs, as *Wau-me-diang-ha* (Collins, 1798, p. 483) 'they have scolded or abused'; *wah-mēd'jang-ah* (Dawes, 1790-93c, p. 21;'is to scold') they scolded *·naadiáɳa* (Dawes, 1790-93a, p. 2; 'he [did see or has seen]…'") they did see or have seen

Mashtotsian alphabet

The Armenian alphabet is native to the Armenian Highlands, also known as Ararat (Movsisyan 2006: 21). Mashtots' follower, Koryun (aka Koriwn), remarks on letters that had been accidentally found by the Syrian bishop, Daniel (Movsisyan 2006: 10), "buried and then resurrected from other languages" (Honarchian 2018: 49). Contemporaneous sources, Khorenatsi and Parpetsi, touched on the same episode, noting the letters had been written down long ago (Movsisyan 2006: 10). Mashtots and his disciples went to Mesopotamia to find the same Daniel in search of the missing letters but in vain (Khorenatsi, as cited in Movsisyan 2006: 10). Finally, a Syrian named Ropanos, a scribe of Greek letters, assisted Mashtots to develop an up-to-date alphabet. This explains the similarity of the Armenian and Greek alphabets, and the order of letters (Honarchian 2018: 49). A slightly different version is given by Vardan Areveltsi (12th-13th centuries) who thought Mashtots found the pre-Mashtotsian alphabet consisting of 22 letters preserved from ancient times and kept by Daniel, but could not translate the Bible using them. They could not reveal the richness of the Armenian language and thus had been ignored by their ancestors who had been satisfied with the Greek, Syriac and Persian letters (Movsisyan 2006: 11). God answered his prayers, giving him 14 letters to use (Movsisyan 2006 : 11).

Pre-Mashtotsian communication

Rock carvings are dated as early as the 13th millennium BCE in Western Armenia (Movsisyan 2006: 26), and there is a direct link between petroglyphs and the Biainili-Urartian hieroglyphic system from the last quarter of the 9th century till the beginning of the 6th century BCE (Movsisyan 2006: 54, 77). However, the national root for the Armenian alphabet appears to derive from rock carvings or 'petroglyphs' and drawings or paintings called 'pictograms' from the fifth to second millennia BCE (Movsisyan 2006). One used descriptive representational devices, including outer line depictions of animals, humans, or objects with additional positional changes identified by pictorial lines. The other, beginning in the first half of the 3rd millennium BCE, took on a more linear and less pictorial form (Movsisyan 2006: 36). They used identifying-mnemonic devices where a given object was represented by a conventional mark, allowing identification of a depicted individual by his totem or other object (Movsisyan 2006: 29-30).

By the time of Christ, a number of contemporaneous authors aver to the existence of Armenian letters. This was well before the creation of an Armenian alphabet by a Christian monk, Mesrop Mashtots in the early 5th century CE (Movsisyan 2006: 10). A classical account of an Armenian script comes from Philo of Alexandria (20 BCE-50 CE), who notes in his writings that the work of Greek historian and philosopher Metrodorus (ca. 145 BCE – 70 BCE), *On animals*, had been translated into Armenian (Vanbeginne 2024: 2). Further, Philostratus the Athenian (n. d., as cited in Conybeare 1912: 120-121) writes "a leopardess was once caught in Pamphylia which was wearing a chain…of gold, and on it was inscribed in Armenian lettering: 'The King Arsaces to the Nysian God.', a king who reigned in 34-35CE.

Pre-Mashtotsian cultural context

Knowledge of the spiritual and material values of the culture that created this alphabet is essential to avoid coming to the wrong conclusions (Movsisyan 2006: 54). The religious historical background to Armenia's original script between the fall of the Kingdom of Van and the proclamation of Christianity as the state religion is imperative to understanding, as it continued to be used in temples by the power of the sacred tradition(Movsisyan 2006: 149).

A monotheist pre-Mashtotsian religion can be pieced together from available evidence. *Khaldis* or *Khaldi* was at the head of the early Vannic religious diumvirate, seconded by Ardinis, revealed by cuneiform inscriptions (840-640 BCE), and the worshippers referred to themselves as 'the Khaldians' (Kennett 2014: 794). This second god can be explained by the practice of absorbing a deified state into the growing Vannic kingdom. Thus, the deity called at Meher Kapussi "the god of the city of Ardinis, became himself a khaldis" (Kennett 2014: 794).Manning (1844-45, in Howitt 1904, p. 502) remarked of pre-British Australia: "They not only acknowledge a Supreme Deity but also believe in his providential supervision of all creation, aided by his son, *Grogor[ag]ally*(cf. *Grogoragally* Organ 1993: 17; lit. God-of son-like-adj').

There was also a messenger or prophet figure in this proto-Vannic religion, called by related names across Asia. In Old Armenian *Artsibidi* means 'eagle-god' (Movsisyan 2006: 126), arguably a reduplicative *portmanteau* of eagle in its literal and metaphorical alloglosses (cf. MA *baze* 'falcon'). Manning (1844-45, in Howitt 1904, p. 502) in relation to the Australia-wide religious 'creed', names "the Second Mediator [after the Son], in the supernatural person, of their intercessor, *Moodgegally* [lit. Moodjel-like-adj; cf. Armenian *Mozarka* (Nayin, 2011: 532) 'Mozaic']."To the Wa-woo-rong of Melbourne, Australia this messenger figure was "Bun-jil" (Smyth 1878: 423). In Western Australia he was called *Mudja*, inferable from *mother of Mudja*(Grey 1841: Ch 14) 'plant bearing seeds...after it has flowered'. This prophet figure's name references his totem, the eagle (Howitt 1904: 143), and is henceforth standardized as Mudyel.

Evidence of a pre-Mashtotsian alphabet

Accordingly, what appears to be Armenian script painted in a cave on the Upper Glenelg River in north-western Australia could be significant. See Figure 1.This style of pictogram is a common tradition about Lake Van where two bronze plates depicted persons with their names reproduced above their heads (Movsisyan 2006: 108). The Galaru tribe of north-western Australiacalled it *Bandidjin*(Elkin 1948: 11), likely meaning Mudyel spirit. What appears to be script appears above a man dressed in robes, who could be a*gomma* (cf. *gommera* (Howitt 1904: 314 'headman'; cf. Arm. *k'ahana*'priest' &*k'ahananer*'priests') priest, or even a Vannicmissionary.

Figure 1

Ancient Mudyel (Grey, 1841, entry for March 29, 1838)
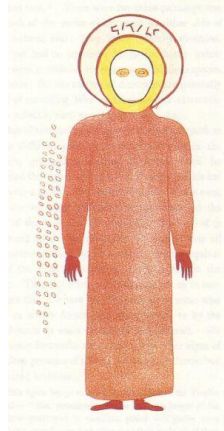
Grey 1841: I: 152 'Other paintings'

Another identifying feature that links this ancient Australian pictogram to that of Greater Armenia is the dot number system. "The dot expression of numbers is the peculiarity of the Armenian Highland in the ancient Near East"(Movsisyan 2006: 31)."The use of dot marks as numbers in the region of ancient Western Asia was characteristic only to Armenia", "derives from [the] rock carving system" and had "extensive use" in the Biainian hieroglyphic system as evidence of its deep local roots (Movsisyan 2006: 92). The comparison is highlighted in Figure 2.The dot number system and cross-longitudinal numbers in Figure 3show a diachrony with pre-British Australia, where the grooves or dots on message sticks represented the number of men invited to a gathering, such as a fight or initiation (Howitt 1904: 709), and the cross-longitudinal marks signifiedthe days he hastravelled (Howitt 1904: 709). Note the unfilled dots or circles alongside the Mudyel figure use the same number system. The number of dots is 62, which suggests the 62nd year of the Neo-Babylonian Empire (544 BCE), or the 62nd year of the Zoroastrian Achaemenid Empire (488 BCE). Another possibility is the Seleucid calendar beginning in 312 BCE (Movsisyan 2006: 248), but it presumably gave less support to a monotheistic *weltanschauung*.
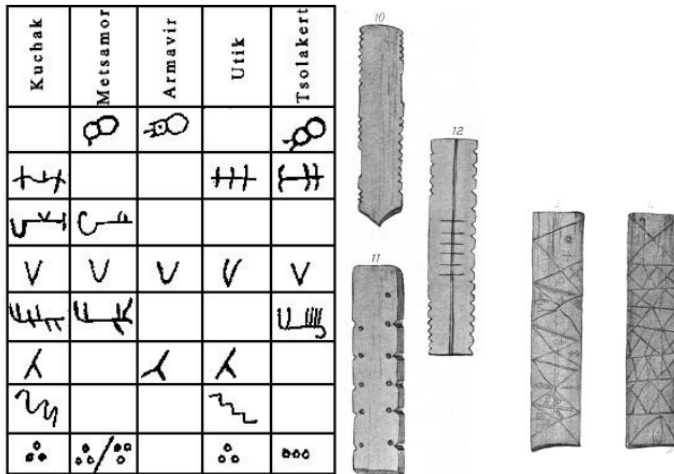
Figure 2

Comparison of number systems in western Asia

Movsisyan (2006: 91) '*Tab 6*'

The dot and cross-longitudinal number system of ancient Armenia compared to pre-British Australia at right (Howitt 1904: 704, 708).

Movsisyan (2006: 49) '*Tab 4*'; Howitt (1904: 704) 'FIG. 44 – Message sticks of the Tongaranka, Narrang-ga, Bura, and Yakunbura tribes'; Howitt (1904: 708) 'FIG. 45. – Message-stick of the Wakulbura tribe, and Kabugabul-Bajeru of Chepara tribe

What seems to be proto-Armenian script is written above this pictographic entity. A close-up version in Figure 4shows how closely it relates to the modern Armenian letters, with an MA transliteration ofմւչլու, /mutʃuil/. However, taking account of historical phonology derived from desinential covariation,and assuming the distance between the last two letters *ոլ*means it was not then a digraph (unlike modern Armenian *ու*), it reads /*Mudjuil*/.This is an acceptable dialectical difference from the Australian etymon, Mudyel /*Mudjəl*/,given 13,000 kms between Greater Armenia and Australia. Ninety degree right rotation of consonants, but not vowels, is indicative of late vocalic development.

Ancient Armenian script at left (from Grey, 1841, entry for March 29, 1838) shows a left 90° consonantal rotation (մ, չ, լ) of the modern Armenian script at right

մ լ չ լ ո լ

Newer evidence should be discounted where it conflicts with the old. Figure 4 shows how Grey's painting of Mudyel looked several generations after the first visit in 1838 by European colonists. Discrepancy between the state of the painting before and after was blamed on unreliability of the initial report (Elkin 1948). However, H. Basedow described a similar figure as being "clothed in a long striped garment, resembling a priestly gown", which in his sketch narrows gradually from the hips to the ankles, causing the latter to appear tightly bound' (Elkin 1948: 5). Moreover, Elkin (1948: 5-6) remarked on ongoing maintenance of the paintings by guides of his photographer, Mr.

Coates: "native guides in their enthusiasm had outlined the outside of the lower legs and this hand before he noticed and stopped them." That the native maintenance was undertaken without knowledge of the art's significance is shown by the fact that the "old native who gave the Bandidjin myth unhesitatingly asserted that these markings were zigzag lightning" (Elkin 1948: 14). This was "in keeping with…the association of Wandjina with rain" and regular maintenance: "retouching Wandjina pictures commences with "Lightning first we make for him" (Elkin 1948: 14). The outline of the last few letters in Armenian were still just visible at 3 o'clock where maintenance had not been undertaken, reinforcing the greater historical credit it should be given. The loss of significance of the script likely relates to the Australia-wide mission system where almost all Aboriginal tribes were put on reserves with entry-exit permits required from the manager, and house rules prohibiting transmission of Aboriginal language or culture, explained well by Dixon (2014: 4-9).

Figure 4

Grey's March 29 1838 cave,110 years later, with lightning superimposed on ancient script
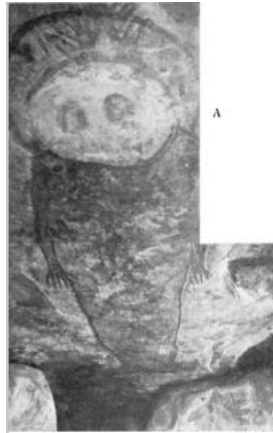
Elkin (1848: 14b) 'Photographs taken in June 1947 of main paintings in Grey's cave of March 29, 1838'

If the hypotheses of late vocalic development and early right rotated Armenian consonants are correct, other early Armenian scripts may also be decipherable. Rock art from pre-Mashtotsian Armenia was carved using hammers fitted with hard stones (Movsisyan 2006). In Australian rock art tradition of the Sydney area, the hammer was called a *mogo* (King, in Hunter 1793: 294, 'a stone hatchet' (cf. *murch*(MA) 'hammer').Figure 5 isa "single monument in its kind", a *menhir* with marks in Shamiram (Movsisyan 2006: 46). It appears to pre-date the Mudyel painting, with the script departing even more so from the modern Armenian. Assuming it has unwritten vowels, inferable from the presumably newer non-rotated vowels in the Mudyel painting, and reads left to right, and right rotating the letters, it appears to read *l-?-r-?*, where – represents a vowel and ? is a character unknown to the modern Armenian alphabet. The second unknown character, ∪ , nonetheless bears similarity to a majuscule Armenian n (Ն) or m (Մ). It also resembles the Sumatran-adapted Phoenician or Batak alphabet letter, ⊃ , conveying a voiced velar nasal, ng /ŋ/ (Schröder 1927: 35), but rotated right 90°.

Figure 5

The Shamiram menhir

Movsisyan (2006: 46) 'Fig. 23'

An explanatory hypothesis as to the meaning of the Shamiram menhir based on pre-British Australian culture springs to mind. In Australian Aboriginal culture, those who passed on were known as the *<Alcheringa>*(Peck 1928, as cited in Organ 1993: 28; 'the prehistoric time') dreamtime, which comprises the collective memory of common ancestors. Diachronic rules such as Gombeeree *-nga* = MA-*nk'*, leads to the likelihood it is allofamic with Koriyun's *<Azchanazi>* (Koriyun, as cited in Honarchian 2018: 49) 'a common ancestry' and MA *<yerazank'>*, 'dreamtime'. Might this have been a letter that was by Mashtots' time unable to accurately convey the syllables of Armenian? An unrecognizable letter in MA would arguably fill the niche to signifythe ancient PIE voiced velar nasal, /ŋ/.

A partially reconstructed pre-Mashtotsian alphabet

Hence, eight of the 22 letters of the Armenian alphabet known to Bishop Daniel can be reconstructed. They are set out in Figure 6. Also note the different written forms of phonetic [l]. That the lettering is not completely uniform and departs from the modern Armenian characters, even allowing for rotation, is to be expected. Early Armenian script styles "were neither neat nor clean cut. Real standardization only occurs universally after the advent of printing" (Kouymjian 2013: 22).Some forms appear more like the modern majuscule, such as final 'l', and others the minuscule form, suggesting the two were not developed until after the Mudyel painting.

Figure 6

A partial reconstruction of the pre-Mashtotsian Armenian alphabet with IPA pronunciation below

/dj/   /tʃ/   /l/   /i/ /m/ /ɾ/ /ŋ/ /u/

Conclusion

In summary, the available evidence of pre-Mashtotsian communication was essentially inventoried in Movsisyan (2006). This material was reviewed from a grounded theory perspective. Much of the pre-Mashtotsian material related to other alphabets, such as the Syriac, Aramaic and Greek, and different communication phases from pictographic to hieroglyphic-syllabic and alphabetic. However, the palimpsest of a pre-Mashtotsian script was identified in an Australian cave, which presents with a remarkably similar religious artistic style, diachronically consistent script and unique deep-rooted Bianian number system. Hypothesized early 90° right rotated consonants and late vocalic development permitted decipherment of a unique petroglyphic menhir discovered at Shamiram. In total, a third of the pre-Mashtotsian alphabet was reconstructed. Already restricted to sacred religious *milieux*, a period of rapid phonological change likely led to the original alphabet falling out of favor.

ՇԵՅՆ Ռ. ԲԵՔՀԵՄ – *Վերծանված նախամաշտոցյան գիրը. հայացք հին զաղութից* – Չորրորդ դարում Մաշտոցի կողմից հայերեն գրերի գյուտը հայ գրի ամենավաղ ճանաչված ձևն է: Այս հոդվածում քննության է առնվում հետնյալ հարցը. ինարավո՞ր է վերականգնել այբուբենը, որը հիմք դրեց մաշտոցյան գրին: Ք.ա. V-II հազարամյակների Մեծ Հայքի ժայռապատկերներն ու վիմագրերը ընդգրկում են հաղորդակցության և գրչության տարբեր դարաշրջաններ, իսկ բազմալեզու արձանագրությունների բացակայության պատճառով խնդիրը թեև դժվարանում է, բայց անլուծելի չէ: Բանավոր ապակոդմնորոշող վկայությունները կապում են հոլոցենի միջին շրջանի Մեծ Հայքը և Հարավարևելյան Ասիան՝ ներառյալ Ավստրալիան, լեզվական ենթաշերտի միջոցով:
Ելնելով վերոնշյալ գիտելիքներից՝ հեղինակի ուշադրությունն է գրավել Ավստրալիայում քարանձավի պատին արված մոխրագույն գրառումը, որը, ըստ հոդվածագրի, հայերեն գրի տարատեսակ է: Բացի այդ, նկարում օգտագործված կետային թվագրման համակարգը համապատասխանում է Մեծ Հայքում լայնորեն կիրառված և ինքնատիպ թվագրման բիայնական համակարգին: Հայկական հոգևոր գեղարվեստական ոճի հիման վրա ենթադրելով, որ պատկերագրված սուբյեկտի գլխավերևում արված մակագրությունը նրա անունն է, տառերը վերականգնվել են: Այդ տառերի հիման վրա առաջ է քաշվել կանխավարկած ձայնավոր հնչյունների ավելի ուշ շրջանում զարգացման մասին, իսկ սկզբնական բաղաձայնները ժամանակակից ձևերի համեմատ շրջվել են 90° դեպի աջ: Դրա հիման վրա ինարավոր է եղել վերծանել Շամիրամում հայտնաբերված էզակի մենհիրի վրայի ինագույն գրությունը: Ընդհանուր առմամբ վերականգնվել է սկզբնական 22 տառերից ութը, ինչը բավարար է նախամաշտոցյան պատմական հնչյունաբանության մասին պատկերացում կազմելու համար, որի պատճառով բնօրինակ այբուբենը դուրս է եկել գործածությունից:

Բանալի բառեր – *հայագիտություն, նախահայերեն լեզու, անատոլիական լեզուներ, պամա-նյունգի լեզու, սիդնեյի լեզու*

ШЕЙН Р. БЕКХЭМ – *Расшифрованная домаштоцевская письменность: взгляд из древней колонии.* – Изобретение Маштоцем современного армянского алфавита в четвертом веке нашей эры является самой ранней признанной в настоящее время формой армянской письменности. В этом исследовании рассматривался следующий вопрос: возможно ли восстановить алфавит, положивший начало маштоцевской письменности? Наскальные рисунки и пиктограммы Великой Армении пятого-второго тысячелетий до нашей эры охватывают различные эпохи общения и письменности, а отсутствие многоязычных надписей делает задачу сложной, но возможной. Вербальные дезинсенциальные свидетельства связывают Великую Армению среднего голоцена и Юго-Восточную Азию, включая Австралию, через лингвистический субстрат. Используя эти знания, в центре внимания оказалась роспись охрой на стене пещеры в Австралии, которая, по-видимому, представляет собой разновидность армянской письменности. Кроме того, точечная система счисления, использованная на картине, соответствует глубоко укоренившейся и уникальной биайнской системе счисления, используемой в Великой Армении. Предположив на основе армянского религиозного художественного стиля, что надпись над головой пиктографического субъекта является его именем, буквы были восстановлены. На основании этих букв была выдвинута гипотеза о позднем развитии гласных звуков, а исходные согласные были повернуты на 90 ° вправо по сравнению с современными формами. На основании этого удалось расшифровать древнюю письменность на единственном в своем роде менгире, найденном в Шамираме. Всего было восстановлено восемь из первоначальных 22 букв, чего достаточно, чтобы составить представление о домаштоцевской исторической фонологии, из-за которой оригинальный алфавит вышел из употребления.

Ключевые слова: *арменоведение, протоармянский язык, анатолийские языки, Пама-ньюнгский, сиднейский язык*