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Equilibrium, punctuation, dia-planar diffusion: Towards understanding early Aramaic - Arabic contact

Equilibrio, puntuación, difusión diaplantar:
hacia la comprensión del contacto temprano entre
arameo y árabe

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Few would contest the fact that Arabs and Aramaeans share a long cultural history. Nor is it controversial to say that there has been contact-based influence between the two languages. However, what is missing until today is the recognition of how pervasive this contact-based influence has been. In this paper I present 24 detailed structural arguments from the basic domains of phonology, morphophonology, morphology and syntax for widespread pre- and early Islamic influence from Aramaic on Arabic. Precisely because the contact lasted for such a long time, equilibrium effects as per Dixon (1997) introduce a mosaic of Aramaic linguistic traits into Arabic. These are modelled in terms of “dia-planar diffusion”, the spread of different features among different speech communities at different times.

Key words: Arabic; Aramaic; pre- and early Islamic language contact; small speech communities; diffusion; reconstruction.

Pocos negarían el hecho de que los árabes y los arameos comparten una larga historia común. Tampoco resulta polémico decir que ha habido una influencia basada en el contacto entre ambas lenguas. Sin embargo, lo que no ha sido reconocido hasta hoy día es la profundidad y dimensión de dicha influencia. En este trabajo presento 24 argumentos estructurales y de detalle tomados del terreno de la fonología, morfofonología, morfología y sintaxis para mostrar la amplia influencia del arameo en el árabe preislámico y de los primeros tiempos del islam. Dado que el contacto entre ambas lenguas se prolongó durante tanto tiempo, los efectos del equilibrio, de acuerdo con los términos de Dixon (1997), introdujeron un mosaico de elementos lingüísticos del arameo en el árabe. Estos elementos se presentan en términos de “difusión diaplantar”, es decir, la difusión de diferentes características entre distintas comunidades de hablantes y en épocas diversas.

Palabras clave: Árabe, arameo; contacto de lenguas antes del islam y en el islam temprano; hablas minoritarias; difusión; reconstrucción.

Introduction: Arabic?

While Semiticists continue to search for sufficient linguistic features defining the entity “Arabic” (e.g. Al-Jallad 2017), Retsö shows that defining a priori what should and should not be included as Arabic is an impossible task.¹ Assuming this position leads to a deceptively obvious question, namely why this is so. In this paper I will make a small contribution to this discussion by suggesting that contact with Aramaic has played a significant role in influencing aspects of Arabic grammar. To begin the paper I will speak of Arabic as a collective term. Anything which influences a part of Arabic influences Arabic. In the course of the paper in sections 3, 4 and 5 I will become more specific and define more precisely which varieties of Arabic were exposed to these influences. After describing the cultural historical argument for Aramaic-Arabic influence and convergence in section 6, in section 7 I describe a model termed “directed dia-planar diffusion” which allows one to conceptualize the diverse influences characterizing Aramaic-Arabic contact in a manner that counters a dominant Semiticist view of such convergences as due to independent parallel development.²

1. History: Punctuated equilibrium. An overview

Clearly Arabic is a language which has existed as an interpretable object for a long time.³ Its history divides into two contrasting stages which are interesting to historical linguistics. Until the advent of Islam (nominally CE 622) Arabic was one of a number of Semitic languages, spoken in the Arabian peninsula, Jordan, Syria, parts of Lebanon, Iraq

¹ Retsö, “What is Arabic?”.

² The material and model developed in this paper were first presented at the conference “Transmission and Diffusion” held at the Max Plank Institute for Psycholinguistics in Nijmegen in 2008.

³ I.e. one cannot speak in the abstract of a language being old, but when one has relatively early written sources (datable inscriptions from CE 325), early mentions of an ‘Arab’ people (BCE 825 in an Assyrian text) and the ability to triangulate back in time on the basis of contemporary distributions (comparative method), one has a richer and more specific insight into a language history than is the case with most languages.

and probably southern Turkey and perhaps the Negev and Sinai. Up to this point its speakers lived in close proximity among a number of Semitic-speaking peoples, by far the most important of which were Aramaic speakers, whose language, beginning at least in BCE 600 was the lingua franca of the region. The closer one moves to Islam, the more prominent Arabic became, if the growth of inscriptions and papyri is an indication of language vitality.

Matters took a dramatic turn with the advent of Islam and the accompanying expansion of a relatively large population of Arabic speakers out of the Middle East. The era of equilibrium became, for a time at least, an era of punctuation. This represents an important linguistic hiatus in the historical interpretation of Arabic, as during it varieties which previously had existed as neighbors moved hundreds or even thousands of miles apart. New centers of Arabic developed, eventually an unbroken chain of Arabic spread across North Africa, and in some cases new Sprachinseln came into existence as the Arabic-Islamic expansion began to ebb and new phases of equilibrium ensued. To a degree the era of punctuation allows important insights into the state of Arabic in the period immediately preceding 622 CE. It is argued here that among the most important influences which become visible is the importance of Aramaic as an adstratal and substratal language to Arabic which has influenced Arabic in multifarious ways.

I should note that I do not attempt in this presentation to explicitly contribute to the borrowing/shift or borrowing/imposition debate in contact linguistics, even if I assume that the long-term Aramaean-Arab contact did produce the outcomes described here. I think that in situations of long-term equilibrium defining the outcomes of contact presents a challenge to current models of language change. While I will occasionally observe that a certain outcome is what one may expect in the case of borrowing or shift, my interest in the first instance is on establishing a large set of features which are relevant to understanding the history of Arabic, and in the longer term may be relevant for understanding the multifaceted ways languages can change.

2. The era of equilibrium: Directed Dia-Planar Diffusion: Aramaic-Arabic Contact

To begin a very brief sketch of Aramaic is in order. Aramaic is first attested about BCE 800.⁴ Old Aramaic consists of about a 5,000 word mainly epigraphic corpus.⁵ This gave way in attested sources to Imperial Aramaic, first used during the Assyrian Empire, then as the dominant language of the Achaemenids. Two of the most important corpora come from this era, Egyptian papyri dating from the fifth century BCE and Biblical Aramaic, the latter found in the Books of Daniel and part of Ezra in the Hebrew Bible.

Thereafter develop a number of varieties collectively known as Middle Aramaic,⁶ spoken in the first millennium CE. These include Palestinian Jewish, Christian and Samaritan Aramaic, Palmyrean, Nabataean, Jewish Babylonian, Classical Mandaic and most significantly Syriac. This last variety, which flourished between 200-700 CE and was centered in Edessa (present-day Urfa in southern Anatolia, Turkey), was the language of the early Christian community and later of the Nestorian Christians. Syriac eventually split into an easterly (Nestorian) and westerly (Jacobite/Maronite) tradition. Samaritan Aramaic, a second variety used in this comparison is best attested from the 4th century CE. It appears that its speakers shifted to Arabic around the time of the Arabic-Islamic expansion.⁷

As the varietal designations suggest, there never developed in Aramaic a standard Aramaic comparable to Classical Arabic as it emerged in the late eighth century. Imperial Aramaic is the closest, but any uniformity in it is usually explained in terms of koinization rather than formal, planned standardization.⁸

⁴ Greenfield, "The Dialects of Early Aramaic", p. 94; Garr, *Dialect Geography of Syria-Palestine*, p. 231.

⁵ Degen, *Altaramäische Grammatik*.

⁶ Boyarin, "An Inquiry into the Formation of Middle Aramaic Dialects".

⁷ Macuch, *Grammatik des samaritanischen Aramäischen*, XXXIV.

⁸ Huehnergard's ("What is Aramaic?", p. 273) invocation of Arabic as a parallel for the structural development of Imperial Aramaic is problematic. Invoking a simplification paradigm implicitly based on Ferguson and Fück, Huehnergard suggests that spread among foreign speakers and outside of its original home area led to a uniformization of Aramaic. Among other problems with using Arabic as an analogical model is that an historically-linear simplification is not an obvious attribute of Arabic linguistic history (Owens, *A lin-*

Broadly speaking, by the early Christian era there had developed two dialect areas, an eastern one, including Babylonian and Nestorian Syriac, and a western one, including the Palestinian varieties and Nabataean. This dialectal differentiation continues today, with the dialect around Ma'lula in Syria the one surviving member of the western branch, and a number of varieties spoken in Turkey, Iran, Iraq and eastern Syria continuing older Eastern Aramaic. Turoyo is often considered to be in a class of its own, however.⁹ Many of these contemporary varieties have unfortunately slipped into the category of endangered languages, as political instability beginning in late Ottoman and continuing to the present day has forced large scale migration and emigration of Aramaic speakers out of the region.¹⁰

In this paper I rely mainly on a sample of three Aramaic varieties for comparison with Arabic, Biblical Aramaic,¹¹ Syriac¹² and Samaritan Aramaic.¹³ The choice of these three varieties is motivated by three factors. First, a reasonable number of very good, detailed descriptive studies allow for broad-based comparisons with Arabic. Secondly, the varieties allow divergent diachronic and geographical sampling. Biblical Aramaic is a chronologically older variety, while Samaritan and Syriac represent the emerging West/East geographically-based varieties. Thirdly, they are all attested in scripts which allow short vowels to be interpreted (as opposed to e.g. the consonantal scripts of Egyptian Aramaic or Palestinian Jewish Aramaic). Where appropriate evidence from other Aramaic varieties will be adduced.

Aramaic contact with Akkadian has been treated in detail,¹⁴ as has Greek and Latin contact with Syriac¹⁵ while contact with Hebrew has been intense at various points in Aramaic history and forms a contact

guistic history of Arabic, pp. 24-6). A further issue, rarely given prominence in Semitic linguistics, is whether norms of writing don't necessarily abstract away from representing existent variation. It is, after all, thanks in part to Sibawaih, a linguist who has no comparable counterpart in the Aramaic tradition, that we discern a variation in Arabic even within the normalizing writing tradition which Sibawaih stood in.

⁹ Jastrow, "The Neo-Aramaic Languages".

¹⁰ Owens, "Endangered Languages of the Middle East".

¹¹ Rosenthal, *A Grammar of Biblical Aramaic*.

¹² Nöldeke, *Kurzgefasste Syrische Grammatik*; Daniels "Classical Syriac Phonology"; Muraoka "Syriac Morphology".

¹³ Macuch, *Grammatik des samaritanischen Aramäischen*.

¹⁴ Kaufman, "The Akkadian Influence on Aramaic".

¹⁵ Butts, *Language change in the wake of empire*.

backdrop to many varieties of Aramaic.¹⁶ Arabic-Aramaic contact on the other hand is either not treated at all, as in Rosenthal's *A Grammar of Biblical Aramaic* (pp. 57-9), restricted mainly to lexicon,¹⁷ treated only in an era where Aramaic was well on its way to acceding to Arabic as the lingua franca of the Middle East,¹⁸ or treated in such a geo-politically limited manner as to preclude deriving a broad overview of the phenomenon.¹⁹ As will become clear in the course of this paper, the current treatment views Weninger's summary of Arabic-Aramaic contact as far too dependent on written sources alone.²⁰ Retsö (2006) speaks of contact ("interference") "... one millennium before the Islamic conquest",²¹ and has a useful summary of evidence of Arabic contact in Qoranic Arabic. However, his treatment is largely restricted to the lexicon.

Blau presents a number of parallel phenomena in Aramaic and in modern Arabic dialects, which he, refreshingly, does not attempt to explain in terms of parallel development. However, he does not develop a systematic framework for explaining the observed similarities, and he appears to limit his observations mainly to contemporary contact.²² Diem found evidence for Aramaic influence on Arabic, which will be noted below, though it falls short of a systematic treatment of the subject. Still, the current presentation finds agreement with a number of points in Diem's article.²³ The current paper departs from most treatments to date, which are largely restricted to lexical contact, in concentrating exclusively on evidence of structural influence in the realms of phonology, morphophonology, morphology and syntax.

Retsö criticizes the thinking behind the reticence to countenance large-scale contact-based influence among the Semitic languages.²⁴ As

¹⁶ e.g. Rosenthal, *A Grammar of Biblical Aramaic*, p. 9; Segert, *Altaramäische Grammatik*, pp. 35, 95-6, 103; Macuch, *Grammatik des samaritanischen Aramäischen*, p. 57.

¹⁷ Fraenkel, *Die aramäischen Fremdwörter im Arabischen*; Jeffrey, *The foreign vocabulary of the Qurʾān*.

¹⁸ Behnstedt and Arnold, *Arabisch-aramäische Sprachbeziehungen im Qalamūn (Syrien)*.

¹⁹ Neishadt, "The Aramaic substrate of Palestinian Arabic".

²⁰ Weninger, "Aramaic-Arabic language contact".

²¹ Retsö, "Aramaic/Syriac loanwords".

²² Blau, "On some Arabic Dialectal Features".

²³ Diem, "Zur Frage des Substrats im Arabischen".

²⁴ Retsö, "Kaskasa, t-passives and the dialect geography of ancient Arabia".

his position is essentially the one adopted in the current section, he is worth quoting at length.

“... the different Semitic languages are basically closed-worlds. It is tacitly assumed that these languages have once upon a time arisen as regional differentiations from a more or less unitary base. After that time they have sometimes interacted, as documented by borrowings, and, in some cases, substratum influence, but on the whole they have remained closed linguistic worlds leading lives of their own like Leibnizian monads.²⁵ Like in these, similar phenomena in different languages tend to be seen as parallel developments, the result of drift as described by Sapir (although Sapir is never referred to).”²⁶

As broad counterevidence against this approach to interpreting Semitic language history, Retsö uses Arabic as a swing language among the Semitic languages, citing evidence from two geographical regions. He cites isoglosses linking Aramaic and Arabic on the one hand, the northerly extension of Semitic, as in (1a) vs. isoglosses linking Arabic and South Arabian languages on the other, as in (1b).

(1) Feminine *-t*, Arabic

a. *-at-* pre-suffix and possessed (construct or *idaafa*); *bugar-at-na* “our cow”

-a(h) elsewhere: *bugara* “a cow”

b. *Saʿadah* (Arabic, Yemen) invariably *-t*

Aramaic and Arabic show the same *-t* ~ *-a(h)* (Aramaic *-aa*, *biš-aa* ‘evil one’) alternation of the feminine *-t* (*-t* construct state, *-ah* otherwise). Geez, Sabaen and most modern South Arabian languages have invariable *-t*. In addition, Arabic dialects in Saʿadah in Yemen also have *-t* invariably (see 3.1.3.1 below).²⁷

Retsö speaks of “...continuum of isoglosses”,²⁸ which would have been in existence at the time of the initial Arabic-Islamic expansion.

Retsö’s position contrasts with that of another well-known Semitist, Macuch.²⁹ Macuch also observes parallels between Aramaic and

²⁵ Admittedly this is a general danger in historical linguistics. Grace (“Regularity of Change in What?”, p. 157) speaks of the “once a language always a language assumption” that can color historical linguistic interpretations.

²⁶ Retsö, “Kaskasa, t-passives and the dialect geography of ancient Arabia”, p. 112.

²⁷ Note here that there are Aramaic attestations from Hermopolis and elsewhere in Egyptian Aramaic (in the “Official” Aramaic era) with F. *-t* (rather than *-aa*) (Greenfield, “The Dialects of Early Aramaic”, p. 96; Muraoka and Porten, *A Grammar of Egyptian Aramaic*, p. 65).

²⁸ Retsö, “What is Arabic?”, p. 445.

²⁹ Macuch, “Pseudo-Ethiopisms in Samaritan Hebrew and Aramaic”, p. 969.

North African Arabic dialects in respect of syllable structure (see 3.1.1.2.2), but peremptorily dismisses them, noting that since the phenomenon is found in North African Arabic, "... it would be hard to explain it exclusively through Aramaic influence". Here one observes a widespread pre-theoretical filter that truncates exploration of potentially interesting leads in reconstructing Semitic language history: as far as we know, there were no large scale Aramaic settlements in North Africa, so any similarities between North African Arabic and Aramaic must be due to independent parallel development. The thrust of this article argues against this perspective.

The current article broadly follows Retsö's and is critical of the received Semiticist position on the issue of contact. However, I take a different tack from the continuum model, instead arguing that long-term Arabic-Aramaic contact shows the effects of what Dixon termed an era of equilibrium.³⁰ In Dixon's model, languages often defy straightforward genetic classification via a classical branching tree model due to an era of equilibrium in which communities of speakers stay in contact over long periods of time, facilitating significant change via contact. In the case of Aramaic-Arabic contact the matter is complicated by the fact that contact between different communities of Arabic and Aramaic speakers at different eras produced local influences, some more general than others. I model this diffuse contact in terms of dia-planar diffusion.³¹ What makes Arabic interesting in this context is that the sometimes dramatic effects of these earlier exchanges often come to the fore during the era of punctuation when Arabic expanded rapidly in the wake of the Arab-Islamic expansion beginning in the seventh century. That is the effects of equilibrium can be followed into an era of punctuation, particularly in the early centuries of Islam.

I should note that in this paper I treat Classical Arabic only in passing. As argued before³² I do not regard Classical Arabic as a proto-object, nor is it possible to derive contemporary dialects, or an ancestral variety thereof, from Classical Arabic. Rather, the dialects themselves have an independent status as contributing to understanding Arabic language history. Only by assuming this position can one understand the

³⁰ Dixon, *The rise and fall of languages*.

³¹ Owens, "Dia-planar diffusion".

³² Owens, *A linguistic history of Arabic*.

exposition in this paper. I also largely leave out of discussion the status of Nabataean³³ and other early epigraphic sources from that same area such as Safaitic,³⁴ as this would constitute a chapter in and of itself in the interpretation of Arabic language history.

3. Presentation of features: a basic inventory

In this section I present a basic core of 24 features which are relevant for establishing Aramaic-Arabic affiliation. This section is descriptive. Because some of the issues have wide ramifications it will not be possible to do justice to each of them. By way of illustration, two of the features alone, the constraint and repair schema (3.1.1.2.2) and word order in Biblical Aramaic (3.1.4.4) were each treated in separate articles³⁵ amounting together to over forty pages. A choice therefore needs to be made between breadth and depth. This article errs in the direction of breadth. Scholars will no doubt take issue with many of the analyses offered here, but I think it is relevant to establish an inventory of case studies which can serve as an orientation for the future.

In each section I summarize the structural similarity, in some cases identity, between Aramaic and Arabic. This section is divided into two parts. 3.1 discusses the problems in greater detail, while 3.2 gives only a brief mention of each issue. In each I follow the order, phonology - morphophonology - morphology – syntax – semantics.

A major objective in this section is to establish that the relevant features are well-established in the early varieties of Aramaic, so that at the end of each section an inventory will be made of which varieties of those covered here have them. The descriptive basis of Arabic is far richer and to the extent they cannot be sufficiently treated in section 3, will be treated in a separate section in 5.1.

³³ Diem, “Die nabatäischen Inschriften”.

³⁴ e.g. Peters, “Romans and Bedouin in southern Syria”, p. 322; Parker, “Peasants, pastoralists and ‘Pax Romana’”, p. 41; Al-Jallad, *An outline of the grammar of the Safaitic inscriptions*.

³⁵ Owens and Dodsworth, “Stability in subject-verb word order”; Owens, “Dia-planar diffusion”.

3.1 Detailed case studies

3.1.1 Phonology

3.1.1.1 Segments

Four striking segmental correspondences between Aramaic and Arabic can be noted.

3.1.1.1.1 /r/

The first is the sound represented by Aramaic /r/ (ܪ). Beginning with Biblical Aramaic /r/ is described as belonging to the category of sounds which pattern with the guttural sounds, /ʕ, ʕ, h/, without actually being of the class of gutturals (see 3.1.1.2.1). A typical formulation is “a guttural or /r/”.³⁶ Rosenthal is frequently forced to define a common phenomenon which obtains over two sets of sounds, as “Roots containing a laryngeal or ʕ”.³⁷ The linguistic generalization is that the two sets form a single natural class, which underscores the current uvular (laryngeal) value of /r/.

In this formulation, the class is bifurcated, gutturals and /r/, the latter presumably being a trill or flap. An obvious way to explain the functional unity of the class is to assume that /r/ in fact represented a uvular trill (/ʀ/), or the voiced velar fricative /ɣ/. The voiced velar fricative of proto Semitic has been lost in Aramaic, having merged with ʕ (/ʕ/) (see 3.1.1.1.2),³⁸ so there is phonological space for the present interpretation.³⁹

Besides the systematic, syllable structure evidence in favor of this, which will be adduced below, it can be noted that in various contemporary Mesopotamian Arabic dialects, Arabic /r/ has merged with /ɣ/, in particular Christian and Jewish Arabic dialects. Hence, for instance, Baghdadi Christian /ɣayīb/ “strange”, < /yariīb/.⁴⁰ This pronunciation

³⁶ Nöldeke, *Kurzgefasste Syrische Grammatik*, p. 107, “ein Guttural oder r”, also pp. 32, 38; Muraoka, *Classical Syriac*, p. 10, Rosenthal, *A Grammar of Biblical Aramaic*, p. 16

³⁷ Rosenthal, *A Grammar of Biblical Aramaic*, p. 46.

³⁸ Moscati et al., *An Introduction to the Comparative Grammar of the Semitic Languages*, p. 40.

³⁹ Khan (“Jewish Palestinian Aramaic Phonology”, p. 107) writing on Jewish Palestinian Aramaic, a variety contemporary with Samaritan Aramaic, notes that /r/ may have had a uvular pronunciation.

⁴⁰ Abu Haidar, *Christian Arabic of Baghdad*, p. 9; also Jastrow, “Die mesopotamisch-arabischen Qəltu-Dialekte”, p. 39.

of Arabic /ɣ/ (yain) is attested in writing in Baghdad as early as the ninth century.⁴¹ It may be suggested that this reflex in Christian and Jewish Arabic dialects is due to language shift by original Aramaic speakers, importing their uvular pronunciation of /r/ into their version of Arabic. While the most reported-on guttural reflex of Arabic /r/ is in Iraqi Arabic, a /ɣ/ reflex is also reported in Damascene Arabic.⁴² Al-Wer calls this variant innovative in Damascus, though a comparative perspective might reveal a broader substratal influence. In addition Aguadé⁴³ as /r/ reflex identifies a pre-Hilali /ʁ/ characteristic inter alia of Fez, Tetouan and various Jewish Moroccan dialects. Behnstedt notes that in Taza in northern Morocco the reflex is /ɣ/⁴⁴ (both references drawn to my attention by Ignacio Ferrando).

Summary: Guttural /r/ found in Arabic and Aramaic (BAr, Syriac)

3.1.1.1.2 Uvular fricatives

Borg explicitly relates various phenomena found in Cypriot Arabic to an Aramaic substratum.⁴⁵ He includes the change of $\gamma > \xi$, and a postulated $*x > *h$. Both of these are highly characteristic of Aramaic, and are otherwise hardly found in Arabic. Likewise, Nöldeke refers specifically to reflexes of $*\gamma$, noting that in Yemen (Dathina, west of Aden) /ɣ/ is realized as /ʁ/.⁴⁶

Summary: $\gamma > \xi$ attested in Arabic and Aramaic (BAr, Syriac, Sam)

3.1.1.1.3 Pharyngeal raising

In Samaritan Aramaic a short low vowel /a/ raises to /e/ after a pharyngeal /h/ or /ʁ/.⁴⁷ Macuch notes that this is particularly common in nominal forms which go back to $*qa\text{ʔ}l$, where the pharyngeal has disappeared.

(2) *leem* “bread” < $*le\text{ʔ}em$

This same reflex of $a > e$ in the context of pharyngeals is attested in what I have termed the Bagirmi dialect of Western Sudanic Arabic,

⁴¹ Blanc, *Communal Dialects in Baghdad*, p. 23.

⁴² Al-Wer (2013), p. 257

⁴³ Aguadé, “Estudio descriptivo y comparativo”, pp. 78-9.

⁴⁴ Behnstedt, “Zwei Texte im Altstadt - Dialekt (T3) von Taza (Marokko)”, p. 165.

⁴⁵ Borg, “Cypriot Maronite Arabic”, pp. 539-540.

⁴⁶ Nöldeke, *Kurzgefasste Syrische Grammatik*, p. 121.

⁴⁷ Macuch, *Grammatik des samaritanischen Aramäischen*, pp. 106, 118.

easterly Borno, a strip of Cameroon, and on into the Bagirmi-speaking area of Chad south of Ndjamena.

(3) *lehem* < *laḥam*, “meat” *beher* < *baḥar* ‘river’, *ḥedda* “he passed over” < *ḥadda*

The shift in this dialect reflects an earlier stage before /h/ merged with /ħ/ and /ʕ/ with /ʔ/. This can be seen in the reflex of *a in the context of *h, as in *ahabal* ‘dim witted’ or *hazza* ‘shake’. No raising has occurred in these, as these have a voiceless glottal fricative rather than a pharyngeal.

Summary: *ħa/ʕa > *ḥe/ʕe is shared between Bagirmi Arabic and Samaritan Aramaic.

3.1.1.1.4 Diphthongs

In West Syriac and in Samaritan Aramaic the diphthongs /*ay/ and /*aw/ show the following phonological alternation:⁴⁸

(4) /*ay/, /*aw/ → /e/, /o/ in closed syllables

/ii/, /uu/ in open syllables

bet “house”, *bet-nu* “our house”, vs. *biit-ak* “your.M house”

yom “day”, vs. *yuum-a* “its day”

While this feature appears to be a later innovation relative to Biblical Aramaic, an identical change is attested in Akkadian,⁴⁹ so it could be that the change began much earlier and spread variably.

In most varieties of Arabic the diphthongs either maintain their original value, or shift to monophthong /ee/, /oo/.

(5) *bayt* “house”, *yawm* “day”: Najdi etc.

beet, *yoom*: Nigerian Arabic etc.

In one geographically large variety, namely in most North African dialects, from Tunisia to Morocco the diphthongs are raised to *ii* and *uu* in all stems, and usually in suffixes as well. Uzbekistan Arabic also has the /uu/ reflex of *aw.⁵⁰

(6) *nuum* ‘sleep’ < **nawm*

These forms are identical to the open syllable variant of Syriac and Samaritan Aramaic.

⁴⁸ Nöldeke, *Kurzgefasste Syrische Grammatik*, p. 34; Macuch, *Grammatik des samaritanischen Aramäischen*, pp. 118, 293.

⁴⁹ Kaufman, “The Akkadian Influence on Aramaic”, p. 20.

⁵⁰ Fischer, “Die Sprache der arabischen Sprachinsel in Uzbekistan”, p. 235.

In Eastern Syriac the alternation was *ay/aw* in open syllables, *ee/oo* in closed. In the Qalamuun region in central Syria as well as in NW Syria⁵¹ an identical distribution is found:

(7) *beet/baytu* “house/his house”

In the first case, North African Arabic raising of diphthongs to /ii/, /uu/ it is reasonable to see a generalization of (4) effected by a substrate of Aramaic speakers. In the case of dialects in the Qalamuun area a contact explanation is very plausible.

Summary: *ay/aw* → *ii/uu* (etc.) found in Arabic and Aramaic (Syriac, Sam).

3.1.1.2 Syllable structure

3.1.1.2.1 Gutturality

The guttural sounds /ħ, h, ʕ, ɣ/ (the last according to the interpretation in 3.1.1.1.1 above), have two prominent properties common to BAr, Syriac and Samaritan. The first is a general tendency to lower a short high vowel to /a/ in the context of one of these sounds.⁵²

(8) *mšabbah* “praising” vs. *mmallil* “speaking”⁵³

ʕabd-ēt “I made” vs. *kitb-ēt* “I wrote”⁵⁴

The second is in verbs, to insert an /a/ in the context: ħ, h, ʕ, ɣ_C-V in conditions summarized in 3.1.1.2.2 below.

(9) *taʕbd-uun* → *taʕabd-uun* “you.M.PL do” (note: first /a/ due to general lowering effect of /ʕ/ noted in previous point)⁵⁵

The second person MSG suffix is either *-ta*, or *-t*. If the latter occurs (there is variation on this point), an epenthetic /a/ will be inserted after the gutturals:

(10) *hištkaħ-at* “you were found”⁵⁶

In Arabic gutturals nearly always tend to favor a low /a/ rather than a high vowel. This obtains in Classical Arabic (*Kitaab II*), as well as in

⁵¹ Behnstedt and Arnold, *Arabisch-aramäische Sprachbeziehungen im Qalamūn (Syrien)*, pp. 68-9; Behnstedt, *Sprachatlas von Syrien*, 1002.

⁵² Nöldeke, *Kurzgefasste Syrische Grammatik*, pp. 36, 62; Malone, “Wave Theory, Rule Ordering and Hebrew-Aramaic Segolation”, p. 47.

⁵³ Rosenthal, *A Grammar of Biblical Aramaic*, p. 17

⁵⁴ Rosenthal, *A Grammar of Biblical Aramaic*, p. 46.

⁵⁵ Rosenthal, *A Grammar of Biblical Aramaic*, p. 46

⁵⁶ Rosenthal, *A Grammar of Biblical Aramaic*, p. 47.

dialects. Thus, in Anaiza Najdi (Saudi Arabia),⁵⁷ whereas a low vowel is normally raised in an open syllable, before or after a guttural raising is inhibited.

(11) *xazan* “he stored”, vs. *sikan* “he lived”

More striking than the lowering effect of the gutturals is a phonetic phenomenon very similar to the Aramaic /a/ insertion, termed the “gahawa” syndrome (a term coined by Haim Blanc). An identical set of gutturals (plus /x/, not found in Aramaic)⁵⁸ /ħ, x, ɣ, ʕ, h/ induces the insertion of /a/ in the context C_{gut}C. The term “gahawa” comes from the varying pronunciation of the word for coffee, *gahwa* in dialects without the gahawa syndrome, *gahawa* for those with it. The difference with Aramaic resides only in the distribution of the phenomenon. As described by Rosenthal for BA_r and Nöldeke for Syriac, in Aramaic it is restricted to imperfect verbs or the 2MSG perfect form. In Arabic it is generalized to all C_{gut}C context, both verbs and nouns.

Summary:

1. Guttural consonants induce lowering of a short high vowel to /a/. (BA_r, Syr, Sam)

2. C_{gut}C in Arabic, and C_{gut}CC in BA_r and perhaps Syriac induces insertion of /a/ after the guttural consonant.

3.1.1.2.2 Epenthesis and open syllables: the constraint and repair schema (C-R)

The interplay of syllable structure and epenthesis lies at the very heart of both Arabic and Aramaic phonology. I have a detailed treatment of this from a comparative perspective,⁵⁹ and here will summarize only the barest of points.

Both Arabic and Aramaic⁶⁰ share two constraints on syllable structure.

⁵⁷ Johnstone, “Aspects of Syllabification in the Spoken Arabic of ‘Anaiza’”, p. 6.

⁵⁸ There is, of course a /x/ in many varieties of Aramaic, including Biblical and Syriac, as an allophonic variant of /k/, after a vowel. Apparently a /x/ arising from the context –Vk > Vx does not induce guttural /a/ in the context –VkC.

⁵⁹ Owens “Dia-planar diffusion”.

⁶⁰ Samaritan Aramaic stands apart from Syriac and Biblical Aramaic in respect of the treatment of short vowels in open syllables. Whereas the former delete in this context, Samaritan Aramaic can lengthen a short vowel in a pre-stressed or stressed open syllable. The vowel lengthening rules in particular recall a similar phenomenon in Biblical Hebrew, while Macuch (*Grammatik des samaritanischen Aramäischen*, pp. 121) notes that epent-

1. Sequences of three consonants or sequences of two consonants + pause (#) are not allowed. Instead, an epenthetic vowel is introduced to break up the sequence between the first and second C.

(12) *melk#* > *melek* (BAr, as in (8))
malk > *malik* (Baghdadi Arabic)

2. A short vowel is not allowed in an open syllable. If such occurs, it is deleted. As Rosenthal puts it, “Short vowels in unstressed open syllables have been reduced to a zero or murmured vowel. Inversely, preservation of a short vowel in an open syllable usually requires that that syllable be stressed.”⁶¹ For the second condition, see 3.1.2.1 below.

(13) *melek-aa* > *melk-aa* ‘the king’ (BAr)
malik-u > *malk-u* ‘his king’ (Baghdadi Arabic)

The two constraints can produce a cycle of events which I term the constraint and repair schema (C-R).

(14) Aramaic
 initial form short high vowel deleted in open syllable repair via insertion in CC/kt

netkteb-aan > *netkØtb-aan* > *netkatb-aan*
 ‘they F.PL. were written’

(15) Baghdadi Arabic
yiktub-uun > *yiktub-uun* > *yikitb-uun* ‘they write’

In both Aramaic and Arabic there are many variants of the constraint and repair scheme⁶² including the effects of gutturalty, in Syriac sonority,⁶³ differential treatment of short high and low vowels, whether CCC sequences are otherwise allowed and the protecting effects of

hetic vowels are much less common in Samaritan than in other varieties of Middle Aramaic. Post-stress short vowels in open syllables delete, as in Syriac and Biblical Aramaic. However, Samaritan may also protect the short vowel it via consonant doubling (Macuch, *Grammatik des samaritanischen Aramäischen*, pp. 84, 120), a strategy also attested in multiple dialects in North African Arabic, for instance Tripolitanian. Diem (“Zur Frage des Substrats im Arabischen”, p. 47) notes a convergence in North Lebanese Arabic and Aramaic in respect of short vowel deletion, though restricts the observation to short /a/ and does not relate the issue to further aspects of syllable structure. Rosenthal, *A Grammar of Biblical Aramaic*, pp. 17, 27, 28; Nöldeke, *Kurzgefasste Syrische Grammatik*, p. 29; Mu-raoka 1996: 10.

⁶¹ Rosenthal, *A Grammar of Biblical Aramaic*, p. 17.

⁶² See e.g. Malone, “Modern”, p. and Voigt, “Mandaic”, pp. 161-2 on Mandaic.

⁶³ Knudsen, *Classical Syriac phonology*, pp. 137-41.

stress (see 3.1.2.1) to name a few. Many relevant details are discussed,⁶⁴ though many points remain open as well.

Samaritan Aramaic only partially follows the C-R schema. Its syllable structure apparently was influenced heavily by Hebrew. Conspiratorially, however, Samaritan is subject to the same avoidance of short open syllables as are Biblical Aramaic and Syriac. The preferred solution is lengthening of the vowel, however, not the C-R schema.

Summary: Nearly identical C-R schemas operate in Arabic and in Biblical Aramaic and Syriac.

I would note here that since the C-R schema itself consists of multiple parts – syllable structure constraints coupled with deletion and/or epenthetic vowel insertion – reference will sometimes be made to the C-R schema as a whole, or, where appropriate, to individual parts of it.

3.1.1.2.3 Systematic status of epenthetic vowel

In Arabic the epenthetic vowels inserted in the contexts described in 3.1.1.2.2 above may be said to have two statuses: either they have a systematic status, which means they undergo all processes associated with lexically-given vowels, or they do not have a systematic status, and they are invisible to these rules. The most widespread indicator of their systematic status pertains to their behavior relative to stress. The epenthetic vowels are in boldface.

- (16) a. *ktab-ít-ha, yišúrb-a* Iraqi
 b. *kitáb-it-ha, yikitba* Eastern Libya

As the provenance of the examples indicates, in some dialects, as in Baghdadi, epenthetic vowels can be visible to stress while in others (Eastern Libya) they are not.

In Aramaic epenthetic vowels have often assumed a systematic status, though as with Arabic, on a mixed basis. This can be seen in (12) above. In (12) above, *mélek* “a king”, the boldface epenthetic vowel induces spirantization of the following consonant, like a systematic vowel. The stress assignment in these forms is ambiguous. Rosenthal implicitly suggests⁶⁵ that traditions exist which treat the epenthetic vowel like a full lexical vowel and stress it. Thus, from original **milh*

⁶⁴ Owens, “Dia-planar diffusion”; see 5.1.3 below for Arabic and 7.3.

⁶⁵ Rosenthal, *A Grammar of Biblical Aramaic*, p. 27.

‘salt’ or **ʕalm* ‘image’ one has *mleḥ*, *ʕlem* (see [17] below).⁶⁶ The historical derivations would have worked as follows, where the medial stage sees the insertion of an epenthetic vowel, which, upon assuming systematic status, causes deletion of the vowel in the initial syllable, as in the C-R schema.

(17) **milḥ* → **mileḥ* → *mlēḥ*
 **ʕalm* → **ʕalem* → *ʕlēm*

Equally, however, there is a (originally Hebrew) tradition where a final epenthetic vowel is simply inserted. Here the derivation stops at the medial stage, e.g. *ʕélem*.⁶⁷

A different instance of an historically epenthetic vowel in Aramaic is probably the first person singular perfect verb form, *-et*. This can be compared with the Arabic first person form *-t ~ -it*

(18) Aramaic Baghdadi
*ki**t**ḥ-et* *ktáb-it*

In Aramaic, as Segert notes,⁶⁸ what originally was an epenthetic vowel, analogous to the inserted Baghdadi Arabic epenthetic vowel (in bold), assumed systematic status, including the constraint and repair scheme discussed in the previous section. The *-et* suffix is reinterpreted as fixed morphological material, hence the suffixation of *-et* places the preceding *ta-* in an open syllable. According to 3.1.1.2.2, vowels in open syllables delete.

This development can be represented in the following, where the middle stage is diachronically postulated. Note that the middle stage is identical to contemporary Baghdadi Arabic (and many other varieties).

(19) **ktab-t* → **ktab-et* [originally epenthetic] → *ki**t**ḥ-et* [via constraint and repair]

In Samaritan Aramaic⁶⁹ an epenthetic vowel inserted in a CC# sequence, can induce lengthening of a preceding vowel.

(20) *napš* > *napəš* → *naapəš*

⁶⁶ Also Nöldeke, *Kurzgefasste Syrische Grammatik*, p. 61 and Malone, “Wave Theory, Rule Ordering and Hebrew-Aramaic Segolation”, p. 47, without needing to agree with all seven steps of his analysis).

⁶⁷ Rosenthal, *A Grammar of Biblical Aramaic*, p. 17.

⁶⁸ Segert, “Old Aramaic Phonology”, p. 122.

⁶⁹ Macuch, *Grammatik des samaritanischen Aramäischen*, pp. 112, 300.

This compensatory lengthening otherwise occurs in open syllables before lexically given (non-epenthetic) vowels (see n. 60).

At the same time, the original epenthetic nature of this vowel is still visible in not taking ultimate stress, as is general in for instance, Biblical Aramaic.⁷⁰

What is noteworthy in the case both of Aramaic and of Arabic is that epenthetic vowels can assume systematic status. They do so in some cases in identical ways, and in others differently.

Summary: In both Aramaic (BAr, Syr, Sam) and in Arabic, epenthetic vowels have a mixed status: sometimes they behave like lexically-specified vowels, and sometimes they do not.

3.1.1.2.4 CVCVC final stress

In Biblical Aramaic stress generally falls on a final closed syllable. This includes, of course, CVCVC words. In western Syriac a final closed syllable is stressed,⁷¹ *koṭév* ‘writing’, whereas in the eastern area stress is on the penultimate.

Arabic divides roughly into two regions, an eastern one with initial stress on CVCVC words, and a western one beginning with Eastern Libya with final stress. However, final stress is also found in southern Jordan and in regions in the Western Sudanic region.

CVCVC final stress in Arabic and Aramaic (BAr, Syriac, Sam)

3.1.2. Morphophonology

3.1.2.1 Stress protection for short vowels in open syllables

As seen in 3.1.1.2.2, short vowels in open syllables are normally deleted in Aramaic. An important exception to this is when a suffix is added to an imperfect verb, or when a possessive pronoun suffix is added to a noun. In these cases the short vowel in the open syllable is stressed, protecting it from deletion (see 3.1.1. above).

(21) BAr⁷²

⁷⁰ Rosenthal, *A Grammar of Biblical Aramaic*, p. 18.

⁷¹ Muraoka, *Classical Syriac*, p. 16; Daniels “Classical Syriac Phonology”, p. 137.

⁷² Rosenthal explains the penultimate stress here as due to the effect of adding a pronominal suffix. However, as seen in (19), the pronominal suffixes *-et* 1SG and *-at* 3FSG induce vowel deletion in the preceding open syllable, according to general rule. It rather appears that the person suffixes on verbs are lexical exceptions in drawing stress rather than deletion.

akúl-i “eat-F”, *šbúq-u* ‘leave-PL’⁷³

The F. suffix *-i* induces stress on the preceding open syllable, preventing deletion of the vowel.

The situation in Syriac is not entirely clear. In Samaritan Macuch explains⁷⁴ forms such as *qaṭáal-at* as due to a reconstructed stress on a short vowel, as in BAr, **qatál-at* which was subsequently lengthened (see n. 60 above). While noting that the evidence is not direct, Knudsen suggests that a similar condition applies to Syriac.⁷⁵

In Arabic stress protection of short vowels in open syllables is found in the presence of an object suffix. In Baghdadi Arabic, for example, which as also seen in 3.1.1.2.2 categorically does not allow short vowels in open syllables, before an object suffix stress is attracted to the syllable before the suffix, thereby protecting the vowel.

(22) *xaabár-a* “he telephoned him” (not **xaabr-a*)
darrás-ak “he taught you”

This situation is thus parallel to Aramaic, except that in Arabic protection of a short vowel in an open syllable is limited to object suffixes.⁷⁶

(23) *xaabr-i* ‘you-F Telephone’ (imp)

Summary: Personal suffixes in Aramaic (BAr, Syr, Sam) and Arabic induce stress on preceding open syllables, thus protecting them from deletion.

3.1.2.2 /h/ of pronoun suffixes

In Aramaic the object suffixes beginning with *-h*, 3FG, 3MPL and 3FPL lost the *-h* to one degree or another. In *Biblical Aramaic*⁷⁷ this alternation is conditioned in the 3MSG: *-hiy* after long vowels, *-eh* otherwise. In Syriac⁷⁸ the 3M and F singular forms have *eeh/aah* after C, *-y/-h* (*y < hi*) after a vowel.

(24) Syriac
melk-eeh “his king”

⁷³ Rosenthal, *A Grammar of Biblical Aramaic*, p. 18.

⁷⁴ Macuch, *Grammatik des samaritanischen Aramäischen*, pp. 122.

⁷⁵ Knudsen, *Classical Syriac phonology*, p. 173.

⁷⁶ As a morphophonological rule. There are dialects (Cairene, some Syrian) in which a penultimate syllable before CC- is stressed phonologically, e.g. *yiktúb-u* ‘they write’.

⁷⁷ Rosenthal, *A Grammar of Biblical Aramaic*, p. 20.

⁷⁸ Nöldeke, *Kurzgefasste Syrische Grammatik*, p. 45; Muraoka, “Syriac Morphology”, p. 137.

melk-aah “her king”

aḫuu-y “his father”

aḫuu-h “her father”

In the plural in BAr and in Syriac the *-h* is invariant, *-hon/hen* “their M/F”. In Samaritan Aramaic the initial *-h* has been lost altogether.⁷⁹

(25) *ʕabd-e* “his servant”

ʕabd-a “her servant”

ʕabd-on “their servant”

In Arabic there are a number of dialects which have the /h/ on a conditioned basis.⁸⁰ A standard conditioning context is that /h/ is dropped after a consonant, retained after a vowel, reminiscent of the BAr situation:

(26) Damascus

šaaḫ-oo-ha “they saw her”

šaaḫ-a “he saw her”

Loss of /h/ in third person object pronouns is found in Syrian, northern Mesopotamian dialects, particularly the qultu dialects, Uzbekistan Arabic where its conditions for occurrence are identical to Damascus,⁸¹ Cypriot Arabic,⁸² Shukriyya in the Sudan and in western Sudanic Arabic.⁸³

Summary: Aramaic (BAr, Syriac, Sam) and Arabic have third person object suffixes lacking *-h* under various conditions.⁸⁴

3.1.2.3 Encliticization of *l*- indirect object marker

I will call the preposition *l* the indirect object marker, as its relevance for present purposes concerns its function as a marker of the indirect object. Rosenthal notes⁸⁵ that “enclitic use of the prepositions *l*”

⁷⁹ Macuch, *Grammatik des samaritanischen Aramäischen*, pp. 132, 300.

⁸⁰ And at least one, Daragözü in Anatolia in Turkey, which has lost the /h/ in all contexts. The assumption here is that the phenomenon started on a variable basis, governed partly by phonological factors, as discussed in Owens (*A linguistic history of Arabic*, p. 242) for Nigerian Arabic. In some cases *h*-loss became categorical, as in Samaritan Arabic and in Daragözü Arabic in Anatolia. While an indirect historical connection between these latter two cannot be ruled out, it is also quite possible that the complete loss of *-h* went to completion independently in different cases.

⁸¹ Fischer, “Die Sprache der arabischen Sprachinsel in Uzbekistan”, p. 239.

⁸² Borg, “Cypriot Maronite Arabic”, p. 538.

⁸³ Owens, *A linguistic history of Arabic*, p. 242.

⁸⁴ See Diem “Zur Frage des Substrats im Arabischen”, p. 43.

⁸⁵ Rosenthal, *A Grammar of Biblical Aramaic*, p. 18.

l- and *ב b-* may deprive a word of its stress or result in exceptional stress (principal or secondary) on the penult⁸⁶.

I will restrict myself to the enclitic *l-* of the indirect object.⁸⁶

In the BA_r of *Daniel* there are perhaps 25 tokens of verb + indirect object *l-*. As Rosenthal states, the addition of *l-* can have different effects on word stress.

If the stress on the stem is on a long vowel, or on VCC, a following *l* + object generally has no effect, i.e. the stress remains on the long vowel or VCC, as in

(27a) *yhiib l-ah* ‘He gave her’ D 7.5

If the verb has no long vowel and is not in a strong syllable, it is often de-stressed, so that only the clitic is stressed.

(27b) *yhab l-áh* ‘He gave her’ D 2.48, 5.19

This process can be represented as follows:

(28) [yháb] [láh] → [yhab-láh]

Normally *yhá**b*** bears stress, but when the enclitic *-l* is added, the domain of stress falls on the entire word. Since in Aramaic stress normally falls on a final closed syllable, stress remains on *láh* alone.

In other cases, as Rosenthal notes, stress shifts to the first syllable, with the clitic also stressed. In this case Rosenthal apparently interprets the verb stress as secondary.

(29) *w-ay-èemar-l-éh*

and-3-say-to-Him

“and says to him” D 4.32

(vs. *yeemár* without the suffix)

Very tentatively from these examples it appears that the indirect object affects the stress of a preceding verb when the verb contains no long vowel or VCC clusters which normally, i.e. with no following indirect object *l-*, bear stress. In these cases, the verb stem is de-stressed.⁸⁷

⁸⁶ Enclitic *b-* is also fairly frequent in Arabic dialects, even if less so than enclitic *l-*. It occurs for example in Najdi Arabic (Ingham, *Najdi Arabic*, p. 30) and in Lower Egypt, including the eastern Delta (B + W: 378).

⁸⁷ In the consonantal EgAr no direct evidence exists about stress. What is apparent is that the verb + *l* unit is a very close one. Muraoka and Porten (*A Grammar of Egyptian*, pp. 41, 296) report what they call a “pronominal object mediated by a verb” tends to occur immediately after the verb, even when a nominal direct object occurs. Nearly all of their examples involve the indirect object marker *l-*.

hn yhb lky r’yh ‘mr

In short then, in the Aramaic of the 5-3 centuries BCE there is ample evidence to argue that the verb + *l-* formed a composite phonological unit.

In the majority of Arabic dialects the suffix *-l* “indirect object”, less commonly the instrumental/comitative *-b* (see n. 86) similarly encliticize to the verb (see ([10]), causing stress assignment as if these suffixes were a part of the verb.

In Arabic all dialects have an independent marker of indirect object, *l* + N/Pronoun. There is a broad division into two areas, those in which the *l-* of the indirect object is encliticized to the verb, and those where this does not happen as in CA. Starting with the second, the western Sudanic dialects, UE from il-Minya down to Aswan (B + W: 377 = Behnstedt and Woidich), Uzbekistan, and parts of Yemen the indirect object marker does not cliticize phonologically to the predicate in this area. However, it is the case that it immediately follows the verb, even in the presence of a nominal direct object (30). This situation recalls the case of EgAram, which will not be discussed here (see n. 13).

(30) *katáb lee-ha al-maktuub*⁸⁸

“I wrote her the letter”.

Dialects with cliticization on the other hand are in the overwhelming majority, these extending throughout North Africa, Lower Egypt, all Levantine and Mesopotamian dialects, Maltese, and Central AP and Gulf dialects, as well as Shukriyya in the eastern Sudan.⁸⁹ In all of these, the cliticized forms induce stress shift and epenthetic vowel insertion appropriate to the rules of heavy syllables and suffixation (see 3.1.1.2.2). The following are from Eastern Libyan Arabic. In each pair, the form with and without the cliticized indirect object marker is given, so the effect of cliticization on stress is clear.

(31) *kitáb-it*

“If Reia (or: the shephard) gave you.F wool”.

They further note that examples occur where the cohesiveness of the verb + *l-* may be expressed in a single orthographic word.

yhb-t-h-l-ky

“I gave it to you.F” (2003: 41)

It may be in Syriac as well an *l-* marking direct object typically will immediately follow the predicate (Muraoka, *Classical Syriac*, p. 77).

⁸⁸ The immediately following *le* determines the “t-less” form of the 1SG perfect verb (see e.g. Owens, *The Oxford hardbook*, p. 460).

⁸⁹ Reichmuth, *Der arabische Dialekt*, p. 283

Wrote-I

“I wrote”

vs.

kitab-it-l-a

wrote-I-to-him

“I wrote to him”

(32) *yiktib*

“he writes”

vs.

yiktib-l-a

“He is writing to him”

As noted, the Arabic stress patterns resulting from the formation of new phonological words via l-encliticization differ in detail from BAR, and indeed, they will differ among themselves as well, each dialect obeying its own rules of stress assignment. What all have in common, however, is the formation of a longer phonological word over which stress is defined. In this example, Arabic and Aramaic are the only Semitic languages with l-encliticization, as described here.

Summary: l-encliticization with attendant effects on stress: shared between Arabic and Aramaic (BAR)

3.1.2.4 1SG stress

In Biblical Aramaic the first person singular suffix *-i* is always stressed.⁹⁰ This is a morphological peculiarity of this form, as there is no phonological context to sanction its stress. Other *-V*-initial object suffixes do not bear stress.

(33) *melk-i* “my king”

Among Arabic dialects there exists a long string of dialects with unique stress on this suffix, and no other object suffix, stretching from southern Jordan,⁹¹ across the northern Sinai⁹² and into the eastern Delta (Jawf), then reappearing in the Baggara dialect of the western Sudan,⁹³ Chadian⁹⁴ and Nigerian Arabic.

⁹⁰ Rosenthal, *A Grammar of Biblical Aramaic*, p. 18.

⁹¹ e.g. Bduul, Owens and Bani Yasin 1984

⁹² de Jong, *A grammar of the Bedouin*, p. 164, 282, 368, 675 [maps]

⁹³ Manfredi, *A grammatical description*, p. 67

⁹⁴ The Sinai dialects as well as Chadian and Baggara, but not Nigerian Arabic, furthermore stress the 1SG verbal object suffix.

Summary: 1SG possessor pronoun unusually stressed in Arabic and in BAr.

Comment: for Samaritan Aramaic the description in Macuch does not specify the stress of the 1SG possessive suffix. In Syriac the 1SG –i has been lost after a consonant.

3.1.3 Morphology

3.1.3.1 –at ~ -a(h) ~ aa

In Aramaic feminine nouns display an alternation in their suffix: –at before suffix or as possessed noun, *mil-at malk-aa* ‘the word of the king’⁹⁵

–aa otherwise

This same alternation is basically found in nearly all varieties of Arabic. In Classical Arabic the realization is exactly the same:

(34) *γurf-ah* ‘room’, *γurf-at-i* ‘my room’

In spoken Arabic the “otherwise” realization usually lacks the /h/, the alternation being dialectal.

(35) *γurf-a* ‘room’

Summary: The same morphophonemics of the feminine singular suffix *ah* ~ *at* are found in Arabic and Aramaic (BAr, Syr, Sam)⁹⁶

3.1.3.2. Pronouns and related phenomena

3.1.3.2.1 Pronouns: object suffixes

In Syriac and Samaritan the second and third person plural object suffixes end in –n.

(36) *bayt-hon* ‘their M. house’

bayt-hen ‘their F. house’

BAr attests both –n and –m in the MPL, *kom* ~ *koon*, *hom* ~ *hoon*.⁹⁷

Summary: The plural object suffix pronoun ends in –n in Arabic⁹⁸ and Aramaic (BAr, Syr, Sam).

⁹⁵ Rosenthal, *A Grammar of Biblical Aramaic*, p. 25.

⁹⁶ Though Socotri among the modern South Arabian languages does have this same distribution as well. Other South Arabian languages have invariable –t for the feminine singular. (Simeone-Senelle, “*The modern south Arabian*”, p. 390).

⁹⁷ Rosenthal, *A Grammar of Biblical Aramaic*, p. 20. Old Aramaic, as well as Nabataean have M. –m, –hm.

⁹⁸ This point is noted in Diem (“Zur Frage des Substrats im Arabischen”, p. 43), though rejected as due to Aramaic influence. Where the object pronouns and the independent pro-

3.1.3.2.2 Intrusive –in(n) + object suffix

In Biblical and Samaritan Aramaic, an intrusive –in is optionally⁹⁹ added in the imperfective verb, before an object suffix.¹⁰⁰ Its form is either –in + consonant, or –inn + vowel or –inn + epenthetic vowel + suffix.

(37) *ydaḥ^hl-inna-ni*
3-frighten-N-me
“It frightens me.” (BAr)

As pointed out nearly 100 years ago by Barth,¹⁰¹ a suffix nearly identical to the Aramaic is added in Arabic to active participle stems before object suffixes. A few Arabic dialects also insert this suffix before object suffixes on imperfect verbs¹⁰²

(38) Nigerian Arabic
ʕaarf-inn-a “I know him”
ʕaarf-in-ha “I know her”
know-N-her

Summary: Intrusive –in occurs before object suffixes in Arabic (usually after AP) and Aramaic (in imperfect verb) (BAr, Sam)

3.1.3.3. The active participle

3.1.3.3.1 The active participle as verbal predicate

One of the most distinctive features of Aramaic morphosyntax is the development of a set of verbal predicates which are marked for person, number and gender out of active participles which originally were marked only for number and gender. In the modern Aramaic dialects these originally participial forms have wholly (in all NENA dialects) or partially (in modern western Aramaic and in modern Mandaic) re-

nouns have the same treatment of the final nasal, so if the objects end in –n, so too do the independent pronouns. For the sake of brevity, I will summarize only the object pronouns.

⁹⁹ Macuch (*Grammatik des samaritanischen Aramäischen*, pp. 227) notes that it is frequent. It also appears to be frequent in Biblical Aramaic, though no text counts are available. In no cases is –in(n) added without a following object suffix. In modern Ma’lula (western) Aramaic, the insertion of –in before an object suffix is fully automatized in the subjunctive verb conjugation, analogous to its automatic presence before an object suffix with an active participle in Arabic (Jastrow, “The Neo-Aramaic Languages”, p. 346).

¹⁰⁰ Rosenthal, *A Grammar of Biblical Aramaic*, p. 71; Macuch, *Grammatik des samaritanischen Aramäischen*, pp. 132, 226.

¹⁰¹ Barth, *Sprachwissenschaftliche Untersuchungen*.

¹⁰² Owens, “The historical linguistics” for detailed discussion

placed the earlier prefix and suffix conjugations (imperfect and perfect verb, respectively).

By Biblical Aramaic times this development was already well under way. In a count of chapter 2-5 of the Book of Daniel, there are 172 tokens of subject + verbal predicates (including participles). 50 of these, about 30% of the total are original active participles.

(39) *la hašt-iin anihnah*

“We don’t need” Daniel 3.16

In addition the passive participle in BAr had also already developed personal inflectional properties.

(40) *ktiib-at*

written-F

“It was written”¹⁰³

Detailed studies as to the function of the active participle as verbal predicate remain to be undertaken, though broad functions have been identified. Rosenthal for instance notes¹⁰⁴ that the active participle may indicate an “immediate present”, sometimes glossed with “hereby”, generally as a “narrative tense”, and to indicate “continuous and habitual action”.

Unless a retention, a notable development in Samaritan Aramaic¹⁰⁵ occurs where the second person object suffixes assume personal status as subject suffixes on active participles, as in

(41) *qaa?eem-ek* “you have stood up, lit. standing up-your”

In Arabic the status of the active participle as a member of the tense/aspect system has been underappreciated.¹⁰⁶ Essentially the active participle in spoken Arabic is a third form along with the perfect and imperfect tenses, with a clearly-profiled aspectual function whose unified meaning is to indicate an action relevant to a given point in a narrative, or lacking this, to the time of speaking. Often it is equivalent to the English have perfective. One finds, for instance, three-way contrasts of the type (Emirati Arabic):

(42) *hu yalas* “He sat down” (perfect)

¹⁰³ Rosenthal, *A Grammar of Biblical Aramaic*, p. 64.

¹⁰⁴ Rosenthal, *A Grammar of Biblical Aramaic*, p. 55.

¹⁰⁵ Macuch, *Grammatik des samaritanischen Aramäischen*, pp. 118, 204; Macuch, “Pseudo-Ethiopisms in Samaritan Hebrew and Aramaic”, p. 972.

¹⁰⁶ see Owens and Yavrumyan, “The participle” for overview

hu y-iilis “He is sitting down right now” (is in process of sitting down, imperfect)

hu yaalis “He is seated/has sat down” (AP)

The verbal function of the active participle is so uniform across all dialects (only Maltese lacking it) that it clearly derives from a common source. It can be noted that even in Classical Arabic (see Sibawaih I: 198) there are hints that the active participle had a similar verbal function.

Summary: The active participle constitutes a third, paradigmatic member of verbal paradigm in Arabic and Aramaic (BAr, Syr, Sam)

3.1.3.3.2 Development of finite conjugation based on active participle in Central Asian Arabic

This sub-section departs from the normal mode of presentation in adducing only an Arabic construction, intimately linked to the inflected participle discussed in the previous section. As noted in 3.1.3.3.1, already by Official Aramaic (Reicharamäisch) times the participle was well on its way to integration into the verbal system of Aramaic. In Aramaic this integration had far-reaching morphological consequences. In all varieties an inflected personal form is attested, which goes back historically to the passive participle (see [40] above). In Syriac and Samaritan Aramaic person marking expands to the active participle as well. Samaritan provides a nearly perfect structural calque for the Uzbekistan construction described below with the object marker *-k* re-functionalized as subject marker ([41]). In Syriac encliticization of original independent pronouns begins (see 3.1.4.3).

Probably the most remarkable development of the active participle in Arabic is what occurred in Uzbekistan Arabic, and its offshoot in Afghanistan, varieties which collectively are termed Central Asian Arabic. Whereas in other varieties of Arabic the active participle remains a non-personal form, marking a distinction only for gender and number, in Central Asian Arabic it has developed personal marking as well. It did this in two ways.¹⁰⁷

In the first and second person forms the object suffixes were re-functionalized as subject markers. Uzbekistan Arabic is one of those dialects where an object suffix is marked by the intrusive *-in-* (see

¹⁰⁷ Zimmermann, “Uzbekistan Arabic”.

3.1.3.2.2), so in the first and second persons we get:

- (43) *zoorb-in-ni* “I have hit” *zoorb-in-na* “we have hit”
zoorb-inn-ak “You.M have hit” *zoorb-in-kum* “you.M.PL ...”
zoorb-inn-ik “You.F have hit” *zoorb-in-kin* “you.F.PL ...”

In the third person the original participle stem stands, but as the person and number suffixes are used exclusively in the third person, they assume a personal value.

- (44) *zoorib* “he has hit” *zoorb-iin* “they.M have hit”
zoorb-a “she has hit” *zoorb-aat* “they.F have hit”

In the case of the third person there is no direct analogue in Aramaic that I am aware of. However, there is a close parallel in the contemporary spoken varieties, where, as noted above, personal forms have developed out of forms which, like Uzbekistan Arabic, were originally non-personal. In the Neo-Aramaic dialects the new finite forms developed via enclitization of formerly independent pronouns. The following, for instance, is from Turoyo in Anatolia.¹⁰⁸

- (45) *qayim-no* “I stood up” < **qaayim uno* “having-stood-up I”
qayim-it “you.M stood up” < **qaayim hat*

When these forms arose in Aramaic is an unresolved question. While they traditionally are ascribed to the “neo” phase of Aramaic, in recent years there is a growing acceptance that, applying the comparative method, contemporary developments may in fact have their origin in the Middle Aramaic period.¹⁰⁹ I assume this perspective in the present discussion.

Aramaic had developed a way of marking person on the active participle, involving encliticization of independent pronouns. In Central Asian Arabic this basic format was applied to the Arabic active participle. As seen in the previous point, Arabic and Aramaic share the basic verbal value of the participle, so no verbal refunctionalization was necessary. While most Aramaic varieties encliticized independent personal pronouns, Samaritan, like Uzbekistan Arabic, refunctionalized object pronouns to subject markers.

Summary: Person distinguished on originally person-less participial forms in Uzbekistan Arabic, BAr (passive participle only), Syr, Sam (both active and passive)

¹⁰⁸ Jastrow, “The Neo-Aramaic Languages”, p. 367.

¹⁰⁹ Hoberman, “The history”, Khan, “The Morphology”, “The North-eastern”, p. 111, 118 for comparison with Jewish Babylonian

3.1.3.4 Verb

3.1.3.4.1 *hit-pəʕal* verb derivation

Aramaic shares a number of derivational verb patterns with other Semitic languages, and has one which is restricted largely to NW Semitic. This is the *hit-pəʕel* pattern, a broadly intransitive form.

(46) *hit-kteb*

“it was written”

An identical form occurs in Arabic, as in the following Moroccan example, with a similar intransitivizing meaning (inchoative or passive, Handbuch 264).

(47) *il-ħabilit-gaṭəʕ*

DEF-rope T-cut

“The rope got cut”

Summary: Aramaic and Arabic share the (*h*)*itpaʕel* (*it-faʕal*) verb derivational form: BA_r, Syr, Sam

3.1.3.4.2 –w MPL suffix on weak verb

Weak verbs, both perfect and imperfect ending in a high stem vowel add the suffix –w in the MPL imperfect. In Biblical Aramaic this occurs in derived stems. In Syriac it occurs generally.

(48) BA_r

bannii-w “they built”¹¹⁰

(49) Syriac

rmaa-w “They threw”

dkii-w “They were pure”¹¹¹

In some Anatolian and in many North African Arabic varieties the MPL suffix appears as –w, rather than the –u or –o which occurs elsewhere (see 5.1.11). It is suffixed directly to the stem vowel.¹¹²

(50)

Mardin

bqa-w

remain-they

¹¹⁰ Rosenthal, *A Grammar of Biblical Aramaic*, p. 66.

¹¹¹ Muraoka, “Sinac Morphology”, p. 145

¹¹² Handbuch, p. 263, Cantineau, *Les Parlers arabes du Département d’Alger*, pp. 709-10 for sedentary urban and Jewish Algiers, Jastrow, “Die mesopotamisch-arabischen Qəltu-Dialekte”, pp. 199-201 for Mardin in Turkey.

‘They remained’

yə-bna-wn

3-build-they

‘They build’

Morocco

yi-bnii-w

3-build-PL

‘They build’

mšaa-w

went-PL

‘They went’

Summary: Suffix 3 MPL –*w* to weak-final verbs with high stem vowels in Arabic and Aramaic (BAr, Syr)

3.1.3.4.3 1SG, imperfect

An intriguing interpretive problem emerges in the 1SG prefix of the imperfect verb. In Syriac the 3MSG has “acquired” an *n-* prefix, so that whereas Biblical Aramaic has *yiktub* “he writes”, Syriac has *niktub*.

(51) Biblical Aramaic	Syriac ¹¹³
<i>a-ktub</i> “I write”	<i>a-ktub</i>
<i>yi-ktub</i> “he writes”	<i>n-iktub</i>

In this feature I go beyond the three-variety Aramaic sample used thus far. Goldenberg reports¹¹⁴ that Palestinian Aramaic, a contemporary of Samaritan Aramaic, has extended the *n-* to the 1SG, *n-iktub* “I write”. In contemporary western Aramaic (Ma’lula), in the subjunctive paradigm, a modern Aramaic paradigm still based on the imperfect stem, the 1SG is identically marked by *n-*, *n-ifθuḥ* “I open”.¹¹⁵ It thus appears that in pre-Islamic times, Aramaic innovated the 1SG, perhaps generalizing from the *n-* marking in the 3MSG.

In North African and Chadian Arabic the 1SG imperfect is similarly marked by *n-*.

(52) *n-uktub* “I write”.

Summary: *n-* as the prefix for the 1SG prefix occurs in Arabic and Aramaic (Palestinian Aramaic, not attested in BAr, Syr, Sam)

¹¹³ Nöldeke, *Kurzgefasste Syrische Grammatik*, p. 105.

¹¹⁴ Goldenberg, (“The Semitic Languages”, p. 483, citing Dalman)

¹¹⁵ Jastrow, “The Neo-Aramaic Languages”, p. 342.

3.1.4. Syntax

3.1.4.1 Prepositional *l*- definite direct object marker

In Aramaic definite nominal direct objects are optionally marked by the preposition *l*-, which otherwise indicates a benefactive argument.¹¹⁶ This occurs in two forms. In one (53) an anticipatory (proleptic or cataphoric) pronoun is attached to the verb and the noun object is marked by the preposition, while in the other (54) no anticipatory pronoun occurs. The examples are from Syriac.¹¹⁷

(53) *bana bayt-aa* → *banaa-hy l-bayt-aa*
 built house-DEF built-it.M to-house-DEF

‘He built the house’ > ‘he built it the house’

(54) *bnā l-bayt-aa*
 built to-house-DEF

‘He built the house’

Contini¹¹⁸ notes that an analogous construction occurs in Lebanon, greater Syria and in Baghdadi Arabic.

(55) *šuf-t-a li j-jaahal*
 saw-I-himto DEF-child

‘I saw the child’

(56) *šuf-it li j-jaahal*
 saw-I to DEF-child

‘I saw the child’

Summary: The preposition *l*- may mark a definite direct object in Arabic and Aramaic (BAr, Syr, Sam)

3.1.4.2 *di* ~ *diil* genitive marker

In Aramaic besides the “direct” or synthetic genitive described in 3.1.3.1 above, a possessor noun can be marked by the morpheme *zi*,

¹¹⁶ Rosenthal, *A Grammar of Biblical Aramaic*, p. 56; Nöldeke, *Kurzgefasste Syrische Grammatik*, pp. 168, 218; Muraoka, *Classical Syriac*, p. 77; Macuch, *Grammatik des samaritanischen Aramäischen*.

¹¹⁷ Contini, “Le substrat arameen en neo-arabe Libanais”, see 5.1.13 for further and Nöldeke, *Kurzgefasste Syrische Grammatik*, pp. 168, 218, *Studies*, pp. 108, 130

¹¹⁸ Contini (“Le substrat arameen en neo-arabe Libanais”) appears to view the *l*-marked object pronoun constructions as being a more recent development in Lebanese Arabic. Also Diem, “Zur Frage des Substrats im Arabischen”, p. 47.

di, *li* or *di*, *dill* or *diil*.¹¹⁹ The forms with /l/ (< di + l ‘to, for’) are attested only in Syriac and Samaritan.

(57) *dill-i* ‘mine’¹²⁰

In Moroccan, and disparate Algerian Arabic varieties (e.g. Jijel) the so-called analytic genitive marker is similarly *di*, *ddi*, *əddi*, *dyaal*.

Heath argues extensively for a Latin origin of the North African variants,¹²¹ deriving the marker from late Latin *de* + the preposition *l* = ‘of-to’.¹²² Here it is relevant to elaborate on one aspect of the Moroccan genitive construction which Heath notes to be highly characteristic of what is customarily termed the pre-Hilalian (pre-Bani Hilal, pre-1000 CE) strata in Moroccan grammar. This is a construction which Heath in fact considers “the central crux in Maghrebi Arabic historical linguistics”.¹²³ In it the possessed noun is extraposed to pre-possessor position where it takes a suffix pronoun which anticipates and agrees with the possessed noun, which itself is marked by the genitive marker *di*.

(58) *xa-ha_x* [*di l-mṛa_x*]
 brother-her of DEF-woman
 her_x brother [of the woman_x]

‘The woman’s brother’ (2015: 14)

It is striking that this structure reproduces a widespread use in Syriac of what is termed a proleptic or anticipatory pronoun.

(59) *br-eeh* [*di allah-aa*]
 son-his [of God-EMPH]

‘the son of God’ = his son, of God¹²⁴

The structural congruence is unmistakable, both in its identical patterning (PSSD-PRO_x [of PSSR_x], and in the identical morphemic connector, *di*, argued here to be cognate between Aramaic and North African Arabic. What further supports this etymology is the fact that the proleptic construction reappears in numerous constructions, one of which, as an anticipatory object marker was introduced in the previous

¹¹⁹ Rosenthal, *A Grammar of Biblical Aramaic*, p. 25; Macuch, *Grammatik des samaritanischen Aramäischen*, p. 134, Nöldeke, *Kurzgefasste Syrische Grammatik*, p. 47.

¹²⁰ Macuch, *Grammatik des samaritanischen Aramäischen*, p. 134.

¹²¹ Heath, “D-possessives and the origins of Moroccan Arabic”, p. 23.

¹²² Pre-Hilali Arabic has *lee* or *lii* ‘for’, not simply *l-* (see 3.1.2.3), so dispensing with the final vowel is a non-trivial issue. However, *diil* itself did arise from *di* + *l*, albeit in a pre-Arabic Aramaic phase.

¹²³ Heath, “D-possessives and the origins of Moroccan Arabic”, p. 16.

¹²⁴ Muraoka, *Classical Syriac*, p. 62.

section (3.1.4.1).¹²⁵ Given a significant Aramaic substrate population familiar with widespread usage of an anticipatory (proleptic) pronoun, the appearance of such a construction is not surprising.

Four further aspects of the issue are pertinent here. First, as already noted Aramaic, like Arabic has a direct or synthetic genitive construction, marked by *-at* (see 3.1.3.1). They also both have an indirect or as it is usually termed analytic possessive construction marked by a separate genitive morpheme, *di* in (57) and (59). Heath, as many before him, note that pre-Hilalian Moroccan Arabic is characterized by a relatively low number of direct (or construct) genitive constructions, a point which sets Moroccan and other Magrebinian dialects apart from most Arabic dialects. Heath attributes this to simplification under bilinguality, though alternative explanations needs to be explored.¹²⁶

In BAR Garr shows¹²⁷ that the choice between the construct genitive and the analytic *di* genitive is governed by discourse factors, “The more prominent... participant occurs in a *di* phrase”.¹²⁸ Neither the construct nor analytic constructions are lexically constrained. Against this, in the later Syriac Muraoka observes¹²⁹ that in N – N possessive constructions, “The synthetic structure tends to be confined to standing phrases verging on compound nouns...” That is, both Syriac and Pre-Hilalian Maghrebi Arabic “prefer” the analytic to the synthetic genitive. Thus, the impetus for the lack of the construct (or direct) genitive in pre-Hilali Maghrebi Arabic might well lie in an original Aramaic substratum.

Secondly, the extraposed possessive (58) tends to be concentrated among certain inalienably possessed nouns.¹³⁰ Here again this distribution reenacts the situation in Aramaic, this time in BAR. Garr, following a number of scholars before him (Havers, Blau, Diem) notes that

¹²⁵ See Muraoka, *Classical Syriac*, pp. 88-9 for list of constructions with proleptic pronouns in Syriac).

¹²⁶ Heath’s *ex cathedra* claim that “There is general agreement that some degree of pidginization or creolization had occurred in the spoken Arabic brought into conquered territories” (“D-possessives and the origins of Moroccan Arabic”, p. 12) may be safely ignored until it is subjected to proper analysis within the parameters of creolization theory proper. Versteegh’s (1984) work in this regard, which Heath adduces for his pidginization explanation, does not stand up to even mild scrutiny.

¹²⁷ Garr, “On the alteration”.

¹²⁸ Garr, “On the alteration”, p. 221.

¹²⁹ Classical Syriac, p. 61.

¹³⁰ Heath, “D-possessives and the origins of Moroccan Arabic”, p. 14.

the Aramaic equivalent of (58) is used almost exclusively in inalienable possessive constructions.¹³¹

Thirdly, in pre-Hilali (and Andalusian) Arabic the relative clause marker is variously *ḏ*, *di*, *dii*, *iddi*, this replicating the analytic genitive marker *ḏi* (etc.). In Aramaic *di* similarly doubles as relative clause marker and analytic genitive morpheme (see 3.2.1.3).

Thus, in telescoped form, multiple indices converge to argue for an Aramaic model for the peculiar pre-Hilali possessive construction.¹³²

There is one important caveat here, and that is that Berber as well has a possessive structure like (58)¹³³

(60) *baba-s_x* *[n-uryas_x]*
 father-his [of-man]

‘The man’s father’

In fact, Fischer had already noted the parallels with both Berber and Aramaic and argued for a Berber origin.¹³⁴ What argues for the primacy of the Aramaic in this case is the morphemic identity of the possessive marker *di*. Heath’s explanation fails here, and Fischer does not even note the particular issue associated with the identical morphemic forms. Both the structural and the morphemic correspondences converge to favor the decisive Aramaic contribution. Of course, the identical Aramaic-Berber structure may have facilitated its transfer to pre-Hilali Arabic.¹³⁵

To add to the circumstantial evidence in support of an Aramaic historical calque, Anatolian Arabic has a genitive marker variously *ḏiil*,

¹³¹ Garr, “On the alteration”, p. 214 n. 4

¹³² There are other aspects to the issue which the Aramaic-origin could accommodate. One is that in Moroccan and some Algerian dialects a variant of the possessive marker is *dyaal*, not *diil* as in Syriac and Samaritan. The explanation for this change would start with the observation that in varieties of Aramaic vowels in open syllables generally are subject to change. Samaritan, for instance, has the alternation *diil* ~ *dill*-V (see [57]). The shift to *dyaal* “avoids” questions of syllabification by adapting to a basic nominal *wazn* in North African Arabic (Retsö, “Kaskasa, t-passives and the dialect geography of ancient Arabia”).

¹³³ Tilmatine, “Berber and Arabic language contact”, p. 1006.

¹³⁴ Fischer, *Eine interessante algerisch-marokkanische*, p. 181.

¹³⁵ Note that the argument here as well as for the proleptic pronoun anticipating a following *l*-marked direct object (3.1.4.1) includes a morpheme identity between Arabic and Aramaic, either *l*- or *di*, not only a common structural pattern. Souag (“Clitic doubling and language contact in Arabic”) has treated constructions which overlap in part with those treated here in terms of clitic doubling. He concentrates only on a basic structural pattern, however, “PRO_x ... Noun_x”. Hence his conclusions (which argue for parallel independent development) are as formulated in their current form not directly generalizable to the current constructions.

ðiila, *ðeela* or *ðeel*. Jastrow, rather improbably in my view, explains these forms via methathesis of the Classical Arabic, *ʔal-la-ðii* → *ðiila*.¹³⁶ Leaving aside the problematic status of Classical Arabic as a proto-variety, his derivation (1) does not address causes for a methathesis, (2) the loss of the initial *ʔa*, or (3) explain the categorical shift from relative marker to genitive marker. I would instead tentatively propose that these are another reflex of an Aramaic borrowing, **diil*.¹³⁷ Note that among Aramaic varieties it is in Syriac where *diil* is attested.

Summary: The analytic genitive marker *di*, *diil* and related possessive structure is found in Arabic and Aramaic (BAR, Syr, Sam)

3.1.4.3 Inflected nominal predicate

In Syriac on non-verbal predicates and on participial predicates an enclitic suffix cognate with the independent personal pronoun is added usually to the predicate.¹³⁸

(61) *tammaan-naa*

here-I

“I am here”.

The construction also appears to occur in Samaritan, though Macuch describes a suffixation limited to third person singular pronouns only.¹³

Analogous enclitic forms are found in various Mesopotamian Arabic dialects.

(62) *hal-həweew-iin* *daayém-fə* *d-daar-əanne* (< *həanne*)

these-animal-PL always in DEF-yard-they

‘These animals are always in the yard’.¹⁴⁰

Though the descriptive basis needs greater clarity, it appears that Uzbekistan Arabic also encliticizes a pronominal subject to nominal predicates.¹⁴¹ In this case the suffixation is mediated via the morpheme *in*, perhaps cognate with the intrusive *-n* (3.1.3.2.2).

¹³⁶ Jastrow, “Die mesopotamisch-arabischen Qəltu-Dialekte”, p. 125.

¹³⁷ While the syllable structure and vowels match up in this suggestion, the problem is the fricative /ð/. I leave the issue open, though can suggest that the fricative perhaps developed by analogy to the demonstrative *ða*.

¹³⁸ Muraoka, “Synāc Morphology”, p. 136, see Diem, “Zur Frage des Substrats im Arabischen”, p. 42 citing Brockelmann, *Grundriss der vergleichenden Grammatik, der semitischen Sprachen*.

¹³⁹ Macuch, *Grammatik des samaritanischen Aramäischen*, p. 132.

¹⁴⁰ Jastrow, “Die mesopotamisch-arabischen Qəltu-Dialekte”, p. 133.

¹⁴¹ Fischer, “Die Sprache der arabischen Sprachinsel in Uzbekistan”, pp. 254-5.

(63) *noo-xuš-inn-i*

not-good-N-I

‘I feel-----

miin-in-ak

Who-N-you

‘Who are you?’

Summary: Arabic and Aramaic (Syriac) have person inflected nominals.

3.1.4.4. Pragmatically-defined subject – verb order

The subject-verb word order of Biblical Aramaic (Daniel) is basically governed by the same pragmatic constraints as is the Arabic of the Arabian peninsula.¹⁴²

Summary: Arabic and Aramaic (BAr) share pragmatically determined subject-verb word order.

3.2 Quick takes

This descriptive section can be expanded considerably with a brief, non-exhaustive list of further features which evince striking correspondences between Aramaic and various varieties of Arabic. This is to emphasize the point that careful examination of Aramaic and Arabic would without doubt yield further promising candidates for significant affinities. The items listed here will not be included in the broader comparative summary in sections 4-7.¹⁴³

1. Behnstedt and Arnold¹⁴⁴ attribute the change of *a > e/o *aswed* “black” vs. *aħmor* “red” in the Syrian Qalamuun to Aramaic substratal influence.¹⁴⁵

2. In BAr the 3FSG object suffix is *-ah*, in Syriac *-aah*.¹⁴⁶ In a number of Yemeni dialects, particularly in the south central region of former

¹⁴² This is described in detail in Owens and Dodsworth, “Stability”.

¹⁴³ And this list is far from exhaustive. Müller-Kessler (“Aramaic”) for instance argues that the Iraqi Arabic existential particle *aku* ‘there is’ has its origin in the common Aramaic locative *k’* or *kh* “here”, perhaps more specifically in a Mandaic Aramaic existential reflex of this, *yk* ‘there is’.

¹⁴⁴ Behnstedt and Arnold, *Arabisch-aramäische Sprachbeziehungen im Qalamūn (Syrien)*, pp. 20-21.

¹⁴⁵ See Behnstedt, *Sprachatlas*, p. 65 ff. and 1023 for various conditioning factors affecting this split.

¹⁴⁶ Rosenthal, *A Grammar of Biblical Aramaic*, p. 20; Muraoka, “Synāc Morphology”, p. 137.

North Yemen¹⁴⁷ the 3FSG is similarly *-aah*, *-eeh* pre-pausal, *-aa*, *-ee* in non-pausal position, while Anaiza, a Najdi dialect of NW Saudi Arabia, has *-ah* in both positions.¹⁴⁸

3. In Aramaic, as in Hebrew, the second person independent pronouns have the assimilation *nt > tt*, *inta > atta* “you.M.SG”. Identical assimilation is attested in Iraqi and in Chadian Arabic, *itta*, *itti* etc. The 1PL independent pronoun is *nihna* or *əhna* in Aramaic. In Chadian and Nigerian Arabic is found an identical *anihna* or *anihna* “we”.

4. In Jewish Palestinian Aramaic¹⁴⁹ (long *aa* may be raised to *ee* in the feminine plural endings, *-aan* and *-aat*. Khan attributes this to Arabic imala influence. He notes a parallel attestation in Palestinian Christian Aramaic texts.

5. The F. plural verb has the suffix *-an* or *-aan* in Aramaic (and Hebrew), as opposed to *-a* in most other Semitic languages (Akkadian, Gəʃəz, modern Ethiopian Semitic). In all Arabic dialects which maintain the feminine plural on the verb, its form is either *-an*, as in Nigerian Arabic *buktub-an*, or *-in* as in Najdi “they F. write”, *yiktib-in*.

6. Loss of initial semivowel in imperative verb.

In Biblical Aramaic, verbs beginning with a stem *y-* lose this *y-* in imperatives.¹⁵⁰ The imperfect stem of these verbs begin either with *-n* instead of *-y* or use a stem with a doubled second radical (*yi-ttid* ‘he sits’, *ytid* ‘sit’).

(64) *yhab* “he gave”, *hab* “give!”

In some Syrian dialects (e.g. Soukhne)¹⁵¹ as well as in Classical Arabic, an initial */w/* is similarly lost in the imperfect (including imperative).¹⁵²

(65) **waʃal > ya-ʃal* or *yi-ʃil* “he arrives”

7. The preposition “between” takes a plural suffix before a plural object in Aramaic, *been-ey-hen* “between them”. In many Arabic dialects the same preposition takes a plural form before a plural pronoun suffix, though the plural suffix itself is the F. *-aat*, *been-aat-hum*.

¹⁴⁷ Behnstedt, *Die nordjemenitischen Dialekte*, p. 87.

¹⁴⁸ Johnstone, “Aspects of Syllabification”, p. 13.

¹⁴⁹ Khan, “Jewish Palestinian Aramaic”, p. 109.

¹⁵⁰ Rosenthal, *A Grammar of Biblical Aramaic*, p. 48-9.

¹⁵¹ (1997), pp. 366-77, Maps 183-88

¹⁵² Initial **/w/* changes to */y/* in NW Semitic, a major isogloss that is used to distinguish NW Semitic from other Semitic branches. The present correspondence thus probably antedates the **/w/ > /y/* shift of NW Semitic.

8. In Aramaic the prepositions “for”, “at” and “like” have the variant forms CV before CC, *le-šlaawaan* “for sacrifices” and C before CV, *l-bayt-eh* “to his house”.¹⁵³

This reflects the phonology of *l-* and *b-* in many Arabic dialects (e.g. eastern Libya, Baghdadi).

9. Plural *-ee*

Grammarians of Aramaic customarily relate the plural suffix *-ee* on a limited number of nouns, particularly body parts, to a lost Semitic dual form **-ayn*.

(66) *yd-ayin* “hands” (BAr)

Rosenthal notes here “... the dual [in such nouns, j.o.] may be used for the plural”, which is to say there is no distinctive dual.¹⁵⁴

An identical state of affairs pertains to Arabic. All dialects form the plural of nouns like “hands, feet, ears” by suffixation of *-ee*.¹⁵⁵

(67) Nigerian Arabic

edee “hands”

Whereas these plural forms are claimed to derive from an old dual, it is more likely that in both Aramaic and in the Arabic dialects they simply go back to an old Semitic plural suffix **-ay*.¹⁵⁶

Note that most Arabic dialects do maintain a dual suffix in *-een*, whereas Aramaic has no formal dual.

10. A curious correspondence is the word for “first”, based on “*awwal*” “first” in nearly all varieties of Arabic. “First” in Nigerian Arabic is *giddaami*, lit. “the one in front”, *al-beet al-giddaami* “the first house”, derived from the stem for “in front”, *giddaam*. Cypriot Arabic¹⁵⁷ similarly has *qdam* ‘first’. In Aramaic “first” is similarly derived from *qdaam* “in front”, *qdaam-ay*.¹⁵⁸ Note that in each case “first” is a “nisba” (gentilic) adjective based on “in front”.

11. Retsö suggests that the North African forms *šaal* and the nisba ending in *-aay* are due to Aramaic substratal diffusion.¹⁵⁹

¹⁵³ Rosenthal, *A Grammar of Biblical Aramaic*, p. 34.

¹⁵⁴ Rosenthal, *A Grammar of Biblical Aramaic*, p. 24.

¹⁵⁵ Blanc, “Dual and Pseudo-Dual”.

¹⁵⁶ See Retsö “Kaskasa, t-passives and the dialect geography of ancient Arabia”.

¹⁵⁷ Borg, *A comparative glossary*, p. 43.

¹⁵⁸ Rosenthal, *A Grammar of Biblical Aramaic*, p. 32; Muraoka, “Syriac Morphology”, p. 141 for Syriac.

¹⁵⁹ Retsö, “Kaskasa, t-passives and the dialect geography of ancient Arabia”, p. 115.

12. Besides the phenomenon cited by Borg on Cypriot Arabic noted in 3.1.1.1.2, Borg furthermore notes that there are occasional reflexes of the Aramaic post-vocalic spirantization rule in Cypriot Arabic lexical items, further noting borrowings and semantic calques, issues not dealt with in this paper.¹⁶⁰

13. In western Algeria and parts of Morocco (Fez), as well as in Andalusian Arabic (Handbuch 258) the relative clause marker is, variously, *ḍ*, *dii*, *iddi*. In Aramaic, the analytic genitive marker *di* (etc., see 3.1.4.2) equally functions as the relative clause marker. As in Aramaic, the genitive marker and relative clause marker can be identical (Tlemcan, Jewish Fez).

14. Both Aramaic and Arabic share the form *faʕl-aan* as a marker of quality, inner state, perception or emotion. In Arabic this usually occurs as a lexically-determined alternative to the AP *faaʕil*. Nigerian Arabic has for instance *fahmaan* “having understood”, rather than **faahim*). In Aramaic the form is an adjective describing an inner state or quality (comparable to the Arabic AP alternative *faʕlaan*) or functions as an agentive noun (comparable to Arabic agentive *faaʕil*): *mʕamq-aan* “one who deepens”, *zayuuʕt-oon* “scared”.¹⁶¹ The formal and semantic overlap is so striking that a common origin at some point in the history of the two languages appears likely. Details require working out.

15. Eksell suggests¹⁶² that the common Arabic indicative marker *b-* was ultimately calqued via what she assumes was a future marker *bʕi* ‘want’ in Babylonian Aramaic (cf. Arabic *baya* ‘want’, where Arabic **y* = Aramaic *ʕ*). A critique of the details of Eksell’s proposal is found in Owens (2018). The gist of the argument, however, is plausible, and in fact would find support in two ways. First, it is argued in Owens (2018) that the original value of the Arabic *b-* was a future marker, and that this meaning has been retained until today in Gulf and Najdi Arabic. Secondly, the pre-Islamic Aramaic presence in the Gulf region is now well documented,¹⁶³ so the socio-historical realities could have suppor-

¹⁶⁰ “Syriac Morphology”, pp. 539-40.

¹⁶¹ Muraoka, “Syriac Morphology”, p. 143; Nöldeke, *Kurzgefasste Syrische Grammatik*, p. 77.

¹⁶² Eksell, “The Origin and Development of the Cursive *b-* Imperfect in Syrian Arabic”, pp. 82-4, 92-6.

¹⁶³ Kozah et al. *Abdulrahim Abu Husayn, Saif Al-Murikhi*; Holes, *Dialect, culture and society in eastern Arabia*, p. 12.

ted such a transfer. Note that the specifics of the argument need to be worked out: did an ancestral variety of Arabic calque an Aramaic tense value onto the verb *baya* (*yabya*, *yiba*) which subsequently reduced to *b-*, or was a *b-* integrated in Arabic directly from an Aramaic *b-*?

16. Holes notes a number of Aramaic loans in Bahraini Arabic, observing that the loanwords often pertain to economies and practices specific to local Bahraini fishing and agricultural activities, attesting to the ancienity of the loans.¹⁶⁴

4. The features in their Semitic context

Summing up the features identified as indicating a significant relationship between Aramaic and Arabic, the following list has been put forward.

Phonology

Arabic and Aramaic share the following:

1. guttural pronunciation of /r/.
 2. *ʕ > ʁ
 3. Gutturality
 - a. Guttural consonants induce lowering of a short high vowel to /a/.
 - b. C_{gut}C in Arabic, and C_{gut}CC in Aramaic induces insertion of /a/ after the guttural
 4. *ay/aw → ii/uu (unconditioned change, North Africa)
or → ee/oo ~ ay/aw (eastern Syriac), ee/oo ~ ay/aw (Qalamun Arabic Syria)
 5. pharyngeal raising: *ħa/ a > ħe/ e
 6. C-R schema:
 - a. Short vowels are not allowed in open syllables.
 - b. At the same time, CəC#; epenthetic insertion in (#)CəCC sequences
 7. Epenthetic vowels can but need not have systematic status (induce same effects as lexical vowels)
 8. CVCVC syllable final stress.
- Morphophonology

¹⁶⁴ Holes, *Dialect, culture and society in eastern Arabia*, p. 13-18.

9. 1SG possessor pronoun is unusually stressed
 10. Short vowel deletion protected by stress.
 11. Aramaic and Arabic have variants of h-initial objects which lack the /h/.
 12. Encliticization of –l on verbs
- Morphology
13. di, diil. Possessive marker
 14. The morphophonemics of the nominal feminine singular suffix: ah ~ at.
 15. The 2 and 3 plural object suffix pronoun ends in –n in both M and F.
 16. Intrusive –in occurs before object suffixes.
 17. *it-faʕal* verb derivational form.
 18. 3 MPL –w to weak-final verbs with high stem vowels.
 19. n- used as the prefix for the 1SG.
- Syntax
20. The preposition l “to, for” marks both indirect objects and definite direct objects.
 21. the (active) participle constitutes third, paradigmatic member of verbal paradigm.
 22. person distinguished on originally person-less participial forms.
 23. subject-verb word order pragmatically determined
 24. inflected nominal predicate with subjectmarker derived from independent pronoun

In this section I briefly indicate why these features are peculiar to Aramaic and to Arabic, to the exclusion of other Semitic languages, or if shared with other Semitic languages, why they are still significant for purposes of the present discussion. In the following list, I mention only those cases where Arabic and Aramaic share the feature with other Semitic languages.

1. A guttural pronunciation of /r/ is attested in Hebrew, but otherwise not in Semitic.

3. Gutturality

The lowering affect on a guttural is not unique to Aramaic and Arabic. Hayward for instance report that in Jabbali (modern South Arabian) gutturals broadly speaking have a lowering effect on short vowels.¹⁶⁵

¹⁶⁵ Hayward et. al., “Vowels in Jibaali Verbs”.

The phenomenon differs in some ways from Aramaic and Arabic, as vowel harmony can in some cases override simple lowering effects. In Ethiopian Semitic gutturals (ʔ, ʕ, x, ħ, h, often termed laryngeals) also have specific effects, though for Ge'ez Gragg notes that a guttural in the context VC_{gut}tV facilitates vowel harmony.¹⁶⁶ It does not produce a specific lowering effect.

Looking more closely at the Aramaic-Arabic affinities, it can be noted that the lowering effect of gutturals is found in strikingly identical contexts. In Eastern Libyan Arabic, for instance, an epenthetic vowel in the context CC# is low in the context of a guttural, *báħar* “sea” and otherwise is high, *dibiš* “load”.¹⁶⁷ This can be compared to the structurally identical epenthetic vowel in Biblical Aramaic which is equally sensitive to the consonant quality, *méleḵ* “king” vs. *ṭáʕam* “order”.¹⁶⁸

On the other hand, the “gahawa” complex is attested only in Aramaic and Arabic. Other Semitic languages do not unilaterally insert a vowel in a C_{gut}C sequence.

4. ay/aw → ii/uu. This is attested in Aramaic and Arabic, as described, but also in Akkadian.¹⁶⁹

5. *ħa/ʕa → *ħe/ʕe. This is also a regular change in Akkadian.¹⁷⁰

6. Epenthesis. CəC# is shared between Hebrew, Aramaic and Arabic. Insertion in (#)CCC sequences is found only in Aramaic and Arabic, as described. However, Akkadian also has epenthesis in the context CC# > CəC#.

7. Systematic status of epenthetic vowels. This is attested only in Hebrew, Aramaic and Arabic.

9. 1SG possessor pronoun is unusually stressed in Aramaic and in Arabic. Hebrew stresses all object suffixes. Aramaic and Arabic are the only Semitic languages where it is the 1SG possessor suffix which specifically attracts stress.

14. ah ~ at alternation is attested in Hebrew as well as Aramaic and Arabic. Other Semitic languages have invariable –at as nominal marker of the nominal feminine.

¹⁶⁶ Gragg, “Ge’ez Phonology”, pp. 180-81.

¹⁶⁷ Mitchell, “Prominence and syllabification in Arabic”.

¹⁶⁸ Rosenthal, *A Grammar of Biblical Aramaic*, p. 27.

¹⁶⁹ Kaufman, “The Akkadian Influence on Aramaic”, p. 20.

¹⁷⁰ See Kouwenberg, “The Reflexes of the Proto-Semitic”, p. 151.

16. Intrusive –in. This also occurs in Hebrew, as well as in various Ethiopian Semitic languages such as Gurage.¹⁷¹

17. The *itfaʕal* form occurs in Hebrew, but otherwise is unattested.

19. n- 1SG. Attested in Ethiopian Semitic (Harari), argued to occur via independent development.¹⁷²

20. –l “to, for” also marks definite direct objects. I should note that this construction in Arabic has already been explained in terms of Aramaic influence.¹⁷³ As Kapeliuk points out, an analogous construction occurs in Ge’ez.¹⁷⁴ Here one should perhaps pursue wider Semitic affinities. Rubin sees the Ge’ez and Aramaic developments as independent.¹⁷⁵ Compelling arguments remain open.

21. The active participle as paradigmatic alternative to the perfect and imperfect verbs is attested in Hebrew, but is otherwise unknown.

It is unsurprising that Hebrew, Aramaic’s close sister language, shares a number of features discussed here. It was after all to Aramaic that Hebrew speakers switched when Hebrew died out as a spoken language in the second century CE. The assumption is followed in this paper that the features discussed here entered or were shared originally with Aramaic (see section 7.3). In this process Arabic inherited affinities to Hebrew via prior Aramaic-Hebrew cognation.

Some features extend beyond Arabic + NW Semitic, including for instance Akkadian. Whether these are due to common inheritance or to Sprachbund (contact) relations is a matter left open. Methodologically it should be mentioned that multiple instances of contact-induced change always need to be considered, so that, for instance, (12) above, CC# → CəC# might have occurred from Akkadian to NW Semitic, and later from Aramaic to Arabic, as described in 3.1.1.2.2. Each feature requires detailed consideration.

¹⁷¹ Owens, “The historical linguistics”.

¹⁷² See Owens “Dia-planar diffusion”, pp. 77-8.

¹⁷³ Blau, *A Grammar of Christian Arabic*, p. 413, reiterated in Rubin, *Studies in Semitic Grammaticalization*, p. 106.

¹⁷⁴ Kapeliuk, “Some Common Traits in the Evolution of Neo-Syriac and Neo-Ethiopian”, p. 310.

¹⁷⁵ Rubin, *Studies in Semitic Grammaticalization*, p. 115.

5. Inner-Arabic distributions

To this point I have been concerned to establish a global catalogue of Aramaic-Arabic features which link these two Semitic languages to the exclusion of all others (except Hebrew). Matters become more interesting, and interpretively complicated, when the inner Arabic and to a lesser degree, inner-Aramaic situation is taken into account.

To qualify for discussion in this paper, a feature shared between Aramaic and Arabic must, on an intuitive basis, be basic to the grammar, unlikely to have arisen via independent innovation, and be attested in a variety of Arabic and a variety of Aramaic. Satisfaction of these three conditions creates *prima facie* evidence for cognation, either via shared inheritance or via contact and borrowing. In many instances the issues identified here pertain to only a minority of varieties of Arabic, so it is now time to discard the fiction that Arabic as a whole is compared to Aramaic.

In this section I will specify which Arabic dialects have the features defined in section 3. In some cases the description provided in the third section suffices to identify the geographical extent, but in most cases greater discussion is necessary.

Having established that the 24 features are strong candidates for Arabic-Aramaic association, in this section I would like to take a closer look at which varieties of Arabic each feature is found in.

5.1 Inner Arabic and inner Aramaic

A third stage of the comparison is to outline the distribution of the test features among varieties of Arabic. Here it will be useful to very perfunctorily list the varieties of Arabic which will be referred to frequently, stating the designation that will be used, the rough geographical extension where this is not obvious from the name, and when the area was settled by Arabic-speaking peoples. For older settlement I simply use the term “pre-Islamic” (pre seventh century), recognizing that detailed inquiry could give a more precise chronological breakdown.¹⁷⁶ Dates are presented merely as a reference point and they represent only the earliest plausible settlement. The features given

¹⁷⁶ See Owens, *A linguistic history of Arabic*, appendix.

relevant to the current exposition often entered or originally were a part of an ancestral variety which may have antedated the current distribution by many centuries.

Mesopotamian Arabic: central and southern Iraq pre-Islamic, northern Syria, Anatolia, northern area settled by 1,000.

Cyprus (Kormakiti) settled sometime between 800-1200.

Uzbekistan, Afghanistan Arabic: Uzbekistan settled by 710, cut off from Arabic-speaking world by 800; Afghanistan Arabic offshoot of Uzbekistan in 19th century.

Levantine Arabic: Syria, Lebanon, Israel, Palestine, northern Jordan: pre-Islamic

Gulf Arabic: Persian Gulf, pre-Islamic

Najdi Arabic: central and northern Saudi Arabia, southern Iraq: pre-Islamic'

Hijazi Arabic: south western Saudi Arabia: pre-Islamic

Yemen: pre-Islamic

Southern Jordan, Sinai littoral: pre-Islamic

Egypt: 640

Eastern Libyan: 650

Shukriyya: eastern Sudan; ?

Western Sudanic Arabic: Darfur, Chad, Cameroon, Nigeria, 1350

North African: Western Libya, Tunisia, Algeria, Morocco, 650-800

Andalusia: 711

Malta: 9th-11th century

I will add to the existing discussion from section 3 only for features requiring greater elucidation, or when the distribution of Arabic variants requires greater detail.

5.1.1 *ħa

This is restricted to Bagirmi Arabic in central and southern Chad, Cameroon, and a small area of NE Nigeria.¹⁷⁷ It occurs in Samaritan Aramaic. As the same sound shift is universal in Akkadian, it is possible that there was a chain of contact-induced shift:

(68) Akkadian > varieties of Aramaic > varieties of Arabic

The fact that in Arabic this change is found in an "extreme" peripheral area, in Central Africa, should not be disconcerting. There are a

¹⁷⁷ Owens, *Neighborhood and Ancestry*, pp. 42-3.

¹⁷⁸ Owens, "Dia-planar diffusion", pp. 88-9.

number of isoglosses which link Aramaic to Chadian and Nigerian Arabic, just as to dialects in North Africa (3.1.2.2, 3.1.3.2.2, 3.2.10). Moreover, its presence in the peripheral area obeys a classic tenet of diffusionist theory, that innovations in a core area may spread and survive in a peripheral area, after they have been supplanted in the core area itself.

Note that this isogloss does not entail Aramaic speakers traveling to Central Africa and propagating the change there. Rather, the change occurred among small groups of speakers in the Middle East, and the offspring of these speakers eventually brought their variants into the western Sudanic region where it has survived until today.

5.1.2 Constraint and Repair Schema

The constraint and repair schema relating to syllabification forms a distinctive and intertwined complex in Arabic.

In Arabic there exists a cline of constraints relating to short vowels in open syllables, defined by stressed syllables, vowel quality and consonantal sequence, among others. In Owens six classes are distinguished.¹⁷⁸ For the sake of brevity only three most relevant to the point at hand will be given here, ranging from almost no deletion to complete deletion. The extreme end most closely resembles the situation in Aramaic.

1. No deletion in any context: Most of Yemen, outside of the Tihama,¹⁷⁹ the oases dialects in Egypt (Bahariyya, Faraafira, Daaxla, B + W), Classical Arabic.¹⁸⁰

(69) *fihimat* “she understood”¹⁸¹

fāhimat “she understood” (Classical Arabic)

...

5. Deletion of high vowels in all positions, except when stressed: Baghdadi

Baghdadi, illustrated in 3.1.1.2.3 above, deletes any short vowels in all positions except when they are stressed. Stressed short vowels are morphophonemically determined, object suffixes attracting stress to the syllable preceding them (3.1.2.1).

¹⁷⁹ Behnstedt, *Die nordjemenitischen Dialekte*, p. 53.

¹⁸⁰ Behnstedt, *Die nordjemenitischen Dialekte*, p. 59. The key position is a high vowel in an open syllable in post stress position. If this vowel is not deleted, no short vowels will be (Owens, *A linguistic history of Arabic*, p. 49).

¹⁸¹ Behnstedt, *Die nordjemenitischen Dialekte*, p. 54.

6. Deletion in any context: North African

In North African Arabic a case could be made for postulating no underlying short vowels and for determining their presence by syllable structure constraint. This is discussed further in the next section.

(70) Tripolitania, Tunisian, Algeria, Morocco (pre-Hilali)

iktīb “he wrote”

kītb-at “she wrote”

5.1.3 Epenthesis

Constraints on short vowels in open syllables lead to repair strategies in Arabic, as sequences of three consonants are disallowed in all varieties under certain conditions, discussed in detail in Owens.¹⁸² Relevant factors can be briefly summarized (3.1.1.2.2).

1. Stem integrity. In some varieties epenthesis occurs only outside nominal and verbal stems. Southern Hijazi represents this case.

(71) *katab-t-ha* “I wrote it” > *katab-t-a-ha*

Many Arabic dialects have insertion of this sort, including Western Sudanic, Cairene and Najdi,

2. Linear epenthesis

In other dialects epenthesis is sensitive only to the phonology: sequences of three consonants, CCC, are disallowed. To break these up, an epenthetic vowel is placed between the first and second consonant. Eastern Libyan Arabic, Shukriyya, Baghdadi, Syrian, and broadly speaking North African exemplify this type. This type is closest to Aramaic.

3. Sonority. Merely to round off the factors affecting epenthesis the role of consonantal sonority, sequences of CC alone can trigger epenthesis, where CC are ordered on sonority hierarchies. The gahawa complex is one reflex of this.

5.1.4 Systematic status of epenthetic vowels

The epenthetic vowels inserted to meet the constraints described in 5.1.2 and 5.1.3 may be opaque to all phonological processes. They are simply inserted and are invisible to stress assignment. Or they are sensitive to stress assignment rules. I will list the varieties here without illustration (see 3.1.1.2.3)

¹⁸² Owens, “Dia-planar diffusion”, pp. 90-2.

Opaque: In Eastern Libyan Arabic, some varieties of Palestinian Arabic and Syrian Arabic they are invisible to phonological rules.

Visible: In Baghdadi, Shukriyya and Western Sudanic Arabic they are visible to stress.

Baghdadi Arabic is variable between opaque and visible treatment.

I can note that in eastern Chad (Abbeche, Atia)¹⁸³ there occurs the alternation:

(72) *tásrig* “you.M steal”

tisírgi “you.F steal”

The feminine form displays two visibility attributes: the epenthetic vowel is stressed and the low vowel is raised to high in the open syllable, which contains an epenthetic vowel, i.e. the epenthetic vowel “triggers” the vowel raising.

5.1.5 Gutturality

The first feature of gutturality (3.1.1.2.1), the depressing effect of a guttural on an adjacent vowel, is universal in all varieties of Arabic. North African Arabic, for instance, which most often has only a single short vowel (i.e. no contrastive value for short vowels), has /a/ next to a guttural consonant, as in Jijel (Algeria) *dxal* “he entered” vs. *ktib* “he wrote”.

The second feature, the gahawa syndrome, divides into two.

Gahawa: Najdi, Shukriyya, Western Sudanic, Eastern Libyan, Southern Jordanian, Sinai Littoral

No gahawa: Palestinian, Damascus, Mesopotamian, Tihama, Baghdadi, Cairene, North African (ex-E. Libya), Uzbekistan

5.1.6 Final stress: CVCVC

Stress on bisyllabic words divides Arabic into two broad areas. Initial stress is found in eastern areas, and in most of Egypt and the Sudan:

Initial: Syrian, Mesopotamian, entire Arabian peninsula, Egypt, Shukriyya, non-Bagirmi Arabic in the WSA

Final stress is found throughout (post Hilali) North Africa, in Bagirmi Arabic in the WSA area, and also in southern Jordan, the Sinai littoral and Eastern Libya.

¹⁸³ Owens, “Nigerian Arabic in comparative perspective”, p. 133.

The il-Faraafira and al-Daaxila oases in Egypt have a strong tendency towards word final stress:

(73) *yiktīb* “he writes”
samák “fish”

Similarly, in Andalusian Arabic stress usually falls on the last –VC of the stem,¹⁸⁴ *qalám-i* “my pen”, *muqaddám* “commander” (along with *muwáddan* “muezzin”), *katáb* “he wrote”. Notably the stress remains on the stem in verbs when a V-initial suffix is added (so long as no further suffixes are appended), *yaktúbu* “they write”, *katáb-u* “they wrote”.

In fact, the question whether Moroccan Arabic even has lexical stress is a fraught one. One tendency, however, is a final boundary rise, whether lexical or phrasal still to be determined (Maas, 2011). In this context it cannot be ruled out that Arabic in general has two bases of stress, one lexically based (eastern and sub-Saharan African varieties) and phrase-based (North African). The latter could have its origin in an Aramaic substrate.

5.1.7 Short vowel deletion protected by stress

Short vowel deletion protection under stress occurs in different forms in different dialects. Its most widespread manifestation is found in Baghdadi Arabic and in NW Syrian Arabic, as described in section 3.1.2.1 above. In addition, it is frequently found in the third person FSG perfect suffix. Cairene Arabic deletes an unstressed high vowel in an open syllable, for instance.

(74) *kaatib* “he has written, but *kaatb-a* “she has written” (> *katba*, after a Cairo-specific rule of vowel shortening)

The 3FSG perfect suffix is *-it*. Before a vowel-initial suffix this draws stress, thereby protecting the vowel from deletion.

(75) *kátab-it* “she wrote”
katab-ít-u “she wrote it”

5.1.8 –n final plural objects (3.1.3.2.1)

In Syrian and Palestinian Arabic, as well as in Tihama (Yemen) the final nasal of plural pronouns is *-n*.¹⁸⁵ In all other dialects the final nasal

¹⁸⁴ Corriente, “Andalusi Arabic”, p. 104.

¹⁸⁵ Behnstedt, *Die nordjemenitischen Dialekte*, pp. 77, 89.

is *-m*, or, if a plural distinction is maintained, *-n* forms are feminine, *-m* masculine, *-n* F.

(76) Eastern Libya

beet-kum your M.PL house“

beet-kan your F.PL house“

In Shukriyya,¹⁸⁶ as well as in some isolated highland locations in Yemen¹⁸⁷ a M/F distinction is maintained via a vowel contrast:

(77) Shukriyya

beet-hun “their M. house”

beet-hin “their F. house”

Two explanations have been proposed for these forms. Diem suggests that the masculine forms arose via analogy to the feminine.¹⁸⁸ Loss of gender contrast in the plural would give the observed forms in Syria and Mesopotamian Arabic and the Tihama. Behnstedt on the other hand has argued for Aramaic substratal influence.¹⁸⁹

Given the wide geographical distribution of the *-n* final pronouns in Arabic, and the fact that Akkadian as well has the *-n* forms, it would appear that one is confronted here with an areal phenomenon of considerable antiquity. As far as Arabic goes, Diem’s explanation in terms of internal development could only tell part of the story at best, as it argues for independent development in precisely the region where the phenomenon is widespread outside of Arabic. Its presence in Shukriyya in the Sudan is one index for its existence in Arabic in pre-diasporic times (pace Owens).¹⁹⁰

Given its widespread distribution in Arabic, and the fact that it can be reconstructed into pre-diasporic Arabic, this form can be interpreted in two ways:

1. it is borrowed from Aramaic, pace Behnstedt, though in pre-Islamic times (probably not from Akkadian)

2. it innovated in a joint Aramaic-Arabic-speaking community. The change spread throughout Aramaic, but only partly in Arabic.

Note that neither 1 nor 2 necessarily contradict Diem’s explanation via analogy. For bilingual Arabic-Aramaic speakers the Aramaic *-n*

¹⁸⁶ Reichmuth, *Der arabische Dialekt der Shukriyya im Ostsudan*, p. 103.

¹⁸⁷ Behnstedt, *Die nordjemenitischen Dialekte*, p. 77.

¹⁸⁸ Diem, “Zum Problem der Personalpronomina”.

¹⁸⁹ Behnstedt, “Noch einmal zum Problem der Personalpronomina”.

¹⁹⁰ Owens, *A linguistic history of Arabic*.

could have provided provided the analogical model for a local change in Arabic.

5.1.9 reflexive/passive: *itfaʕal*, t-stem (3.1.3.4.1)

This verb form is attested in Cairene Arabic, as well as in various places in Upper Egypt and the Nile delta (B + W: 87), as well as in North African Arabic. Retsö notes¹⁹¹ that Tunis city, Susa and Takrouna in Tunisia in Morocco Tanger, Larache, Casablanca, Rabat and southern Morocco near Agadir, and Algiers in Algeria use either the t-stem (*t-bna/yi-t-bna* “it was/is built”, Tunis) or a tt-stem (*ti-bna/yi-tti-bna* “it was/is built”, Susa).¹⁹² Already in the nineteenth century, Spitta-Bey pointed out the identity of this Cairene form to Aramaic.¹⁹³

Retsö notes that Arabic typically uses either the n- or t- stems for stative passive (in various combinations, sometimes lexically distributed), and that the same two formatives form isoglosses throughout the Semitic languages: Akkadian, Hebrew, and possibly Ugaritic use n-, while Aramaic and Ethiopic use t-.¹⁹⁴

5.1.10 –w on weak-final verb (3.1.3.4.2)

Most dialects (along with Classical Arabic) replace the final –VV on weak-final verbs with the plural suffix, as in Cairene where the plural –u replaces the stem-final –i.

(78) Cairo
y-imši ‘he walks’
y-imš-u
 3-walk-PL
 ‘They walk’

¹⁹¹ Retsö, *The Finite Passive Voice in Modern Arabic Dialects*, pp. 98-114, 117, 138.

¹⁹² In addition, a combination of n- + t- is found in Djidjelli and Tlemcen in Algeria, *n-t-gra* “be able to read for oneself” (Retsö, *The Finite Passive Voice in Modern Arabic Dialects*, p. 117), as well as in Maltese, *in-t-qaal* “be said”. Retsö also notes that the t-form occurs in Jeddah Arabic, as in *attaakal* “it was eaten” (p. 145). This is restricted to “initial-hamza” verbs. An identical form occurs in Nigerian Arabic as well, lexically restricted in the same way.

¹⁹³ Spitta-Bey, *Grammatik des arabischen Vulgärdialekts von Aegypten*, p. 198.

¹⁹⁴ Retsö, *The Finite Passive Voice in Modern Arabic Dialects*, p. 165.

5.1.11 *n-* 1SG

n- for the 1SG is found in Eastern Libyan Arabic, Upper Egypt and the Egyptian oases, North Africa, and in Chadian (but usually not Nigerian) Arabic.

In Arabic *n-* marking 1SG in the imperfect nearly always is associated with *n-...-u* in the 1PL,

(79) *ni-ktib* “I write”, *ni-ktib-u* “we write”

Arabic, but not Aramaic, has the *n-...-u* plural.

This development has been explained along terms of internal development,¹⁹⁵ an explanation which I believe is still plausible. However, it is quite possible that the form was first introduced by bilinguals. Blau reports one instance of the 1SG *n-* and of *n-u* (*naquul-uw*) in a Middle Arabic text from Suur (Der Zor) along the Euphrates River in present-day Syria, indicating that transfer from Syriac to Arabic did occur.¹⁹⁶ This was a center of Syriac scholarship. Blau’s assumption that the form must be of “Magrebi” origin because of the *n-* is circular and is not supported by independent evidence, for instance that individuals actually travelled from Morocco to the Euphrates.

5.1.12 Preposition *l-* marking definite direct object.

The indirect object marker *l-* marks definite direct objects in Levantine Arabic, Baghdadi, Maltese, Cypriot Arabic and Central Asian Arabic (3.1.4.1). In the first two it shares the anticipatory pronoun construction with Aramaic. This may be restricted to animate direct objects. In Andalusian Arabic it generalizes to both definite and indefinite direct objects.¹⁹⁷ The construction is also found in Uzbekistan Arabic where Ingham¹⁹⁸ reports the object must be animate.

(80) *ray-t lil-hom*

saw-I to-them

‘It was them I saw’ (Maltese)¹⁹⁹

¹⁹⁵ Fischer 1926; Owens 2003.

¹⁹⁶ Blau, *A Handbook of Early Middle Arabic*, p. 142.

¹⁹⁷ Corriente, “Andalusi Arabic”, p. 110; Heine and Kuteva, *Language Contact and Grammatical Change*, p. 152.

¹⁹⁸ Ingham, “Notes on the Dialect of the Al Murra”, p. 34.

¹⁹⁹ Borg and Azzopardi 1997: 136.

²⁰⁰ Fischer, “Die Sprache der arabischen Sprachinsel in Uzbekistan”, p. 263.

- (81) *leel li hat qatal-u*
 night to him killed-him
 ‘He killed him in the night’ (Uzbekistan)²⁰⁰
- (82) *pi-vaddi l-exl-u*
 IND-send to-parents-his
 ‘He sends his parents’ (CyA)²⁰¹

Rubin exemplifies the danger of not casting one’s comparative net far enough when evaluating this feature.²⁰² While noting the construction in Maltese he adopts Borg and Mifsud’s²⁰³ explanation in terms of a Romance substratum. The presence of the construction in Central Asian Arabic as well as in Cypriot Arabic provides strong evidence for the classic wave theory explanation of its expansion, and which needs to be explicitly argued against by those advocating independent parallel development.

5.1.13 Person-marked participle

The person-marked participle occurs only in Uzbekistan and Afghanistan Arabic. In an incisive, though incomplete, interpretation of the development of this form, Windfuhr notes that this construction, which he terms the “perfect” goes back to the original active participle.²⁰⁴ In particular, he suggests that this construction could be calque on a Kurdish perfective, formed, as in Sulaimani Kurdish, by a participle + agent + patient construction. He places the following forms side by side,²⁰⁵ for “I/you have hit them” (“N” added by me):

(83)	Participle	N	Agent	Patient
Sulaimani Kurdish	<i>xward-uu</i>	\emptyset	<i>t</i>	<i>in</i>
Uzbekistan Arabic	<i>zorb</i>	<i>in</i>	<i>-ak</i>	<i>um</i>

Windfuhr’s contribution is to have indicated that the construction is to be understood as a calque on a system already functioning in a co-territorial language. But a more direct, and in the context of the current exposition, profound association can be found in Aramaic, not Kurdish. The key element is that Aramaic and Arabic already share a

²⁰¹ Borg, *Cypriot Arabic*, p. 138.

²⁰² Rubin, *Studies in Semitic Grammaticalization*, p. 107.

²⁰³ Borg and Mifsud’s.

²⁰⁴ Windfuhr, “Central Asian Arabic”.

²⁰⁵ Windfuhr, “Central Asian Arabic”, p. 118.

‘verbal’ function of what is historically an active participle form, so that all bilingual speakers had to do was to transfer the Aramaic idea of marking person on the participial form to a set of forms amenable to this representation in Arabic. Moreover, as noted in 3.1.3.3.1, a formal “hint” to use the object pronouns as a subject marker potentially existed in the construction noted in Samaritan Aramaic, whereby the object markers on the active participle form assumed subject marking status.

Note that from a larger areal perspective Windfuhr’s observation can be expanded in the direction of a Sprachbund going back into the first part of the millenium. As has been demonstrated in 3.1.3.3.1, both Arabic and Aramaic share a verbal paradigm where the participial forms a part of the paradigm. Aramaic in general has expanded this function more than Arabic, though Uzbekistan is one variety of Arabic which has ‘calqued onto’ the Aramaic construction formally. Unless it can be shown that Kurdish otherwise had a specific influence on Uzbekistan Arabic (as opposed to the well-established Persian/Tajik areal influence), it makes much more sense both linguistically and historically to attribute the specific influence of Aramaic speakers. The larger issue raised by Windfuhr’s observations, however, is whether the expanded verbal function of the participle in Aramaic wasn’t due to very early contact with Iranian or other languages.

5.2 Aramaic and other points, in a table

In terms of the methodological scope of this paper what is relevant to summarize here is how many of the 24 features discussed are found in all three Aramaic sources. This can be done with the help of the following table, which includes a summary of other information as well.

feature	section	BAr	Syr	Sam	total	Distribution Arabic	spread	Dia-plane
guttural r	3.1.1.1.1	+	+		2	Baghdad-, Elsewhere ?	1	1
*ʕ > ʁ	3.1.1.1.2	+	+	+	3	Cypriot, Yemen, Oman	3	2
*ha > he	3.1.1.1.3			+	1	NA	1	
ay/aw > ii/uu	3.1.1.1.4		+	+	2	N Af, Levant, Uzb	3	2
Guttural lowering, insertion	3.1.1.2.1	+	+	+	3	many	5	3
C-R schema	3.1.1.2.2	+	+		2	many	5	3
Systematic epenthetic vowel	3.1.1.2.3	+	+	+	3	many	5	3
CVCVC stress final	3.1.1.2.4	+	+		2	NA, Chad	5	3
short V stress protection	3.1.2.1	+		+	2	baghdad, NE Syria	3	2
object without h-	3.1.2.2	+	+	+	3	Levant, NA	3	2
-l encliticization	3.1.2.3	+			1	many	5	3
lsg stressed	3.1.2.4	+			1	Sinai, NA, S. Jordan	5	2
-ah ~ -at	3.1.3.1	+	+	+	3	many	5	3
-n plural object	3.1.3.2.1	+	+	+	3	levant, tihama, shukriyya	5	2
intrusive -in	3.1.3.2.2	+		+	2	NA, Oman, Yemen, Uzb, Bahrain	5	3
AP member verb paradigm	3.1.3.3.1	+	+	+	3	many	5	3
person-marked participle	3.1.3.3.2	+	+	+	3	Uzb	1	1
it-faʕal	3.1.3.4.1	+	+	+	3	Eg, N Af	5	2
-w 3MPL verb suff	3.1.3.4.2	+	+	+	3	N Af	5	1 or 2
n- 1SG	3.1.3.4.3					N Af, Chad, Egypt	5	1
prep l- marks DO	3.1.4.1	+	+		2	Lev, Bagh, Cypriot, Uzb, Malta, And	5	2
di, diil possessor	3.1.4.2	+	+	+	3	N Af, Anat	3	1 or 2
inflected nominal pr	3.1.4.3		+		1	Anatolia	3	2
S-V pragmatic order	3.1.4.4	+			1 or 2	Gulf, N Af (?)	5	2 or 3

Notes to Table.

Most columns are self-explanatory. “Total” refers to the total number of Aramaic dialects, of the three considered here, where the feature is attested. Distribution in Arabic is a non-exhaustive listing of where the feature is found. “Many” means that it is very widespread. “Spread” is roughly based on “distribution”, and intuitively is graded “1” for very restricted, in a few cases found in only one Arabic dialect today, “3” is in between, found in at least two non-contiguous dialects and “5” means widespread, found in a number of non-contiguous dialects, or found in a contiguous and large area (e.g. all dialects except Maltese, for AP as predicate). Dia-plane is the suggested dia-planar era the affiliation with Aramaic begins with, as discussed at greater length in 7.3 below.

6. Aramaeans and Arabs: the socio-cultural basis of diffusion

Before moving to a linguistic generalization of the data, it is necessary to outline the key socio-cultural elements which undergird the supposition that diffusion via contact plays an important role in explaining linguistic forms.

From the time of the earliest attestations of Aramaic in the eighth century, Aramaeans and Arabs have been in close contact. Aramaeans themselves first appear in history as nomads on the northern fringes of the Assyrian empire in the Syrian desert and in Mesopotamia. Lipiński infers their historical attestation by 1800 B.C. in the designation “Sutaeans”.²⁰⁶ These were a nomadic group that frequented the Middle Euphrates and Syria, who by 11th century BCE had become synonymous with the Aramaeans. Beginning around 1300 B.C. they become a significant threat to the Assyrian empire,²⁰⁷ and by the 9th century BCE some of them had taken up a sedentary life. A number of Aramaean kingdoms dominated by different tribes developed along the middle and upper Euphrates and into Anatolia, Syria and Lebanon, as well as in southern Babylonia. Many of these kingdoms were the object of various attacks by Assyrian kings, accounts of which are a main basis of our knowledge of their existence.

No Aramaean kingdom ever achieved widespread political dominance in the region. However, Aramaic itself did become the major lingua franca of the Middle East for over 1,000 years, between ca. 600 BCE – 700 CE. During Persian Achaeminid rule a variety was used for official correspondence, hence its attestation as far as Egypt.

In his summary, Lipiński puts considerable emphasis on the extent, both geographical and chronological, to which Arabs and Aramaeans have lived in close, and apparently a largely non-antagonistic relationship.²⁰⁸ In the Aramaean centers of power attested beginning in 1,000 which are located in Syria and along the Euphrates comingled Aramaeans and Arabs. Lipiński for instance describes Laqee, an area around present-day Deer Zoor in eastern Syria on the Euphrates River, as “...

²⁰⁶ Lipiński, *The Aramaeans*, p. 38.

²⁰⁷ Lipiński, *The Aramaeans*, p. 38.

²⁰⁸ Lipiński, *The Aramaeans*.

a rather loose confederation of North-Arabian²⁰⁹ and Aramaean sheikhs”,²¹⁰ and later as a “mixed Aramaean-Arabian confederation”.²¹¹ He similarly describes Aramaeans and Arab tribes living together in the ninth century south of the Diyala River, i.e. in the area of present-day Baghdad. Particularly vivid evidence for Aramaean-Arab interaction comes from the records of a campaign by the Babylonian king Tiglath-pileser III, who in 735 conducted a campaign against the Chaldeans who were a dominant group in southern Babylonia, and which had a significant, if not dominant Aramaean ethnic composition.²¹² The document mentions 35 tribes who were subjugated in the attack, and of these, Lipiński on the basis of the tribal names suggests that nearly half were either Arabs or had Arabic clans in them. The hiḏḏaar tribe, for instance, was said to contain four groups. Lipiński suggests that two of these were Aramaic, two Arabic.²¹³ Under one tribal umbrella “the various groups forming the tribe may have spoken two different languages, respectively Aramaic and Arabic.” Summarizing the situation he states,

“... the global history of these Aramaeans in the 8th-7th centuries B.C. can hardly be separated from the history of the North-Arabian tribes living in the same regions and called “Aramaeans” in Assyrian sources that barely and only exceptionally distinguish the two groups.” (485)

What little can be reconstructed of social life among the Aramaeans and Arabs in this era, further allows us to assume a close relationship between the two groups. Originally they, like Arabs, were nomadic,²¹⁴ and while Aramaeans developed an urban culture, they continued nomadism probably throughout the history of the Arab-Islamic expansion. The centralized states which they did develop were politically weak.

²⁰⁹ Lipiński alternates between the designations “North Arabians” and “Arabs”, though insofar as etymological origins allow, via for instance tribal and place names, evidence points to Arabs, i.e. speakers of the Arabic language.

²¹⁰ Lipiński, *The Aramaeans*, p. 101.

²¹¹ Lipiński, *The Aramaeans*, p. 495.

²¹² Lipiński, *The Aramaeans*, pp. 416-22, also Eph’al, “‘Arabs’ in Babylonia in the 8th Century B. C.”.

²¹³ Lipiński, *The Aramaeans*, p. 457.

²¹⁴ Segert, *Altaramäische Grammatik*, p. 35.

The close relationship between the Aramaeans and Arabs continues to be attested up to the Arab-Islamic expansion. Retsö in his compendious summary of pre-Islamic Arabs documents this affinity in a number of places.

Most striking in this respect is the somewhat enigmatic Nabataean culture which began emerging in history in 312 B.C.E. With its center in Petra in southern Jordan, between 170 B.C.E. and 100 C.E. it dominated eastern Jordan and the northern Hijaz, southern Syria and the Negev, with its interests stretching to present-day Gaza. It is well attested in the Sinai through numerous graffiti. The Nabataeans have been problematic for cultural historians of the Middle East. They wrote in Aramaic, yet they produced in Nemara in southern Syria the earliest Arabic text, in Aramaic script. They were connected in contemporary sources to Arabs, but were not considered to be Arabs.²¹⁵ Different ethnic identities have been attributed to them. For Cantineau they are Arabs.²¹⁶ Against this, Starcky²¹⁷ suggests they were originally Arabs who gave up their language in favor of the Aramaic-speaking peoples they came in contact with and among whom they settled. In fact, it is more likely that they are comprised of a supra-ethnic identity, as with the Chaldeans described briefly above, composed of Aramaic and Arabic speakers. Linguistic evidence of this will be presented below.

Writing about northern Syria and Mesopotamia, the Greek geographer Strabo (early first century C.E.), quoting the geographer Posidonius who wrote and described conditions in the first half of the first century B.C.E (c. 80 B.C.E.), notes that "... the Armenians, Syrians [= Aramaeans, arimaioi] and aráboii betray a close affinity, not only in their language, but in their mode of life and bodily build, and particularly wherever they live as close neighbors..."²¹⁸

Especially interesting is the report of large numbers of Arabs in the region of Edessa in southern Turkey between 0-110 C.E.²¹⁹ It will be recalled that Edessa emerged around this time as the center of Christian Syriac culture. While Retsö does not consider the short-lived Palmyran

²¹⁵ Retsö, *The Arabs in Antiquity*, p. 381.

²¹⁶ Cantineau, *Le Nabatéen I*, p. 9.

²¹⁷ Starcky, "The Nabataeans: A Historical Sketch", p. 87.

²¹⁸ Retsö, *The Arabs in Antiquity*, p. 352.

²¹⁹ Retsö, *The Arabs in Antiquity*, pp. 412, 434.

kingdom around 270 C.E. to be Arab, he does note the presence of a large number of Arab names in the Aramaic inscriptions, and Abbott claims Palmyra's queen Zenobia for the Arabs.²²⁰ Wilmsen as well emphasizes the pre-Islamic presence of Arabs in the Levant.²²¹

Retsö's broad documentation of a well-attested pre-Islamic Arab presence throughout the Middle East in what today are Iraq, southern Turkey, Syria, Lebanon and Jordan, is usefully juxtaposed with Cantineau's summary of Aramaic speakers in the Middle East in 150 C. E.

“Dans le region qui s'étend entre la Méditerranée et le bord du plateau iranien, nous trouvons donc constituée vers – 150, au lieu de la mosaïque linguistique qui existait auparavant, un ensemble cohérent de parlers araméens”. (1930: 11)

Exactly what the linguistic complexion of the Middle East was prior to 150 C.E. is a separate issue. The point to be made here is that in exactly the same area which Cantineau sees as dominated by Aramaic lived large numbers of Arabs.

In short, the argument for a long lived and socially intense period of Aramaic-Arabic contact comes from two directions. On the one hand, beyond the Arabian peninsula populations of Arabs are well attested in pre-Islamic times in the Levant, Mesopotamia, and into southern Turkey. On the other, the historically-attested spread of Aramaic is all but co-extensive with the Middle East itself: the Levant and Mesopotamia into Turkey, the northern Najd, the Persian Gulf between the fourth and tenth centuries²²² including present-day Qatar, Kuwait, the UAE and the NE Saudi Arabian littoral,²²³ and even where there is no archaeological trace, as in Yemen, arguments from reconstruction allow it to be entertained in other places as well (3.1.3.2.1, 3.2.2, 3.2.6, 5.1.8). The socio-geographic overlap between Aramaic and Arabic is far greater than customarily assumed.

Admittedly some scholars viewed the pre-Islamic populations of the Middle East in more dichotomous terms, at least linguistically. Donner notes on the one hand that “Aramaic speaking populations of Syria... culturally had more in common with the tribal society of the

²²⁰ Abbott, “Pre-Islamic Arab Queens”, p. 13.

²²¹ Wilmsen, *Arabic indefinites*, pp. 130-47.

²²² Al-Thani “An archaeological survey of Beth Qatraye”, p. 23.

²²³ Kozah, *Abdulahim Abu Husayn, Saif Al-Murikhi*.

Arabian peninsula than they did with the settled communities of Syria".²²⁴ He similarly notes that Aramaic was even more dominant in Iraq than it was in Syria.²²⁵ On the other, he speaks of the Nabataeans simply as being "Arab Nabataea",²²⁶ and when he speaks of language he conceives of the population in Syria as speaking either Aramaic or Arabic²²⁷ with Aramaic apportioned to the west, Arabic to the east. Jallad (2018) similarly speaks of "Arabic-Aramaic written bilingualism" when discussing mixed texts such as discussed below, apparently arguing for a modally-based bilingualism: Arabic was the spoken medium in Nabataean culture while Aramaic was the written one.

It is, however, inherently unlikely that all individuals simply spoke either one language or another or that Aramaic was hermetically sealed in a written mode. *Lingua francas*, as Aramaic was in the region, by definition imply bilingualism, and given the close cultural affinity between Arabs and Aramaeans, it can be assumed that there was also a linguistic affinity marked by bilingualism in favor of Aramaic. Moreover, given the evidence for long-term Arab-Aramaean contact, it is unlikely that even in the immediate pre-Islamic era the two populations simply separated into discrete language areas. Unfortunately eyewitness accounts to this in the 6th-7th centuries are entirely lacking. Small, but dramatic ones do exist, however, for instance in the remarkable "Raqaash" (dedictee of inscription) Nabataean inscription from the northern Hijaz, NW of Medina, dated to 267 C.E.²²⁸ The four-line inscription consists of lexical and structural elements from both languages, a demonstrative from Aramaic, for instance, and prepositions from Arabic. O'Conner terms the text a "puzzle". From a contemporary perspective, it appears to fall either within the typological bounds of codeswitching or of a mixed language.²²⁹

²²⁴ Donner, *The Early Islamic Conquests*, p. 95.

²²⁵ Donner, *The Early Islamic Conquests*, p. 171.

²²⁶ Donner, *The Early Islamic Conquests*, p. 95.

²²⁷ Donner, *The Early Islamic Conquests*, p. 117.

²²⁸ Discussed by Cantineau, *Le Nabatéen I and II* (1931 and 1935) and re-evaluated by O'Connor, "The Arabic Loanwords in Nabataean Aramaic", pp. 221-227.

²²⁹ In a forthcoming paper, al-Jallad discusses one further bilingual text from Sakaakaa also in NW Saudi Arabia.

More cannot be said, beyond the key point that only a population deeply bilingual in Arabic and Aramaic could have produced it.²³⁰

Throughout the attested history of Aramaean-Assyrian relations, therefore, Arabs are consistently depicted as, or can be inferred to have been culturally and socially close to Aramaeans, often living with them in the same tribal affiliation.

Closer to Islamic times, detailed information about the displacement of Aramaic in favor of Arabic may never be forthcoming, though Knudsen suggests that by the tenth century Arabic was clearly the dominant spoken language.²³¹ This dominance certainly have begun earlier from region to region. Thus Griffith documents the gradual shift in Palestinian monasteries between 500-800 C.E. from Greek and Aramaic to Greek and Arabic as liturgical languages, and from Aramaic to Arabic in the general populace.²³² He notes that in immediate pre-Islamic times the monks in these monasteries spoke the languages of the general populace, which were Aramaic and Arabic.²³³ By the eighth century Christian Palestinian Aramaic had nearly died out in favor of Arabic.²³⁴

Regarding the demographics of the change the dia-planes discussed in the next section need to be divided into two eras. Dia-planes 2 and 3 encompass the period of long-term Aramaean-Arabic symbiosis described above. Given it, the linguistic convergence documented here

²³⁰ A tempting claim that the text is the earliest attestation of codeswitching/mixed language cannot be upheld. Gibson (*Textbook of Syrian Semitic Inscriptions*, p. 78 ff.) describes a Phoenecian-Aramaic mixed text from Arslan-Tash in northern Syria, dating to the seventh century B.C.E. His summary of the text is interesting: "It is difficult to avoid the conclusion that the writers intentionally mix Phoen. and Aram. in order to impart a magical flavor to their texts and thus increase the potency of the incantations... in other words, that both the language and the orthography are artificial creations specially concocted for this genre of writing". Looking beyond Gibson's speculative attribution of magical intent, the use of more than one language in an incantation could well have been directed towards the two ethno-linguistic communities (Arabic and Aramaean in the case of Raqaash, Phoenecian and Aramaic in the case of Arslan Tash) which constituted the societies. Informing this mixing, however, was certainly a real sociolinguistic code, not artificial creation. Macdonald ("Reflections on the Linguistic Map of pre-Islamic Arabia") similarly describes a number of texts which he considers to have mixtures of both Arabic (what he calls "Old Arabic") and other, closely-related North Arabian languages. He thus speaks of Safaeo-Arabic, and Dadano-Arabic, besides Nabataeo-Arabic and one Aramaeo-Arabic text from the present-day United Arab Emirates.

²³¹ Knudsen, *Classical Syriac phonology*, p. 21.

²³² Griffith, "From Aramaic to Arabic".

²³³ Griffith, "From Aramaic to Arabic", p. 20

²³⁴ Griffith, "From Aramaic to Arabic", p. 27.

merely mirrors the long-term social contact. Dia-plane 1 is the early Islamic era, and in some cases assumes innovations far outside the original Middle East homeland. To argue for contact-induced change here it is clear that it must be assumed that there was an adequately large population of Aramaic speakers among those in the invading Islamic armies to provide a model for Aramaic to Arabic shift. Evidence for this is largely indirect.

That Aramaic speakers were present even in the most intimate Islamic circles is shown by Gilliot who documents references to Christians and Jews among the Prophet Muhammad's intellectual entourage,²³⁵ some of whom most likely were Aramaic speakers, for instance Zayd ibn Thabit himself, the last secretary of the Prophet. For evidence of contact among the diaspora populations one would need to determine the ethnic and linguistic makeup of the "Syrians" who constituted large contingents of soldiers and immigrants to newly conquered lands. Importantly, Donner notes that after the Islamic conquest of Syria "... relatively few tribesmen [from the Arabian peninsula, jo] migrated there after the conquest".²³⁶ Whatever the ethno-linguistic situation was before the conquest would have been maintained in the Levant in its immediate aftermath.

There is ample evidence for the important role of Syrian "Qaysites", in diaspora populations. Kubiak for instance, reports they were settled in the eastern Delta²³⁷ and in 727, the importation of a large contingent of "Qaysi" from the Syrian desert to Upper Egypt is reported.²³⁸ An important jumping off point for the conquest of North Africa developed in Fustat (Cairo), founded in 641. While the early population of this city was very mixed, it is clear that a substantial part of the population came from Syria and Iraq,²³⁹ areas where Aramaic would still have been widespread. Kubiak notes that "The immigration from Syria must have been considerable, since under the Umayyad Caliphs close contact between the two provinces was maintained."²⁴⁰ Since Fustat residential

²³⁵ Gilliot, "Zur Herkunft der Gewährsmänner des Propheten".

²³⁶ Donner, *The Early Islamic Conquests*, p. 249.

²³⁷ Kubiak, *Al-Fustat*, p. 82.

²³⁸ Lewis, "Egypt and Syria", p. 176.

²³⁹ Kubiak, *Al-Fustat*, p. 79, 83.

²⁴⁰ Kubiak, *Al-Fustat*, p. 83.

districts tended to be defined by tribal affiliations, the urban linguistic ecology would have favored the maintenance of minority languages in these parts of the city. The district of Al-Hamra al-Wusta, for instance, was a Syro-Byzantine stronghold.²⁴¹

This brief survey shows that the intimate contact between Aramaic and Arabic, attested as early as Aramaeans and Arabs themselves are identified in written sources, did not abruptly come to an end in 622 with the coming of Islam. Rather the transition from Aramaic to Arabic lingua francahood occurred gradually over a period 600-900, during which time Aramaic continued to be widely spoken, even by non-native speakers, not only in the Middle East, but also in the emerging centers of the Arabic-Islamic diaspora.²⁴²

7. Directed Dia-Planar Diffusion

With this background in mind it is relevant to present a basic typology of the individual cases discussed here, with a view towards organizing them into an initial comparative linguistic summary. Before proceeding to an overall interpretative model, I would like to address a fundamental issue in the current interpretation of Arabic-Aramaic contact.

7.1 How can the present elucidate the past?

The issue is that one might want to question the legitimacy of comparing contemporary Arabic dialects with languages documented as long as 2500 years ago. A strong form of this objection would note that even if similarities can be discerned, the languages as self-contained entities are so different that it is pointless to postulate contact-induced influence. Similarities are due to chance convergence.

Such an objection, however, suffers from three weaknesses. First, and perhaps paradoxically, historical linguistics, while working with “complete” languages as their input, in fact compares individual lin-

²⁴¹ Kubiak, *Al-Fustat*, p. 100.

²⁴² As one observes in the transition out of one dominant colonial language into global English dominance today. In Alexandria, Egypt, for instance, French continued to be used as a lingua franca among an old expatriate community and beyond until very recently, but now as the language of wider communication has given away to English.

guistic features, or systems of features, not complete languages. The twenty four features examined here are a legitimate set for historical study. To say that Arabic is compared to Aramaic is a broad metaphor. Concretely, it is individual linguistic features which are compared.

Secondly, it misses a major objective of historical linguistics, namely to identify how successor forms derive from antecedents, whether the change is due to internal factors or contact. No limits are set as to when chronologically or in the relative history of a language a feature appeared.

Thirdly, any theory of historical linguistics needs to beware of assumptions of universality of language change. Certainly languages change, but till today there are no metrics, no rules, no tables, typologies or grammaticalization clines which predict in advance (1) how fast languages change (2) how fast individual features change (3) whether a language or a feature will change or (4) under what conditions they will change and (5) if all conditions are met, what the change will transpire to. A language or a feature can remain stable over centuries, and they can change, or new languages can evolve (e.g. in case of creoles) within decades.²⁴³

It is relevant to illustrate this third point in greater detail from the current data. I use one example to show that features from contemporary Arabic dialects are as “old” as those “same” features as experienced in the chronologically older classical languages. I will be brief and programmatic, and the reader is referred to the relevant sections of this article or articles elsewhere for detail.

Intrusive *-in*.²⁴⁴ What makes the intrusive *-in* diagnostic is that it is a purely structurally-determined morpheme. In those varieties where it occurs, given an object suffix on a predicate, the *-in* is automatically inserted between predicate and stem. Alternatively, the choice of *-in* is not automatic, but if it occurs, it must be accompanied by the suffix pronoun. In both cases the occurrence of *-in* is fully determined by its linguistic context.

(84) Nigerian Arabic: *kaatib* ‘having written’ + *ha* ‘it.F’ → *kaatb-in-ha* ‘having written it.F’

²⁴³ Operstein, “Contact-genetic linguistics: towards a contact-based theory of language change”.

²⁴⁴ Owens, “The historical linguistics of the intrusive *-n in Arabic and West Semitic”.

Samaritan Aramaic: *yiqtaal* + a → *yiqtaal-inn-a* ‘he kills her’²⁴⁵

There is one rule for the insertion of the intrusive *-in*, and that rule is oblivious to chronological time, unless one will argue that a rule of such specificity arose twice, once in Samaritan Aramaic, and once in Nigerian Arabic. If one does push this argument, then, presumably, one will also argue that its occurrence in Samaritan Aramaic is independent of its occurrence in Biblical Aramaic, and that its presence in Nigerian Arabic is independent of that in Bahraini or Yemeni Arabic. Implicity, such arguments have in fact been made.²⁴⁶ As soon as one embarks on this line of argumentation, however, there is no longer a linguistic basis for determining how history is explicable at all in those varieties it is attested in. Presumably one would want to say that in fact there is an historical linguistic association of inheritance between Biblical Aramaic and Samaritan, and perhaps between Nigerian Arabic and Bahraini Arabic. However, the only methodological grounds for distinguishing an Arabic intrusive *-in* and an Aramaic intrusive *-in* is the circular argument that in the one case it occurs in varieties of Arabic, and in the other in varieties of Aramaic.

So if there is one rule, it must have a common origin at some point in chronological time. Samaritan Aramaic died out perhaps in the eighth century CE. Nigerian Arabic is still spoken today. Nigerian Arabic, moreover, has been in the area of Lake Chad since the 14th century, and is separated from its nearest intrusive *-in* neighbor (Yemen or Bahrain) by 1,500 miles, and by at least 600 years, but probably by over 1,000. The comparative method elegantly tells us that the intrusive *-in* has one intermediary common dispersal point somewhere in the Arabian peninsula over a millennium ago. But if there is a common origin to the Arabic intrusive *-in* and the Aramaic intrusive *-in*, there is no reason not to postulate a single origin for both. This cognation with Aramaic puts the common origin back still further. I will take this point up briefly in 7.4 below. For now the point should be clear that “old” in comparative linguistic terms is meaningless in chronological terms. Once it is in the language the intrusive *-in* is ageless. The “same” *-in* which we see and hear spoken in Nigerian Arabic today is the same –

²⁴⁵ Macuch, *Grammatik des samaritanischen Aramäischen*, p. 228.

²⁴⁶ Hasselbach, “The ventive/energic in Semitic: A morphological study”, p. 324, see Owens 2013: 219, n. 4

in as the ancestral NA population brought with them 600 years ago, and the same *-in* as attested in Yemen and the same *-in* reconstructed to the Arabian peninsula... and this is the same *-in* which was attested in Samaritan and Biblical Aramaic. The major linguistic principle derivable from this example is that given the appropriate circumstances, linguistic features, even “exotic” ones, can remain stable over millenia in widely separated locations. The fact that they are today attested in widely separated locations does not demand that we postulate spontaneous generation in each disparate location they are found in.

I would note that detailed arguments against parallel independent development in the more complicated case of the C-R schema are found in Owens.²⁴⁷ Similar objections to not assuming a shared history applies to all of the features discussed here.

7.2 A basic model

The situation which has been described for early Aramaic-Arabic contact involves a large number of highly specific features whose chances of independent development are low. To conceptualize the high degree of convergence between the two languages I use the wave model of diffusion, adopted to the specificities of the historical socio-linguistics of the region. The cover term I suggest is “directed dia-planar diffusion”. The social basis of the model is the observation from the previous section that groups of Aramaic and Arabic speakers, often small social units, were in close contact with one another over long periods of time. There were many local encounters. This can be represented conventionally as in Figure 1.

Figure 1 Aramaic-Arabic directed dia-planar diffusion

T1	T2	T3	T4	
Aram-Ar ₁	Aram-Ar ₁	Aram-Ar ₁	Aram-Ar ₁	...
	Aram-Ar ₃	Aram-Ar ₃		
Aram-Ar ₂		Aram-Ar ₂ or ₆		
	Aram-Ar ₄	Aram-Ar ₄	Aram-Ar ₄	...

In these groups, Aramaic would have constituted the language of wider communication. Aramaic had been the dominant language in the Middle East for over 1,000 years before the Arabic-Islamic expansion,

²⁴⁷ Owens “Dia-planar diffusion”, pp. 97-99.

so allowing for probably local exceptions, it would have been the Arabic speakers who would have been bilingual in Aramaic. The diffusion is “directed” by the sociolinguistically dominant language. These groups served as the locus of the diffusion of Aramaic traits into Arabic. It may be assumed that throughout the 1,600 years (900 B.C.E. – 700 C.E) many encounters and different linguistic outcomes resulted. This situation is represented in Figure 1 on a time axis, on a geographical planar axis, and by social group, represented by the numbers. In this stylized representation, at T1 there were two separate encounters between Aramaic and Arabic-speaking groups, the groups represented by the numbers “1, 2”. Group 1 continued their contact throughout, from T1 to T4. Group 2 split, Arabs and Aramaic speakers going their separate ways so that at T2 there was no contact between them. Some successors of this group met up again at T3, though whether these were the “same” (“2”) or different (“6”) or something in-between linguistically would be an open question. At T4 the two groups in any case had split again. Groups which before were not in contact could come into contact, with attendant linguistic effects (e.g. group 4 at T2), and the groups could split apart again.

That such encounters could produce not only the effects described in this paper, but more unusual ones is suggested in the Raqash inscription, discussed in section 6. Moreover, with certainty many linguistic effects which one existed probably eventually disappeared with no trace. Those which did become established enough to be transmitted into the present day were the result of local events. The geographical plane of contact was large and politically decentralized, so no standard set of diffused features resulted. We thus observe much linguistic evidence dispersed throughout the present-day Arabic-speaking world.

The diffusion towards Arabic, moreover, stopped relatively abruptly with the Arabic ascendancy with the spread of Islam. At the latest by the beginning of 800 C. E. Arabic was replacing Aramaic as the language of wider communication in the Middle East. The original Aramaic features were, however, now part of different varieties of Arabic. Here they began to undergo further permutations and spread, as Arabic groups diffused linguistic traits amongst themselves. The overall result was to produce unequivocal, but widely distributed linguistic traits many of which can ultimately be traced back to Aramaic.

7.3 Interpretation

An initial historical linguistic interpretation will divide the diachronic development into three eras (three dia-planes) according to when the diffusion can be inferred. The extent of the attested spread of a feature across a plane plays an important interpretive role in assigning it to one plane or another.

Diffusion occurred:

Dia-plane 1: early Islamic era

Dia-plane 2: In Middle Aramaic era (ca. 100-700 C.E.)

Dia-plane 3: Prior to Middle Aramaic

There is no single criterion or set of criteria which will automatically assign a feature to one of the three dia-planes, though in all cases standard historical linguistic thinking can be applied to reach a best possible decision. Some assignments will be easier than others, as the following brief consideration of criteria will make clear. An initial assignment of features to dia-planes is made in Table 1, as well as below.

a. Era ab quo. There are relatively few indications which limit the anciencey of a feature, though some exist. As argued in 3.1.4.2 the *dyaal*-possessor derives from Aramaic *diil*. *Diil* is attested only in Middle Aramaic and thereafter, which would exclude dia-plane 3. Similar considerations apply to the *n*- 1SG and the inflected nominal predicate.

b. The further the older. A standard wave theory assumption is that wider spread features are older. It takes time for groups to reach new homelands, and if the same feature is found in different directions the likelihood of attaining that distribution is raised the longer the groups have to reach their destinations. In Table 1, among Arabic dialects those considered “widespread” frequently are placed in dia-plane 3, the oldest. C-R schema, for instance, is found nearly everywhere in the Arabic-speaking world in one form or another. If it had entered Arabic from Aramaic at an early era, it would have had time to have spread within the Arabic of the Middle East, so that it would have been carried in different directions at the time of the diaspora.

c. The more peripheral the older. This partly coincides with the previous criterion, though can apply to only one feature, which if only one, would be considered a relic. The idea here is again that it would have taken time for the feature to be carried a long distance. Though the **he* reflex of **ħa* is attested only in Nigerian Arabic, to have been

preserved it would have had to have entered its ancestral dialect early enough that it could partake of the diaspora.

d. Single features are innovative. Potentially contradicting the previous point is the observation that a single feature is more likely to be innovative than multiply-attested ones. The inflected personal participle, for instance, is attested in Arabic only in Uzbekistan. It is highly plausible that it was here that the feature developed, rather than assuming that it innovated elsewhere, where it disappeared in its original homeland, and traveled to Uzbekistan. This leads to the next criterion.

e. Non-contiguous features are older. Unless one is an adherent of parallel independent development (see 7.1), identical features which are distributed discontinuously are likely to be older. This criterion dovetails in part with b. above, though does not demand great distance. The –n-final object pronoun is attested in the Tihama and in the Levant, suggesting a common innovation.

f. Complications. The caveats that go with these criteria should not be underestimated. Essentially they amount to little more than common sense rules of thumb, and objections, both logical and empirical, can be directed against all of them. At best they only establish a terminus ab quo, since only when a phenomenon is identified can its history be contemplated. It is argued, for instance, that the pre-Hilali di-possessive is due to Aramaic sub-stratal influence. This is assumed to have happened in situ in the Maghreb, though nothing logically precludes the feature having innovated in the Middle East and being carried to the Maghreb. The only structural criterion militating against this interpretation is that of least moves: if it innovated in Arabic in the Maghreb, it innovated once, and nothing more. If it innovated in the Middle East, it would have had to have moved, and to have disappeared in the Levant.

As it turns out, there is indirect evidence bearing on this. In Baghdad²⁴⁸ and Levantine Arabic (as in [85]) there exists an extraposed possessive construction structurally identical to (58).

(85) <i>xayy-a_x</i>	[<i>li-l-mara_x</i>]
brother-her	to-DEF-woman
‘the woman’s brother’	

²⁴⁸ Abu-Haidar, *Christian Arabic of Baghdad*, p. 116.

As can be seen by inspection, the only difference is that instead of the possessor marker *di*, the Levantine construction uses the Arabic preposition *l-* ‘to, for’. It is possible, therefore, that the current Levantine Arabic construction re-lexicalized an original *di*- possessive with *li-*, otherwise keeping the construction constant.

Similarly, following Rosenthal’s description of Biblical Aramaic syllable structure (see 3.1.1.2.2) it is possible to argue that a model of radical syllable restructuring (the C-R schema) was available during dia-plane 3. On the other hand, Knudsen discussing Syriac dates the final reduction of short vowels in open, unstressed syllable to a later date in the third century CE.²⁴⁹ Thus, Rosenthal on Biblical Aramaic and Knudsen on Syriac should be regarded as points of orientation, suggesting a concrete chronological range for when the changes might have entered Arabic. Many details remain to be worked out.

It can finally be noted that this analysis is orientated towards understanding Arabic. Aramaic merely provides the source material. Carrying this research forward, one can imagine that ultimately it could inform the history of Aramaic as well.²⁵⁰ One remark bears elaboration here. Hoberman appears to indicate that the boundaries between a reconstructed Aramaic based in the neo-northeast dialects and attested Middle Aramaic varieties, Syriac and Samaritan from the sample here, may be hard to draw.²⁵¹ A reconstruction of pronouns does not reproduce Syriac or Samaritan, but neither does it yield entities radically different from them. Accepting the basic premise of the current paper, the diasporic Arabic varieties – Cypriot, Uzbekistan, North African – are especially interesting to Aramaic to the extent that they contain features introduced via contact in the early Islamic or in the pre-Islamic era. Their presence in the diasporic Arabic varieties confirms an antiquity *ad quem* of the forms in Aramaic itself.

7.3.1 Dia-plane 1: early Islamic era

a. Inflected participle. This is found in only one dialect, Central Asian. As the spread of Arabic to this region can be historically dated

²⁴⁹ Knudsen, *Classical Syriac phonology*, p. 37.

²⁵⁰ As in Owens “Indeterminacy and the comparative method: Arabic as a Model for understanding the history of Aramaic”.

²⁵¹ Hoberman, “The history of the modern Aramaic pronouns and pronominal suffixes”.

to the early eighth century, this feature in all likelihood arose subsequent to this migration. There is no indication of a similar development elsewhere in the Arabic-speaking world.

b. di-possessive. This is limited to pre-Hilalian North African (Algerian, Moroccan) Arabic. As the Arabic-speaking population was established in this area in the middle to late seventh century, its diffusion can be dated to that period.

c. 3PL perfect-w. This is widespread to North African but is also found in Mardin in Anatolia, so an argument might be made for Dia-plane 2.

d. Guttural r. As noted above, Haim Blanc already pointed out the guttural r pronunciation in eighth century Baghdad.²⁵² While best known in Iraqi Christian/Jewish Arabic, it might, however, also have a presence in the Levant, while reflexes identified in pre-Hilali Moroccan dialects suggest a contact periodization no later than the early Islamic dia-plane, perhaps older.

e. n- ‘I’. This in fact is not attested in the Aramaic sample, though is found in Palestinian Aramaic, of the same era as Samaritan. A structural “hint” is found in the spread of *n-* to the third person in Syriac (see [51] in 3.1.3.4.3 1). If this is a model for the North African/Chadian *n-*, it probably emerged in early Islamic times in the diaspora population.

f. **ha* → **he*. This is attested only in Samaritan and in Nigerian Arabic. Assuming cognation, its presence in Nigerian would be explained by contact and shift in Samaritan. This is not the only isogloss attested for Nigerian Arabic in the sample (gutturality, visible epenthesis, CVCVC final stress, 1SG stressed, *at* ~ *at*, intrusive *-n*, AP as verbal predicate, *n-* 1SG (variable in Nigerian Arabic).

g. short vowel protected by stress. This is strikingly found in two non-contiguous Arabic regions with a known Aramaic substrate, namely Iraqi and NW Syrian Arabic. Unlike the guttural /r/, in Iraqi it is widespread in that it is found in the lingua franca *gəl-ət* dialect (Irwin, 1963). It is possible that this feature already entered the relevant ancestral Arabic dialects sooner, in which case the feature belongs on Dia-plane 2.

²⁵² Blanc, *Communal Dialects in Baghdad*.

7.3.2 Dia-plane 2: 100 C.E. – 600 C.E.

This is the Middle Aramaic period.

a. * $\zeta \rightarrow \gamma$. Though attested only in Cypriot as well as occasionally in Yemeni/Omani Arabic, the large area of discontinuity speaks for a broader pre-Islamic contact.

b. *aw/ay = uu/ii or ee/oo (3.1.1.1.4). This change is found in North African Arabic (from Tunisian westwards) and Maltese, as well as in Central Asian Arabic. It is occasionally attested in Andalusian Arabic. A different reflex is also found in central Syria today. The fact of a wide diasporic dispersion, eastwards and westwards, indicates that it must have been widespread in the original Middle Eastern dispersal area. There it already had a large enough population of speakers that when they split, the resulting groups could maintain the forms in tact. This feature underscores the “planar” component of the model. The different planar varieties in Aramaic transferred more or less in tact to different varieties of Arabic.

c. *l-*, definite direct object marker (5.1.12). This feature parallels *aw/ay and so the logic of assigning it to dia-plane 2 is the same. It is attested in Central Asia, Maltese, Cypriot Arabic, Andalusian Arabic and in Syrian and Baghdadi Arabic.

d. *Itpeel*, *itfaʕal*. As in 7.3.2b.

e. *-i* 1SG. The presence of this feature both in the Middle East (southern Jordanian, Sinai litoral) and some African dialects suggests an early diffusion and subsequent propagation in diasporic times. In this case the only Aramaic evidence in the sample is from BAr. However, post-C *-i* was lost in Syriac, and Samaritan is so strongly influenced in its syllable structure and prosody by Hebrew that its lack in Samaritan is not a compelling factor.

f. invariable *-n* in plural object pronoun. See discussion in 3.1.3.2.1 and 5.1.8.

g. object pronoun lacking /h/ (see 3.1.2.2). This fairly transparently derives from contact with Aramaic. The conditions for the occurrence of /h/ are nearly identical, namely, *-h* after a vowel (*-hon*), or in Biblical Aramaic after a long vowel, and \emptyset after a consonant (*-on*), with Samaritan having lost the *h-* altogether. Moreover, this coincides with the previous variable, invariable *-n* in Damascene Arabic and for instance in Samaritan. That it occurs both in Uzbekistan and in the Sudanic area

argues that the feature spread from Aramaic to Arabic in pre-Islamic times, then transported further during the diaspora.

h. inflected nominal predicate (3.1.4.3). This is tentatively set in dia-plane 2. The feature is widespread in qəltu dialects (Mesopotamian Arabic). If the construction is cognate with that in Uzbekistan, then dia-plane 2 is appropriate. To the extent that one would argue that it is restricted to the Mesopotamian area, one could entertain the idea either that it belongs to dia-plane 1, or even that it is a later development than this. Disentangling these leads is a task in and of itself.

7.3.3 Dia-plane 3: ? < - 100 C.E.

The beginning point of this dia-plane is open to interpretation, as will be discussed in 7.4 below. It pre-dates dia-plane 2, in any case. Many phonological features belong here.

a. C-R. This is widely attested in Arabic, Baghdadi, NW Syrian, North African (Tunisian, Algerian, Moroccan), and “imperfect” traces of the constraint are attested even more widely. Given the profound extension of this feature in Arabic, as well as the fact that it is fundamental to syllable structure, it must have diffused at an early enough time for it to have worked its way into many varieties of the language.

b. systematic status of epenthetic vowels. This feature goes hand in hand with 7.3.3a, and follows the same argumentation.

c. CgutC, lowering in context of guttural consonant. This feature is very widespread in Arabic. It is slightly less well established, at least in the literature as analyzed thus far in Aramaic. It occurs in Biblical Aramaic; its status in Syriac is suggested by Nöldeke.²⁵³ Given its extension in Arabic, indicating a long breeding time, and its uncertain breadth in Aramaic, this is a feature which may have moved from Arabic to Aramaic. More research is needed, however.

d. CVCVC final stress. This feature defines a basic dichotomy throughout the Arabic dialects. The hypothesis here is that this feature was introduced into Arabic via Aramaic.

e. at ~ ah, AP as verbal form, guttural constraint on /a/. These three features, being universal in Aramaic and in Arabic self-evidently belong to a very early strata.

²⁵³ Nöldeke, *Kurzgefasste Syrische Grammatik*.

f. l- encliticization. This is so widespread in Arabic that an early provenance is likely.

g. Participle as member of verbal paradigm. This is all but universal in both Arabic and Aramaic.

h. Intrusive -in. While this feature is quite rare among contemporary Arabic dialects, its extreme range of dispersal as well as its universality in the Aramaic used here argues for dia-plane 3.

i. S-V pragmatic word order. This is placed in dia-plane 3 because of the affinities shown between Biblical Aramaic and Gulf Arabic. More research needs to be done on both Aramaic and Arabic to substantiate this.

7.4 Diffusion or transmission?

In the instance of dia-planes 1 and 2 the case for change in Arabic via contact with Aramaic is implicit in the fact that there are many varieties of Arabic which do not have the Aramaic-identical or Aramaic-like properties. For these the model assumes a proto-Arabic whose features are explicable within the classic methods of the comparative method.²⁵⁴

For dia-plane 3, however, one needs to consider a different perspective, observing that there is often very little evidence for when these features would have diffused from Aramaic to Arabic. Some of the features, moreover, are found almost universally in Arabic, so an argument for diffusion, which in the optimal case requires that only one set of varieties is affected by the contact, is weak.

One feature was introduced precisely to raise this question, namely the variation *-at ~ ah* (3.1.3.1). This is a feature of great morphological specificity. For diffusion it would require the maintenance across language boundaries of complicated allomorphic variation. While this is not impossible, a more plausible assumption is that the change from invariable *-t*, attested in Ethiopic Semitic, Akkadian and in most Modern South Arabian languages, to *-t* before suffixes, *-ah* before pause (simplifying the contexts), occurred at a time when Aramaic and Arabic speakers had not yet differentiated linguistically.

A similar argument, however, might obtain for all of the features included in 7.3.3. This is an issue a discussion of which would take us

²⁵⁴ Owens, *A linguistic history of Arabic*.

outside the scope of the present paper. It is relevant to observe, however, that dia-plane 3 leads into interpretive problems as relevant to the nature of proto-Arabic and proto-Semitic itself as it is to the bilateral relationship between Aramaic and Arabic.

8. Conclusion

The features discussed in this article are all fundamental to the structure of Arabic. This is not a fishing expedition looking for rarefied correspondences between Arabic and Aramaic. This holds as much for spoken Arabic today as it held for speakers of Biblical Aramaic. A feature such as the C-R schema is so basic that one might estimate something between a quarter and a third of all words in running conversation are impinged by it. The extent to which the features are present in discourse is precisely one of the arguments in favor of the contact-based change. They are so present that transfer via contact among fluent bilinguals is highly plausible.

To reiterate the obvious, if the features entered Arabic via contact from Aramaic, then the ancienity of the features as proposed here needs to be accepted. The di-possessive, for instance, could not have developed independently of Aramaic say around 1200 CE. To argue for such makes no linguistic sense. Indeed, an analogous argument forms the basis of Heath's Latin-origin explanation. The transfer needed to occur when it is plausibly available to the community of speakers. The same argument that the features must not be later than the early Islamic period, and are in many cases older, applies in essence to all the features discussed here. In other words, if, in the vein of Macuch²⁵⁵ one would deny the contact-based origin of the features in Arabic, one needs in all twenty four instances to argue for parallel independent development. While I believe it is a position tactily assumed among many Arabicists and Semiticists, it is rarely clearly articulated.²⁵⁶ As noted in Owens,²⁵⁷ this inherently is a methodologically dispreferred explanation for convergence, because at best it is a default option. It can only be appealed to if relationship via genetic cognation and borrowing/shift do not

²⁵⁵ Macuch, "Pseudo-Ethiopisms in Samaritan Hebrew and Aramaic".

²⁵⁶ As in Bloch, "Different Ways Identical Results".

²⁵⁷ Owens "Dia-planar diffusion", p. 78.

work. This is especially so in the current case where it is known that the populations have been in contact over such a long period of time.

In general, it needs to be emphasized, the data which has been presented conforms to the “predictions” of Dixon’s equilibrium + punctuation model of historical change. Dia-planar diffusion will produce widespread contact-induced change – the current data set runs the gamut of phonology, morphophonology, morphology and syntax – but because it assumes dispersed populations and contact over long periods of time, many different individual outcomes are expected. Arabic is particularly interesting because the period of rapid expansion, the period of punctuation during the rise of Islam, allows insights into contact events which must have already taken place in the pre-Islamic era. The same argument was the basis of the reconstructions in Owens,²⁵⁸ and can now be generalized to both internal and contact-based change.

Finally, it can be observed that among the current features are those which other scholars have recognized as “non-Arabic”, looking for contact-based explanations or others elsewhere. These include the following:

Diem argues that the change of *hum → hon (and other plural suffix pronouns) in Tihama and Damascus Arabic occurred independently via analogy to the feminine suffix²⁵⁹

Heath argues for the development of pre-Hilali *dyal* from Latin *de* + Arabic *le*.²⁶⁰

Corriente, Rubin, and others see the prepositional *l-* marking of a direct object as due to Romance influence on Maltese and Andalusian Arabic.²⁶¹ Heine and Kuteva argue for parallel independent development here.²⁶²

In each case I either follow the suggestions of others who have proposed Aramaic influence,²⁶³ or, with the caveats expressed in 7.3, propose here that they are due to Aramaic contact. Once one assumes this perspective, not only these, but many developments in Arabic fall into place, offering explanations which are simpler either distributionally

²⁵⁸ Owens, *A linguistic history of Arabic*.

²⁵⁹ Diem, “Zum Problem der Personalpronomina”.

²⁶⁰ Heath, “D-possessives and the origins of Moroccan Arabic”.

²⁶¹ Corriente, *A Grammatical Sketch*, p. 126; Rubin, *Studies in Semitic Grammaticalization*.

²⁶² Heine and Kuteva, *Language Contact and Grammatical Change*.

²⁶³ E.g. Behnstedt, “Noch einmal zum Problem der Personalpronomina”.

or linguistically. Distributionally, for instance, one does not need to puzzle over the fact that the same *l-* prepositional marking also occurs in Cypriot Arabic, Levantine, Baghdadi and Uzbekistan Arabic, varieties well outside the orbit of Romance influence. Linguistically there is no need to justify the odd fusion of Latin *de* with Arabic *le*: Aramaic **diil* as a source is already there. Thus the most fruitful explanation which conforms both to standard linguistic argumentation and to the long socio-historical contact between Aramaeans and Arabs, the explanation requiring the fewest causal steps, is that they all entered Arabic from Aramaic. In the end, Occam's razor will prevail.

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