The Word, the Blade, and the Pen: Three Thousand Years of Arabic

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(Book preview)¹

Arabic's history spans nearly three thousand years. The language first appears as a shadowy idiom in the early 1st millennium BCE, sporadically attested in ancient rock inscriptions from the southern Levant and North Arabia and fragments in the documents of major empires. In Classical Antiquity, Arabic flourishes as a written language among the nomads of North Arabia and the Syro-Jordanian desert, and by mid-first millennium CE, it had become the language of world empires and international scientific discourse. Ahmad Al-Jallad plots out the complex evolution of the world's fifth most widely spoken language. For the first time, Arabic's entire history will be told, with a special focus on the primary sources and their socio-cultural contexts. The evolution of both the language and its associated writing traditions are discussed in light of linguistic, historical, and archaeological research, and presented as a coherent narrative. The book is divided into three parts -1) the Word: Arabic's earliest stages when it remained a purely spoken language. Evidence for it is preserved in transcriptions of loanwords, personal names, and other fragments in the written languages of the time; 2) the Blade: this refers to the instrument used to carve rock inscriptions, usually a sharp stone or metal blade. Arabic is abundantly attested in rock inscriptions from the late first millennium BCE onward; 3) the Pen: in the early first millennium CE, Arabic is written more and more frequently in the Nabataean script and in ink. This catalyzes the evolution of the Arabic script as we know it and ultimately the transformation of Arabic into a world language.

The book is in contract with Princeton University Press and expected to appear in 2019.

A visual timeline of Arabic

Early First Millennium BCE

Arabic makes its first appearance in the Iron Age Levant and Mesopotamia. The shadowy language is known only from a handful of loanwords, personal names, and fragmentary inscriptions in varieties of the South Semitic alphabet, a script used across Arabia in the 1st millennium BCE. In this period, groups of people called Arabs inhabit the frontier region between the Fertile Crescent and the deserts of North Arabia. Assyrian sources call the oasis of Dumah (modern Dumat al-Jandal) the 'fortress of the Arabs'.

¹ http://aljallad.nl/the-word-the-blade-and-the-pen-three-thousand-years-of-arabic-book-preview/

Seal Ward fig. 1208 (courtesy OCIANA)



A seal from Mesopotamia with a fragmentary inscription in the South Semitic script, beginning with the *lam auctoris*, typical of Ancient North Arabian inscriptions. The style dates to the 8th-7th centuries BCE (Sass 1991: 48-49).

 Tablet from Uruk (courtesy OCIANA; Kienast 1958: 43-44)



A tablet with an inscription in the South Semitic script. The text is fragmentary but some words can be made out: Right: $gwl |/bbl \underline{t}qb ... | nby /.. y | --- / h{b}$; Left: 'or $sbbn \{r\} / l \underline{sr} |$ (I do not believe the line with two holes at the end is a \underline{t} but a word divider). The first two words could mean 'he went to Babylon' but the remaining letters are difficult to interpret. The left image, which is upside down, seems to contain names, perhaps 'bbn /'ababun/ or sbbn /sababun/. The second line begins with the $l\bar{a}m$ auctoris followed by the name \underline{sr} , maybe /sayr/ or /sawr/.

Ancient North Arabian inscription from Bāyir, Jordan (Hayajneh, Ababneh, Khraysheh 2015)

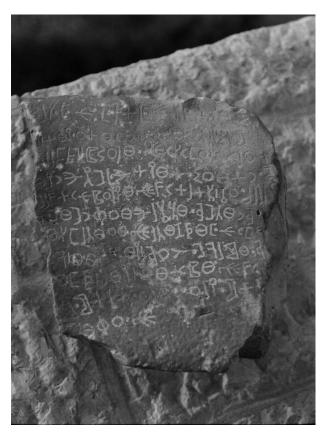


A bilingual Ancient North Arabian (script undetermined)-Canaanite inscription from northeastern Jordan. The Ancient North Arabian inscription contains an invocation to <u>Milkom, Kemosh</u>, and <u>Qaws</u>, the gods of the Iron-Age kingdoms of the southern Levant. The Old Arabic reads: *hā malkum wa kamās wa qaws bi-kum ʿawadnā* 'O Malkom, Kemosh, and Qaws, in you we have sought refuge'.

Late First Millennium BCE

Attestations of Arabic begin to flourish in this period. Inscriptions in the Safaitic and Hismaic alphabets, both belonging to the South Semitic script family, begin roughly in the centuries before the Common Era, spanning the southern Levant, from the Hawran to the Hisma and Dumah. The establishment of the <u>Nabataean Kingdom</u> in present-day Jordan markers a turning point in the history of Arabic — an Arabic-speaking elite begin the process of writing the Arabic language in a variety of the Aramaic alphabet known as Nabataean.

A Hismaic inscription from the Madaba region in Jordan (Graf & Zwettler 2004)



A votive inscription in Old Arabic expressing the fulfillment of a vow to deity and a petition for mercy (vocalization is based on Al-Jallad 2017)

saqoma le-'elāhe Ṣaʿb wa taʿānaya wa taśaddada laho be-kolle mā p^haʿala wa nadara `arbaʿa `asleʿat men-nīrat wa ʿap^hanat wa yatḥall be-ṣaḥrāy wa law lā-ka taraḥḥam ʿalayya wa dakarat allāto `aśyāʿa-nā kolla-hom

He sinned against the god S b and so was reduced to abject supplication, and suffered, and so he exerted himself for his (the deity's) sake in all that he has done and he vowed four commodity lots of Indigo and Verdigris pigments and then secluded himself in the desert in order that you may show mercy upon me, and may Allat be mindful of all our companions'

JSLih 384, An Arabic inscription in the Dadanitic script from the Higaz (courtesy OCIANA)



This is a grave inscription set up by a woman. The text is unique in that it is written in Old Arabic rather than Dadanitic, the written language of this area at the time. The text reads: nap^hs 'abdsamīn bin zaydharg 'allatī banah salmā bint 'aws'arśān 'the funerary monument of 'Abdsamīn son of Zaydharg which Salmā daughter of Awsarśān constructed'

KRS 2453, An Old Arabic poetic text (Al-Jallad 2015)



A poetic text in an Ancient North Arabian script exhibiting a mix of Safaitic and Hismaic values. The text is related to the <u>Baal Cycle</u>, would could suggest a rather early data of composition:

hagga mōt wa-lāzz tarām

 $p^{h}a$ moyakān hal p^{h} layāley-oh wa- 'aywām-oh

 $p^{h}a$ 'ā Ba 'al yobatt wa lā hū bātt wa mā nām

Mot held a feast; the scorner eats

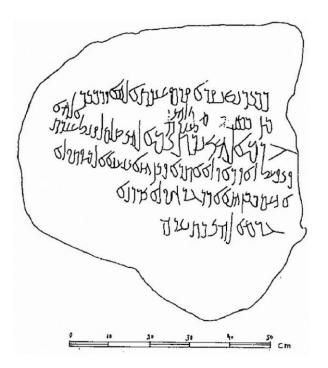
Established is the alternation of his nights and days

And, behold, <u>Ba'al</u> is cut off; cut off indeed, but not dead.

First-Third Centuries CE

This period is witness to the climax of Arabic script diversity. The language is written in Safaitic, Hismaic, possibly in Ancient South Arabian, as well as for the first time Nabataean and Greek scripts, ranging from the Hawran to North Arabia. The wealth of texts across different alphabets allows us to form a detailed picture of the diverse cultures and dialects of the Arabic-speaking peoples of this period.

'En 'Avdat Inscription (Kropp 2017)



The 'En 'Avdat inscription comes from near the ruins of the Nabataean city <u>Oboda</u> in the Negev. According to Macdonald (2010), it contains an Arabic liturgy belonging to the deified Nabataean king '*obodah*. Since the inscription is undated, the exact period to which it belongs is unclear. Kropp (2017) places it between 88 and 125 CE. The text reads:

 $p^{h}a yap^{h}$ 'al lā pedā wa lā 'atarā

 p^ha kon honā yabġenā 'al-mawto lā 'ebġā-h

p^ha kon honā 'arād gorho lā yored-nā

'May he act that there be neither ransom nor scar; so be it that death would seek us, may he not aid its seeking; and so be it that a wound would desire (a victim) let it not desire us!'

A war song from Marabb al-Šurafāt (NE Jordan) (Al-Jallad 2017)



This undated text, but possibly the 1st c. CE, contains a short war song that was perhaps sung by soldiers on their way to battle.

The poetic section reads:

pha ḥalīl-oh meḥ-ḥarb	pha hay-yawma honā `āḥer ḥalīl
ra`osa <u>d</u> ekrat	pha hay-yawma honā `āḥer ḥalīl
ʿaneya man ḥoṣepha	pha hay-yawma honā `āḥer ḥalīl

'May his halting be only for war, so let here this day be the final encampment; foremost fame!, so let here this day be the final encampment; those who return suffer, so let her this day be the final encampment'

Safaitic inscription from Wādī Umm Khinyṣri (NE Jordan) dated to the first century CE (Harahsheh & Al-Šudayfāt 2006, tracing by authors)

The nomads of the Syro-Jordanian desert were keenly aware of political happenings in the Roman Empire, and often dated their inscriptions to those events.

halla dawra sanata malk agreppoş ben hayrodayş wa wagada 'a<u>t</u>ra 'ahwāl-oh 'āl 'aślal taym w garmā 'wa 'ahwad wa zabīd p^ha nawga 'a wa hā <u>d</u>ū-śaray wa llāt ganīmata le-<u>d</u>ī da 'aya wa lam yohabbal sep^hr

'he encamped in this region the year of King Agrippa son of Herod and he found the traces of his maternal uncles, of the lineage of 'Aślal, Taym, Garmā', 'Aḥwad, and Zabīd, and so he grieved in pain; O Dusares and Allāt, may he who would read (this writing) aloud have spoil and let not the writing be effaced'

A pre-Islamic Arabic graffito in Greek letters (Al-Jallad and al-Manaser 2015)



This Arabic graffito in the Greek script provides the earliest vocalized example of the Arabic language, demonstrating the usage of the accusative case in this period.

'Awsos ' $\bar{u}dou$ bannā'ou kazimou 'atawa mis-se'ī'a śatāw wa-bannā'a 'ad-dawra wa yir'aw baqla bi-kān $\bar{u}(n)$

' 'Aws son of 'ud son of Bannā' son of Kazim came from $S\bar{1}$ to spend the winter with Bannā' in this place and they pastured on fresh herbage during Kānūn'

Fourth-Sixth Centuries CE

These centuries witness a script bottleneck. The Ancient North Arabian alphabets seem to decline and eventually disappear, while the Nabataean Aramaic script spreads and becomes associated with Arabic. Nabataean-script inscriptions begin to show more influence from Arabic and their Aramaic component recedes, until it is restricted to a few fossils. By the sixth century, the Nabataean script had developed fully into what we would recognize as the Arabic script.

Namarah Inscription (source)



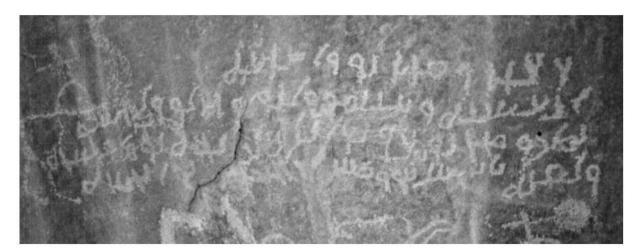
The Namārah epitaph, named after the <u>area</u> in which it was discovered, is a grave inscription for a certain Mar'alqays son of 'amro, "king of all the Arabs". Dated to 328 CE, it is one of the earliest examples of writing the Arabic language in the Nabataean Aramaic script, foreshadowing the development of the Arabic script from Nabataean.

Excerpt (Aramaic bolded):

tī naphs mar'alqays **bar** 'amro malk al- 'arab kollah <u>d</u>ū 'asara 'al-tāga

'This is the funerary monument of Mar'alqays son of 'Amro king of all the Arabs, who bound on the diadem'

Sakākā Inscription (S1, Nehmé 2010: 71)



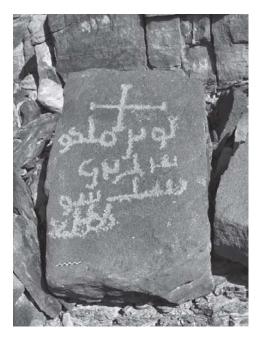
This text in the Nabataeo-Arabic alphabet, from Sakaka in northern Saudi Arabia, is transitional between the Nabataean script and the Arabic script proper. The text also exhibits a mix of both Arabic and Aramaic languages. It is dated to April, 428 CE.

Excerpt (Aramaic bolded):

dəkīr-w mohāreb-w wa 'ashāboh 'al- 'aśarah

'May Mohāreb and his ten companions be remembered'

Himà-Sud Paleo-Arabic 1 (Robin, C.J., A. al- Ghabbān, and S.F. al-Sa'īd 2014)



A Christian Arabic-script inscription from Himà, from the region of Nagrān. The language of the text is, however, in all respects Aramaic.

tawbān bar mālik-w b-yarah burak šatt 3×100 20+20+20+4

'Thawbān son of Mālik-w in the month of Burak in the year 364 (470 CE)'

Harrān Inscription

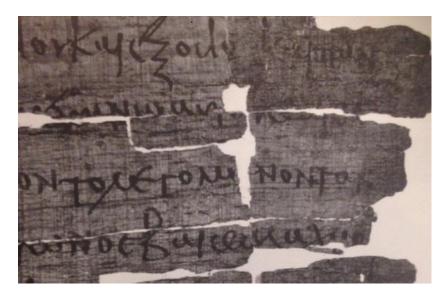


A bilingual Greek-Arabic inscription commemorating the building of a martyrium of St. John, dated to 568 CE, from Harran, southern Syria. The text is nowadays part of a modern house.

'anā šarahīl bar tālemo banayt dā 'al-martūl sanat 463 (= 568 CE)

I, Sharahīl son of <u>t</u>ālemo, built this martyrium the year 463 ... (the rest of the inscription has defied a satisfactory interpretation)

Petra Papyri (source)



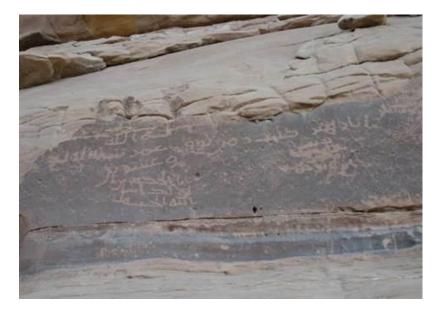
Greek legal documents from Petra (6th c. CE) containing numerous Arabic words and phrases in transcription. Since Greek notes the vowels, these documents, along with the Graeco-Arabic inscriptions mentioned above, are our clearest witnesses to the pronunciation of Arabic in the pre-Islamic period. The final line on this photograph (P.Petr II, 199) contains the name of a property *bait al-akbar* 'the largest apartment'.

Seventh-Tenth Centuries CE

Following the Arab Conquests, Arabic, written in the latest form of the Nabataean script, spread across Asia and Africa and was elevated to the status of an official language of an empire. Our earliest examples of Arabic as an administrative and literary language date to these centuries.

Graffiti

The Zuhayr Inscription (Ghabban 2008)



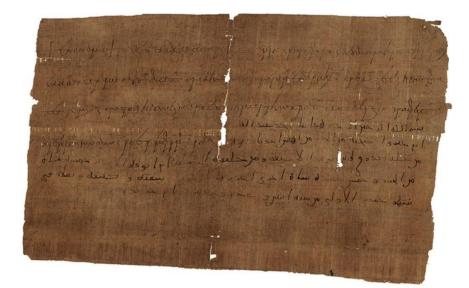
A graffito dated to the year 644 CE (24 A.H.) from northern Saudi Arabia, the earliest rock inscription containing diacritics (dots) to distinguish homographic phonemes. The text reads:

'anā zuhayr katabt zaman tuwuffiy 'umar sanat 'arba' wa- 'ašrīn

'I, Zuhayr, wrote at the time Umar died, the year 24'

Papyri

The Ahnas papyrus (PERF 558)



An early bilingual Arabic-Greek receipt dated to 643 CE (22 AH), at a time when Arabic and Greek were both administrative languages of the Umayyad state. The Arabic goes as follows, vocalized based on contemporary Greek transcriptions:

bismillāh ar-raḥmān al-raḥīm hādā mā aḥad ʿabdallāh ibn gābir wa-aṣḥābuh min al-gazr min ahnas aḥadīnā min ḥalīfat tidrāq ibn abūqīr al-aṣġar wa-min ḥalīfah iṣṭafar ibn abūqīr al-akbar ḥamsīn šāh min al-gazr wa-ḥams-ʿašrah 'uḥrē 'agzarahā 'aṣḥāb sufunuh wa-katāyibuh wa-tiqlāh fī šahr gumādē al-ūlē min sanat itnatayn wa-ʿašrīn wa-katab ibn ḥadīdo

'In the name of God, the Rahman, the merciful; this is what Abdallah son of Gabir and his companions took as slaughter sheep from Heracleopolis; we have taken from the representative of Theodorakios, the younger son of Apa Kyros, and from the representative of Christophoros, the eldest son of Apa Kyros, fifty sheep of slaughter and fifteen other sheep; he gave them for slaughter for the crew of his vessels, his cavalry, and infantry in the month of Gumada 1 in the year 24; Ibn Hadido has written.'

Qur'an

Birmingham Qur'an fragment (source)

Scholars have identified a number of early fragments of the Qur'an through radio carbon dating techniques. One of the earliest is a parchment held by the University of Birmingham, containing two leaves of a Qur'anic manuscript. In 2015, these were dated to between 568 and 645 AD. The text is a fine example of the so-called Higazi hand, the script and orthography (writing conventions) associated with the Umayyad State, likely originating in the writing school of Yathrib (Madina) in pre-Islamic times.

Damascus Psalm Fragment

20 Kalesparon Kal сра а келбу од. Хевігоў ГЕД ENERXICOHCAN Сфо́дра . Клітнн'єпіну міанаутшин 42. оа·хе·ўюет. ўм. Гев·ла ўм. NEFRENAYTOIC

A gloss of Psalm 78 found in the Geniza of the Umayyad mosque of Damascus, dated as early as the late 8th to 9th century. The Arabic text is written in Greek letters, exposing the pronunciation

of the language at the time. The language seems to reflect the vernacular of the period as well rather than the literary language. Thus, it provides our earliest witness to the spoken Arabic shortly after the Arab Conquests. For a monograph devoted to this document, see Al-Jallad (forthcoming).

fa-akelū wa-šabe 'ū ğeddā wa-šehwet-hum ğēb lahum

'So they ate and were greatly sated and he brought to them what they desired'

Second Millennium CE (in progress)

By this time, Arabic is firmly established as a global language, used across three continents for science, administration, law, religion, and more. The spoken language also spread across North Africa and the Middle East, although we know far less about medieval spoken Arabic due to the strong written standard. Calligraphic forms of Arabic emerge as the Arabic script becomes one of the main vehicles of artistic expression in Islamic civilization. The influence of Arabic begins to be seen on languages across the world.

Eleventh-Nineteenth Centuries CE

Mamluk Axe (source)



A Square Kufic Arabic inscription on the axe of Sultan Qait Bay, ruler of Egypt (1468-1495). The text says:

The Sultan, the victorious king, the father of happiness, Muhammad Ibn Qait Bay, his help may be glorified.

Ottoman Arabic inscription of the Old Mosque in Edirne, built in 1414 CE (source)



Arabic building inscriptions belong to a time-tested tradition, dating back to the pre-Islamic era. This gilded marble plaque, situated above the old mosque of Edirne, contains a *hadith* 'saying of the Islamic prophet' followed by honorific titles for the Ottoman ruler who patronized the mosque.

1) qāla l-nabī, 'alayhi l-salām, man banā li-llāhi masjidan banā llāhu lahū baytan fī l-jannati". Amara bi- 'imārati hādhā l-jāmi 'i l-sharīfi l-sulṭānu l-mu'ayyadu l-mujāhidu

2) l-murābițu manşūru l-liwā' qāhiru l-aʿdā' nāshiru l-ʿadli wa-l-iḥsāni ʿalā ahli l-dunyā lsultānu bnu l-sultāni bni l-sultāni ghiyāthu l-dunyā

3) wa-l-dīni Muḥammadu bnu Bāyazīd khān khallada llāhu sulṭānahū wa-awḍaḥa ʿalā l-ʿālamayni burhānahū fī muntaṣafi shawwāli sanati sitti ʿašari wa-thamānmi 'ah

1) The Prophet, peace be upon him, said: Who builds a *masjid* for God, God builds him a house in paradise. The righteous *sultān*, striving in *jihād*, has ordered the building of this noble *jāmi* '

2) [He who is] guarding the frontiers of Islam, victorious with his flag, overwhelming the enemies, spreading justice and beneficence over the inhabitants of the earth, the *sultān*, son of the *sultān*, son of the *sultān*, helper of the earth

3) And the religion, Muhammad, son of Bāyazīd, Khān, may god make his reign eternal and make his proof manifest on both worlds, in the middle of the [month of] shawwāl of the year eight hundred sixteen.

Mamluk Graffito from Jebel Qurma, Jordan (Photograph, A. Al-Jallad)



Jebel Qurma, near the oasis of Al-Azraq, was a popular look-out point over the centuries. Inscriptions in Safaitic, Thamudic, Greek, and Arabic scripts attest to the various periods in which men were dispatched to this hilltop to keep watch. This Mamluk inscription shares a rock with a Safaitic one, two forms of Arabic separated by over 15 centuries.

hadara fī hādā l-makāni l-mubāraki 'ahmadu bnu yahyā bni abū bakr

'Ahmad son of Yahyā son of Abū Bakr settled in this blessed place'

First Arabic book published with movable type, commissioned by Pope Julius II for Arabic-speaking Christians of the Middle East (<u>source</u>)



Gregorio de Gregorii, an Italian printer, published the first book in Arabic with moveable type in 1514, commissioned by Pope Julius II for delivery to Christians in the Middle East. This was the first printed book in Arabic.

A printed Arabic grammatical manual Arabic, 1866 (source)

බබ්බබ්බ බබ්බබ්බ බබ්බබ්බ 亡ら فصل الخطار في اصول لغة الأعراب الشيخ ناصيف البازجي اللبناني عفى عنه وقد أضيفَتْ اليهِ شُرُوح وزيادات لاجل أغام الفائدة

This concise manual on Arabic grammar was produced by the 19th century Syrian/Lebanese intellectual Nāṣīf al-Yāzijī (1800-1871), part of the Nahda, an Arabic cultural renaissance of the 19th and early 20th centuries, beginning in Egypt and the eastern Mediterranean.

Twentieth and Twenty-First Centuries CE

Arabic is the world's fifth most widely spoken language, stretching from the Atlantic to the Indian ocean. The true extent of Arabic's spoken diversity is discovered as researchers document hundreds of different dialectal forms of the language that were hidden behind the standardized Classical language over the centuries. Diglossia becomes publicly debated as Arabic's dialects begin to take a written form.

Wikipedia in Egyptian Arabic (source)



A version of Wikipedia written entirely in an elevated register of Egyptian colloquial Arabic, containing over 10,000 articles. The orthography contains some etymological spellings, such as رقم for ra'am 'number', as well as phonetic forms like تلات /talāt/ instead of the etymological form.



3arabizi (online Arabic) (source, Twitter)

A conventional way of represented in Arabic in Latin characters emerges on the internet and in text messages. Combining numbers and digraphs, Arabic's consonants completely accounted for, e.g. 3 = 'ayn, $7 = h\bar{a}'$, and so on. Often times, 3arabizi simply calques Arabic orthography, leaving many of the short vowels unwritten.

Modern Standard Arabic

A widely popular Japanese cartoon dubbed into Modern Standard Arabic and distributed across the Arabic speaking world. Classical Arabic continues to flourish, perhaps as never before, as mass education and media spread knowledge of a modernized version of the language, called Modern Standard Arabic or $fush\bar{a}$, far beyond a small educated elite. The complex interaction between this high register and the myriad of spoken forms will shape Arabic's future. For an excellent article on Arabic's future, see the death of Arabic is greatly exaggerated, by Elias Muhanna.

References:

Al-Jallad, A. 2015. Echoes of the Baal Cycle in a Safaito-Hismaic Inscription. Journal of Ancient Near Eastern Religion 15.1: 5–19.

Al-Jallad, A. 2017. Graeco-Arabica I: The Southern Levant. In A. Al-Jallad (ed.), Arabic in Context. Leiden: Brill, 99-186.

Al-Jallad & al-Manaser 2015. New Epigraphica from Jordan I: a pre-Islamic Arabic inscription in Greek letters and a Greek inscription from north-eastern Jordan. Arabian Epigraphic Notes 1: 51–70.

Ghabban, A.I. (*Trans.* & Remarks by R. G. Hoyland), "The Inscription Of Zuhayr, The Oldest Islamic Inscription (24 AH/AD 644–645), The Rise Of The Arabic Script And The Nature Of The Early Islamic State", Arabian Archaeology And Epigraphy, 2008, Volume 19, pp. 210-237.

Graf, D.F. & Zwettler, M.J. The North Arabian "Thamudic E" Inscription from Uraynibah West. Bulletin of the American Schools of Oriental Research 335, 2004: 53-89. Pages: 71–83

Harāhšah, R.M.A. & Al-Šudayfāt, Y.M Nuqūš şafawiyyah mu'rraḥah ilà ḥukm aġrībā al-ṯānī (19/50 – 92/93 m). Maǧallat mu'tah li-l-buḥūṯ wa-'l-dirāsāt (silsilat al-'ulūm al-insāniyyah wa-'l-iǧtimā'iyyah) 21:6, 2006: 111-129.

Hayajneh, Hani, Mohammad I. Ababneh, and Fawzi Khraysheh. 2015. "Die Götter von Ammon, Moab Und Edom in Einer Neuen Frühnordarabischen Inschrift Aus Südost- Jordanien." In Fünftes Treffen Der Arbeitsgemeinschaft Semitistik in Der Deutschen Morgenländischen Gesellschaft Vom 15. – 17. Februar 2012 an Der Universität Basel, edited by V. Golinets, H.-P. Mathys, and S. Sarasin, 79 – 105. Münster: Ugarit-Verlag.

Kienast, B. Mitteilung von einer Tontafel mit altsüdarabischer Beschriftung. Pages 43-44, pl. 46 in H. Lenzen (ed.), XIV. Vorläufiger Bericht über die von dem Deutschen Archäologischen Institut und der Deutschen Orient-Gesellschaft aus Mitteln der Deutschen Forschungsgemeinschaft unternommenen Ausgrabungen in Uruk-Warka, Winter 1955/56. (Abhandlungen der deutschen Orientgesellschaft, 3). Berlin: Mann, 1958. Pages: 43-44 Plates: 46:A,B.

Nehmé, Laïla. 2010. "A Glimpse of the Development of the Nabataean Script into Arabic Based on Old and New Epigraphic Material." In The Development of Arabic as a Written Language, edited by Michael C. A Macdonald, 47–88. Supplement to the Proceedings of the Seminar for Arabian Studies 40. Oxford: Archaeopress.

Robin, C.J., A.I. al-Ghabbān, and S.F. al-Sa'īd. 2014. "Inscriptions Antiques de La Région de Najrān (Arabie Séoudite Méridionale): Nouveaux jalons pour l'histoire de l'écriture, de la Langue et du Calendrier Arabe." CRAI, no. 3: 1033 – 1128.

Sass, B. Studia Alphabetica. On the Origin and Early History of the Northwest Semitic, South Semitic and Greek Alphabets. (Orbis Biblicus et Orientalis, 102). Freiburg Schweiz: Universitätsverlag / Göttingen: Vandenhoek & Ruprecht, 1991. Pages: 48-49, fig. 24, 25

Seal Ward: Ward, W.H. The seal cylinders of Western Asia. (Carnegie Institution of Washington Publications, 100). Washington, DC: Carnegie Institution of Washington , 1910. Pages: 352