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## On 'imāla in pre-Islamic Arabic

### Abstract

This article proposes that the 'imāla phenomenon was an innovation in the Najd region. The non-'imāla form was the traditional form because it is the vowel production in the available Ancient North Arabian data. The article will separate the use of 'imāla as an assimilatory vowel from the Najdi non-assimilatory production by analyzing the testimonial data in the traditional books of grammar. Finally, the article will use the available genealogical literature to establish an approximate chronology for the innovation and to justify the spread of the innovation among the pre-Islamic tribes.

### Keywords

vowel change, development, variation, koineization, contact.

### 1. Introduction

This article strives to introduce a snap shot of the developmental condition of the 'imāla sound condition in the pre-Islamic varieties of Arabic on the eve of the advent of Islam. 'imāla will be considered by this article as an innovation that took place in the pre-Islamic Najdi group of dialect. For ecological reasons, this phenomenon did not extend to the Western Hijazi dialects despite favorable geographical conditions. The latter dialect group retained the traditional Ancient North Arabian form of the vowel, i.e. tafxīm. 'imāla is used in the non-Najd dialect as an assimilatory phonetic condition. It is, therefore, an indicator for the contact situation in the Arabian Peninsula among the speakers of different pre-Islamic varieties. I will argue here that the phenomenon originated in Najd in the Najdi tribes. Its limited geographical spread was shaped not by the existence of geographical barriers, but by a set of prohibitive linguistic and non-linguistic

factors. The emergence of Islam and the Arab conquests must have frozen this innovation<sup>1</sup>.

Historians of Arabic have always complained of the shortage of pre-Islamic and early Islamic dialectal data, let alone reliable and complete sets thereof. The conditions remain the same in this article to some extent. Due to the nature of writing as a transition medium of historical data, issues of availability and reliability are even more acute. However, it has now become possible more than ever before to study some aspects of pre-Islamic vernaculars in greater detail. We owe this novel potential to new transliteration efforts of existing data and recent epigraphic findings and fresh analysis of some already existing epigraphic data. In addition, new interdisciplinary fields of research such as historical socio-linguistics and sociology have shown potential to magnify the effectiveness of the otherwise scanty data. This article tries to make use of these two advantages to explain the status and distribution of the 'imāla phenomenon<sup>2</sup> in the pre-Islamic dialects by using space and contact models as explanatory tools. The behavior and phonetic value of 'imāla have been discussed elsewhere (Owens 2006 and al-Sharkawi 2015). The task of the current article is to provide a map and a chronology of the phenomenon.

## 2. This Article

In the following section, I will talk very briefly about the geographic structures of the Arabian Peninsula in order to show that the physical ecology was irrelevant to the development and/or the manner in which the innovation spread in the Arabian Peninsula. Although geography was not formative and was permissive, it did not help spread the innovation beyond the tribes of Asad and Tamīm into Southern Najd and Hijaz.

Then, I will move to discuss 'imāla as a phonetic phenomenon in the second/eighth century from the point of view of the Arab grammarians. I will do this in a summary fashion, because the topic has been previously described and discussed in details elsewhere. The discussion will distinguish between the 'imāla as a phonetic process (which is common among most of the pre-Islamic tribes in Hejaz) and 'imāla as a stable sound realization in the innovating area. I will then move to the discussion of relevant epigraphic data from Northwestern Arabia from the advent of the Common Era. The purpose of this quick survey of inscriptional data is to show that the non-'imāla form of the vowel is older than the phenomenon under discussion, with the 'imāla form being then the

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<sup>1</sup> This article is made possible through the University Research Grant of Wayne State University in the summer of 2017.

<sup>2</sup> For an overview of the phenomenon, see Levin (2007: 311–315). For more detailed analysis of the phenomenon in medieval Arabic linguistic theory, see Levin (1971 and 1992: 74–93).

innovation. After that, I will introduce the geographical distribution of the innovative phenomenon in the Arabian Peninsula in pre-Islamic times. I will finally use traditional Arab genealogical literature to determine the genealogical origins of the pre-Islamic tribes that used the innovation and the temporal distance between them and the tribes that did not use the innovation. The purpose of this analysis is to determine an approximate time frame for the innovation.

The available data points towards the possibility that Najdi dialects were innovative. Genealogical data, when compared with the distribution of the phenomenon, will also show that the innovation was not accepted by the rest of the pre-Islamic Arabs, even in the same geographical region at least as late as the career of the Prophet Muhammad.

It is important to note here that despite the parameters of space are generally accepted as identification of historical varieties, we must realize that these varieties are also, and often primarily, determined by political events and/or social mobility. The geographical structures of the Arabian Peninsula is an unlikely a factor in the formation and development of vernaculars despite the geographical designation of such varieties. It is equally important to note that political space in particular and non-geographical space in general does not contain and/or limit linguistic varieties. When a dialect is named Hijazi, Najd or Qaysi for instance, it is in fact not necessarily spoken in these areas and domains only, and not in other regions as well. That is to say, the region does not form the register.

One can, in my opinion, speak about a binding relationship between a linguistic variety and a geographical region only when the geographical space in question is restrictive, such as an island, a valley between mountain, a harsh desert, or when there is political conflicts. The Arabian Peninsula, as we will see in the next section, was not geographically restrictive for linguistic contact. Its terrain and topography were movement friendly. We will, in the following paragraphs, discuss the geographical space. Political space will be discussed later in the genealogical discussion.

### 3. The Peninsula

The Arabian Peninsula is a large land bridge suspended between the continent of Africa and that of Asia. It is among the largest peninsulas on earth, and is surrounded by water on three sides, except from the northern and northeastern sides. It is connected to Africa and Asia from the broadest side: Northern and Northwestern Arabia. It lies on 23 north and 46 east.<sup>3</sup> The Red Sea borders the peninsula from the west and southwest with a massive approximate coastal

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<sup>3</sup> [https://www.google.com/eg/?gfe\\_rd=cr&ei=sQuXU6jPFM2e\\_wbW11CgBw#q=longitude%20and%20latitude%20of%20the%20arabian%20peninsula](https://www.google.com/eg/?gfe_rd=cr&ei=sQuXU6jPFM2e_wbW11CgBw#q=longitude%20and%20latitude%20of%20the%20arabian%20peninsula).

length of 1900 kilometers. In the south, there is the Gulf of Aden, and also in the south and southeast, there is the Arabian Sea. The Peninsula is bounded by the Persian Gulf and the Gulf of Oman from the east. The surrounding waters around the Arabian Peninsula, except the Indian Ocean, were relatively narrow and mostly easily passable. The Syrian desert is the northern border of the Arabian Peninsula, where there is no topographical demarcation to mark the end of the Peninsula and the beginning of the rest of South West Asia.<sup>4</sup> Its southern part is its largest mass, and extends between Yemen and Oman to more than 1900 kilometers. In the Northwest, the Arabian Peninsula is connected to the African continent through the Sinai Peninsula, which serves as a bridge for the two continents. The northern part of the peninsula is its connection to the rest of the ancient world. The northwestern part borders Sinai and the Levant, the northern line borders the Syrian Desert and the northeastern part borders the Iraqi desert. This northern land bridge is a flat mass with no land barriers, such as mountains.

Deserts cover more than three-quarters of the Arabian Peninsula. Geographers think that the region had changed from savannah, or grasslands to desert by about 8,000 B.C.E., along with the neighboring Sahara Desert in North Africa. The Arabian Desert, one of the largest deserts on the planet, is a vast desert wilderness stretching from Yemen to the Persian Gulf and from Oman to Jordan and Iraq. It occupies most of the Arabian Peninsula, with an estimated area of 2,330,000 sq km (900,000 sq mi). Al-Nufūd desert is one of the Arabian Deserts, this desert of the now northwestern Saudi Arabia is famous for gigantic sand dunes, some reaching over 100 ft. high. Al-Rub‘ Al-Xāliyy ‘the empty quarter’ is the largest (only sand) desert in the world and famed for huge sand dunes that can extend for over 25 miles. A large part of the Arabian Desert, it covers most of southern Saudi Arabia, and is almost moisture-less. The A-Dahnā’ is the northern expanse that connects to the Al-Nufūd Desert.<sup>5</sup>

Artifacts from hunter-gatherer groups and early settled cultures have been found at many sites. Traces of the earliest towns, cities and civilizations in the Fertile Crescent along the Mediterranean Sea have also been found. The Arabian Peninsula is mostly arid with inhospitable terrain and fertile regions nearly all around the periphery.<sup>6</sup> Along the mountainous Arabian Sea coast to the south, rain-fed and irrigated highland areas support a rich agriculture. These mountains continue up to the Red Sea coast, but they do not receive the monsoon rains, and are mostly arid. People settled in areas where they could farm, and herded flocks of sheep and goats in areas where they could graze on seasonal plants. During the first millennium B.C.E., domestication of the camel

<sup>4</sup> <http://www.britannica.com/EBchecked/topic/31551/Arabia>.

<sup>5</sup> <http://www.worldatlas.com/webimage/countrys/asia/middleeast/melnd.htm>.

<sup>6</sup> [http://www.newworldencyclopedia.org/entry/Arabian\\_Desert](http://www.newworldencyclopedia.org/entry/Arabian_Desert).

allowed pastoral nomads to inhabit even more arid parts of the peninsula. More important, the camel allowed people to cross the driest deserts between wells. Camels can travel at a steady rate and withstand the harsh desert climate for long periods without drinking. Invention of a practical camel packsaddle allowed it to carry hundreds of pounds at once. The camel caravan opened the Arabian Peninsula to regional and long-distance trade during the early centuries of the Common Era.

The Arabs were skillful in transporting goods safely across the wide barren stretches, guided by signs of nature just as mariners navigated the seas. Seaports along the Arabian coasts linked the peninsula with the Mediterranean trading system, the Indian Ocean and Africa. Towns at caravan stops at oases developed along the overland trade routes, such as the inland towns of Makka and Madīna. In the northern part of the peninsula, cities such as Jericho, Jerusalem and Damascus developed during biblical times. During classical times, city-states like Palmyra and Petra grew wealthy from trade on the eastern end of the Asian silk roads. Although the inner regions of the Arabian Peninsula were too difficult to conquer, the caravan routes and their towns in the region were not completely isolated. Arabian camel cavalry fought in imperial armies for the Persians and the Romans. Improvements in the camel saddle during the early centuries of the Common Era increased their strength as a military force and gave them control of the caravan trade. Trade and migration brought them luxury goods, wealth and ideas, including monotheistic belief systems such as Judaism and Christianity, though most tribes in the area remained polytheistic until the rise of Islam.

Although there are some plateaus and elevations in the heart of the Arabian Peninsula, especially in Najd, the whole region is largely a flat area of land with very few especially elevated landforms. The few mountains of the Peninsula are concentrated along the western and southwestern Red Sea coast. There are two smaller mountain ranges, the Hijaz in the Western costal region and 'Asīr in the southwestern costal region. Running along Saudi Arabia's border with the Red Sea, these two ranges of lower mountains averages 6,000–7,000 ft. (1,829–2,130 m). Mountains stretch along the coast of the Arabian Peninsula about 50 miles from the sea. Because these mountains catch what little moisture is carried by the winds that move across the Arabian Peninsula, their climate is very different from that of the interior basin. Throughout most of the year, the climate of the mountains is balmy (mild) during the day and clear at night. At the height of the rainy season, tremendous downpours and flash floods are common. During the winter, it occasionally snows. The coastal mountains of the western and northern regions have steep slopes on both the seaside and interior side, making survival difficult for all but the wild goats. In the southern and western regions, the mountains are rugged with juniper forests interspersed among jagged rocks and steep slopes.

Najd comprising a mainly rocky plateau sloping eastward from the mountains of the Hejaz. On the northern, eastern, and southern sides, it is bounded by the sand deserts of Al-Nafūd, Al-Dahnā', and the Rub' al-Xāli. Oases groups within Najd region include Al-Kharj, Al-Maḥmal, Al-Sudayr, Al-Washm, Al-Qaṣīm, and Jabal Shammar.<sup>7</sup> It glides into the surrounding desserts and the eastern costal region smoothly, forming no natural barrier.

From the above brief description, we can see that the Arabian Peninsula is a permissive ecology as far as contact is concerned. It does not contain natural barriers that may allow compartmentalization of features and varieties and prohibit dissemination. However, geographical space is relevant to our study of the distribution of linguistic features/variation. But it will be inadequate for us to define space merely as a physical concept. It is rather a three dimensional concept of the geographical/physical, the social and the perceptual (Britain 2002: 604). Geographical space helps identify the sources of a linguistic variable, the concentration of its users and the rout of its dissemination. It is the region where the variable in question is witnessed repeatedly.

Social space is the space shaped by the group using the variable in the physical space and outside it. The particular variable may be used in a geographical dialect, and may also be used by speech communities in particular context outside that physical space. By the same token, a variable may not be used in a particular variety except in certain communicative contexts. Looking at a variable in physical space only will not help us understand its distribution in the historical context of the Arabian Peninsula. This is because different pre-Islamic tribes spoke different vernaculars that differed in many aspects, including our 'imāla. These tribes were themselves affiliations of smaller tribes, which in turn were composed of clans. These structures enjoyed a high degree of structural flexibility and mobility, especially because the terrain was not adverse.

#### 4. 'imāla

In this section, I will discuss the phonological phenomenon of 'imāla in the dialects of Tamīm in pre-Islamic times. I will do this to suggest that the long vowel in the dual suffix could have exhibited different qualities according to the vowel and consonantal environments in its neighborhood. The description also indicates that that in Tamīm the vowel change is not responsive to its phonological environment.

I will use the phonological and phonetic description of 'imāla in Owens (2006: 197ff) in order to make the claim that 'imāla took two different shapes in the grammatical literature: an assimilation phenomenon and a sound innovation

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<sup>7</sup> <http://www.britannica.com/EBchecked/topic/401967/Najd>.

in some of the pre-Islamic dialects. There is a lot of confusion among the grammarians as to who of the Arabs used the phenomenon and who did not. Generally, only some of the Arabs tended towards 'imāla of /ā/ > /ē/. We know that generally speaking the region of Hijaz did not use it ('Abū ḥayyān, al-Baḥr, I: 71), but realized the /ā/ > /ō/ quality that the Arabs called tafxīm 'magnification' ('Abū ḥayyān, al-Baḥr, I: 59). Neither did the Yemeni dialects use the phenomenon, although the tribes in the north east of Yemen did. However, the situation of 'imāla in Hijaz is not very clear, for it seems there are tribal dialects that did in fact use 'imāla instead of tafxīm. The majority of the clans in the 'Asad and Qays tribes of Najd also leaned in some of their clans towards 'imāla (Ibn Ya'īṣ, šarḥ al-mufaṣṣal, IX: 54). Among these Najdi tribes Tamīm, according to the Arab grammarians, was the group of dialects that used 'imāla consistently (Ibn al-ḥāḡib, šarḥ al-šāfiya, III: 4).

Now, what does 'imāla in relation to tafxīm mean? It is defined as:

- (1) iṣṭilāḥan taqrīb al-faṭḥa mina al-kasra wa-l-'alif mina-l-yā' min ḡayri qalbin xāliṣ wa-lā 'iṣbā' mubālaḡin fiḥ...
- (2) hiya 'ibāra 'ann al-nuṭq bi-l-'alif murakkaba 'alā faṭḥa tuṣraf 'ilā-l-kasra

'technically, it is bringing the faṭḥa from the kasra and the 'alif from the yā' without total shift or too much blending. It is pronouncing the 'alif mounted on a faṭḥa and moving towards the kasra (al-ḡabbā', al-'iḡā'a, 28).

From (1) we can understand that 'imāla is a matter of approximation and fixing of the tongue positions. It constitutes a shift in the tongue position from a lower to a medium height to produce a vowel between the two qualities of tafxīm and kasra. In (2), however, there is a sense of a glide from the position of tafxīm towards the position of yā' without reaching there quite, which may render a glide quality like /ay/. Owens (2006) explains some of the phonetic contexts of the glide quality. Owens (2006) explains in details some of the phonetic environments of the glide quality.

Generally speaking, 'imāla is a change that happens to the long /ā/ in the neighborhood of a short /i/ vowel in the previous or following syllable towards an /ē/ like quality (Owens 2006: 197). This change happens in the medium or final parts of the word. From traditional Arab grammarians, one can understand the 'imāla phenomenon in another additional two different phonetic descriptions. According to most grammarians, apart from Sībawayhi, it is to be understood as a change from a long vowel to an off-glide /ai/. The grammarians describe the phenomenon as inclining the 'alif towards the yā' (Ibn ḡinniy, Sirr , I: 58 and Zamaxšariyy, Mufaṣṣal, 355). This definition means that one starts from

the 'alif and moves to the yā'. While this understanding is plausible, Owens (2006: 200) finds this analysis problematic. According to him, this understanding of 'imāla makes it identical to the already existing diphthong /ay/. As evidence, Owens declares that Sībawayhi does not mention any similarity between the two sounds. In addition, after the discussion of 'imāla Sībawayhi discusses a case in which some Qaysi Arabs change the final -ā in some nouns such as ḥublā 'pregnant' in pause position into -ay to become ḥublay. Although this is a clear case of an off-glide, Sībawayhi does not include it in his discussion of 'imāla. There is also a pronunciation of the same word that Sībawayhi discusses in the chapters on 'imāla where the word ends with an on-glide -ie rather than an off glide (Owens 2006: 200–201).

Owens' analysis of Sībawayhi adds more to our knowledge of the quality of this phenomenon. He suggests that 'imāla as intended by Sībawayhi is actually an on-glide /ie/ rather than an off-glide /ai/. Sībawayhi declared that /ā/ is inclined if it is followed by consonant with a kasra. This statement is made in the passive voice. Owens understands, and correctly so, that this statement shows that the tongue starts from the position of /i/ and moves towards /a/ to produce this sound. This realization of 'imāla is attested in the Qur'ānic readings especially those of al-kisā'iyy and 'Abū 'Amr Ibn al-'Alā' (Owens 2006: 199). To prove that the tongue does not begin from the /a/ but from the /i/, Owens continues that guttural, /r/, and emphatic sound consonants and the neighborhood of /u/ or /a/ that have a lower tongue positions prohibit 'imāla, and keep /ā/ as is, which indicates that the initial tongue position of the 'imāla is not low /a/ (Owens 2006: 201). Now, that said, we can say that /ā/ tends towards the 'imāla position unless prevented by one of the previous sounds (Corriente 1977: 22). These two descriptions of the 'imāla phenomenon take it towards glides. Textual descriptions, however, can indicate an additional sound quality.

Furthermore, Ibn Ya'īš in his *šarḥ al-mufaṣṣal* (vol. IX: 54) defines 'imāla in a different manner, one that betrays a long vowel rather than a glide. He claims it is:

'udūl bi-l-'alif 'an istiwā'ihī wa- ḡunūḥ bi-hi 'ilā al-yā' fa-yaṣīr maxraḡu-hu bayna maxraḡ al-'alif al-mufaxxama wa bayna maxraḡ al-yā' 'taking the 'alif away from its straight forward position towards the place of articulation of the al-yā', so its place of articulation is between that of the emphatic 'alif and that of the yā'.

From this definition, we can see that Ibn Ya'īš focuses on tongue movement rather than the vowel quality. According to him, the position of the tongue is hanging stable between the vertical position of the /ā/ and that of the /ī/ and not the gliding between them. This medium position of the tongue articulates

a possible long /ē/- like vowel, and adds to the previous two qualities. Sībawayhi (al-Kitāb, II: 259) gives us three phonetic contexts that we can use to corroborate this triple-quality analysis and from which we can understand that what is collectively termed *'imāla* and differently defined can be interpreted as an off-glide /ai/, an on-glide /ia/ and a long front medium vowel /ē/.

First, according to Sībawayhi, the /ā/ endures *'imāla* when it precedes a short /i/, such as the nouns *'ābid* and *'ālim*. In such environments, it is logical that the long /ā/ inclines towards the /i/ by the tongue rising to a higher front vowel position. This is the context of an offglide /ai/, where the tongue starts with the long low front /ā/ and glides upwards in preparation for the short /i/.

(1) *'ābid*--- *'āibid* (a proper noun)

In this context, *'imāla* comes in the first syllable or medium in the word. The second context is when the /ā/ endures *'imāla* when it is preceded by /i/, such as in *'imād* (proper noun). It is also understandable in such a case to interpret *'imāla* as a simple long front medium vowel, as the tongue takes the medium position to pronounce the short medium front vowel /i/ and remains at the same lower position to pronounce the long front vowel and raises it from its original low front position.

(2) *'imād*---*'imēd*

Third, the /ā/ endures *'imāla* when it is preceded by a long front high /ī/ vowel and a /h/, such is in the case of *yakīla-hā*. It is acceptable in such a case to accept Owens onglide /ia/ explanation, as the tongue is raised to produce the front high long vowel /ī/, colors the following short /a/ to make it an /e/ and starts the long final originally low front vowel from a higher tongue position than usual. This apparently is a case of *'imāla* from vowel harmony that the Arab grammarians called *'itbā'*, where usually a contextual long vowel colors the rest of the short and long vowels of the word, provided of course that there is not a consonantal context of guttural sounds (Sībawayhi, al-Kitāb, II: 259).

(3) *yakīla-hā*--- *yakīli-hā* (he weighs it)

It is now important to sort out an issue of terminology. Arab grammarians use two terms to talk about the phenomenon under discussion: *'imāla* and *'itbā'*. It is my understanding that disentangling these terms will help us understand contact in pre-Islamic Arabia.

*'itbā'* is another term we encounter in the medieval literature on *'imāla*. It is always mentioned as a dialectal feature of the Tamīmi dialects (*'Abū ḥayyān*,

al-Baḥr, IV: 413). In all the examples of 'itbā' in these works, the long front high vowel /ī/ raises short and long preceding and following vowels in the word. It is also to be noticed that Sībawayhi puts the condition that there must be a /h/ sound between the inclined vowel and the preceding long /ī/. This condition seems also to be relevant to nouns followed by suffix pronouns, where 'imāla happens in the suffix long vowel as well as the stem vowels. And the examples Sībawayhi and al-'Axfāš (Ma'ānī al-qur'ān, I: 13) give are in fact nouns followed by object suffix pronouns. Apart from the guttural consonant sounds, there is no phonetic preventative factor that may inhibit vowel harmony on all kinds of suffixes in Arabic, and not only object suffix pronouns. Nominal suffixes in Arabic do not include any of these 'imāla -prohibiting sounds.

My understanding is that 'imāla is the general phenomenon of shifting the tongue position in pronouncing long and short low front vowels. 'itbā' is, as the word literally indicates, the phenomenon where the position shift takes place for assimilatory purposes. 'imāla is also the term grammarians used to refer to the innovation of /ā/ shifting permanently into /ē/ in all environments which we witness in Tamīm. Accordingly, Tamīm and probably Asad as well realized the two forms of the 'imāla phenomenon. In all cases, the vowel under study was /ē/ except in the positions where assimilation is dictated by the phonetic environment. In these cases, we can find the on-glide, the off-glide or the long /ē/. 'itbā', then, is a subcategory of 'imāla.

## 5. Early Data

I will report here very briefly on the relevant data from the ancient North Arabian ancestor of Arabic inscribed in Greek. I will use for this purpose Al-Jallad's (2017: 99–186), (2015b: 1–60) and Caplony (2015: 2–81) analysis of the Greek-Arabic data from southern Syria, central and southern Jordan, and the Negev. In addition, I will also use for Old Arabic data evidence from the Safaitic inscriptions from southern Syria and Jordan (al-Jallad 2015a).

The relevant data is largely composed of personal names and short phrases mostly from onomastica and tombstones. Most of the data come from a short Greek inscription contexts. These inscriptions furnish us with two advantages relevant to our purpose here. In the first place, onomastica were inscribed mainly by lay-writers, who were not trained scribes. Their main focus was to convey the Arabic sounds as faithfully as they knew how. The picture the data conveys to us is as a faithful rendering of the Arabic sounds as a writing medium can allow. The second advantage has to do with the Greek writing system itself (Al-Jallad 2015: 6). The ability of the Greek script to represent vowels makes the data more transplant in so far as the 'imāla is concerned. The data can show short and long vowel qualities and variable behavior.

We have data for the short /a/ and long /ā/. I will discuss it in the following short points. But it is important to note here that there is a phonetic conditioning relevant to this data. The phenomenon in question does not take place in the neighborhood of emphatic sounds:

- 1 /a/ in its original etymological form in all sound conditions appears in different data locations and times as well. We see it in data from Bosra, Petra, Umm Al-Jamal and Nissans, geographically. Chronologically, we also find the same data in periods extending from the 3<sup>rd</sup> to the 6th century AD (al-Jallad 2015b: 31).
- 2 In the data pool  $a > e$  in the syllable before the one carrying primary stress. This change is not evenly distributed in the data pool, and it does not seem clear what the sound environments governing it are. In the data from southern Syria the change is extremely conditioned. The short  $a > e$  happens in pretonic syllables after voiceless sibilant. In Nissans, the change takes place as a regressive assimilation phenomenon (al-Jallad 2015: 31). In other sources, the  $a > e$  happens in all environments pretonic (al-Jallad 2013: 25).
- 3 The data does not only show  $a > e$ , but also shows  $a > o$  when it is unstressed. This change seems to be of an assimilatory nature, since it is conditioned before a labial consonant sound. The only data we have for this phenomenon comes from Jordan (al-Jallad 2015b: 32).

*ʾimāla* does not only happen with the short /a/ sound. It also happens with its longer counterpart /ā/.

- 4 The data on this long vowel was ambiguous. It is transcribed in Greek with an (a), which may indicate a similarity in sound quality to its shorter counterpart. In addition, the  $\bar{a} > e$  and  $\bar{a} > o$  are not attested to unambiguously (al-Jallad 2015b: 33).

In this paragraph, we have discussed the chronology of *ʾimāla* in the Greco Arabic and Safaitic inscriptional data. The chronology helps us understand the phenomenon and its distribution. For most of its history, the short /a/ and its long counterpart in the Ancient North Arabian ancestors of Arabic have had a stable pronunciation, a non-*ʾimāla* pronunciation from the Nabataean and Roman era from the 1<sup>st</sup> century of the common era. In the 6th century raising the vowel towards /e/ starts to be witnessed in inscriptions (al-Jallad 2015a: 46). The fact that the data is witnessed only in Petra allows me to speculate that this vowel behavior was recent. It did not infiltrate, further north into Ancient North Arabian territories or south into the Hijaz. The assimilatory use of /a/ as /o/ before labial consonants can be witnessed between the 4th and the 6th centuries (al-Jallad 2015b: 32). There is no available data yet to indicate that

the both allophones have come to exist at an earlier stage in the history of the vowel in question. There is also no available data to indicate if the dates mentioned here.

## 6. Distribution of 'imāla

Now, let us talk about the distribution of the phenomenon among the pre-Islamic Arab tribes. Orthographic evidence is not forthcoming. We will, therefore, rely entirely on the available testimonial and indirect data, lacking and selective as they are. From the medieval books of grammar, we know that Hijaz and Yemen did not share in the innovation. The way inhabitants of these two regions pronounced the /a/ and its longer counterpart is designated in the traditional grammatical literature as *tafxīm*, which is a term that is defined as pronouncing the target sounds from a lower tongue position which will make them sound as an /o/ low front to central vowel, or *fath*, which is pronouncing it as an /a/. The innovative 'imāla pronunciation was not even a conditioned pronunciation in the majority of the tribes of these two regions. It is shared by two of the major Najdi tribal dialects. It is very noteworthy that the dialect group of Qays did not realize the innovative 'imāla sound but produced the traditional vowel sound.

The two tribal dialect groups of Tamīm and 'Asad realized the 'imāla vowel sound, both in its innovative and assimilatory forms. We know that 'Asad realized it in their rendition of the Qur'ān (Lisān, m x ḍ). 'Asad did not only produce the phenomenon in the Qur'ān. Traditional books of grammar show that 'Asad used 'imāla in all its sources of data and in all sound environments (Ham', vol. II: 200). It cannot, therefore, be a post-Islam innovation. It was an innovation that took place before the advent of Islam. In Tamīm 'imāla is also realized (Ham', vol. II: 200) in conditioned environments and in non-conditioned environments. Al-'ašmūniyy (šarḥ IV, p. 224) gives many examples to show that 'imāla in Tamīm is not only an assimilatory phonetic process. It happens also in cases where no regressive or progressive vowel exists.

Now, it is important to go back to Qays in its Najdi context once more. I mentioned earlier that it is a part of the group of dialects that did not take part in the innovation despite its existence in the same ecologically permissive geographical area. Different early grammarians such as Sibawayhi and al-Farrā' mention Qays among the tribes that realize the 'imāla as a result of an assimilation process. Some Arabs of the Hijaz also realized the phenomenon in its assimilatory capacity. Taking the /a/ and /ā/ towards the /e/ and its longer counterpart due to the influence of a preceding or following high vowel is, however, different from the phenomenon in 'Asad and Tamīm. In these two prominent tribes, as well as in other less linguistically acclaimed tribes in the north east and

eastern Arabia, such as Hawāzin, Bakr and Sa'd Ibn Bakr (ğamhara, p. 265), the phenomenon is not conditioned. The higher tongue position is the default point of articulation in these Najdi tribes.

As-Suyūṭiyy (Ham', vol. II: 204) tells the story of 'imāla in Yemen as well. Like Hijaz Yemen seems to have used the phenomenon as a result of the phonetic process of assimilation. He also states that the Yemeni tribes used 'imāla in most positions when the linguistic environment was conducive. So, there were cases when the innovating tribes behaved identical to the traditional tribes. However, it is important here to mention the caveat that when the phenomenon was mentioned in relation to a non-Najdi tribe, the term 'itbā' did not occur in the medieval Arabic books of grammar.

## 7. The History of 'imāla

Now, let me move to the linguistic history of the innovation. By gaining some understanding of form and the history of the split between these innovative tribes and Hijaz, we can estimate the history and movement of 'imāla. Despite the absence of satisfactory historical data, the structure of tribal genealogy and tribal migration can shed some light on the issue at hand. However, a quick word on the general structure of the Arab tribe is in order to start with. It is my understanding that it is important for the purpose of this article. Looking at tribal structure allows us to see that the concept of tribes as a social space does not correspond to a territorial physical space. I will also show that the tribal structure as a non-physical social space is a permissive ecological factor.

The Arab social concept of the Qabīla 'tribe', is the major structural unit of pre-Islamic peninsular Arab society. Although the term is technical in the medieval literature on genealogy, its popular and scholarly use alike is loose. Its meaning was often generalized to include smaller social structures. According to al-Qalqaşandīyy (756/1355-821-1418) the Arabs divided their native al-'ansāb (sing. nasab) 'genealogies' into six main divisions. Each of these divisions is a subcategory of the previous one. The top category of which is al-ša'b 'people'. As far as this category is concerned, the Arabs saw themselves as the children of two main distinct peoples: the traditionally well-known Qaḥṭān and 'Adnān. Without going into too many interesting but needless details here, Qaḥṭān was also commonly known as al-'arab al-'āriba 'the real Arabs' people, whose origin is Yemen (Nihāyat al-'arab, p. 211). The second people, 'Adnān, is also commonly known among medieval Arabs as al-'arab al-musta'riba 'the Arabized Arabs' (al-'A'lāq al-Nafīsa, p. 59). Its origin was believed to have been northern, largely Syrian. Further smaller divisions of the Arabs always come back to one of these two peoples. Both peoples met and interacted on

the main Arabian Peninsula north of Yemen in a deep and unknown point in the history of the Arabs pre-Islamic time.

Each of the two ša‘b is in turn further divided into two qabā’il (sing. Qabīla) ‘tribe’. The ša‘b of Qaḥṭān is, then, divided into ḥimyar and Kahlān. Al-Qalqašandiyy lists the clans of these two tribes. Most of the pre-Islamic famous names among the Arabs as far as tribal pre-Islamic dialects were concerned come from these two large tribes. From Kahlān, on the other hand, descends ṭayyi’, one of the most eloquent Arab tribes as we will see later, according to the judgment of the medieval Arab grammarians. However from the same Kahlān comes Kalb, one of the tribes grammarians do not recommend collecting data from (ṣubḥ, vol. I, p. 315). The Northern ša‘b of ‘Adnān is also divided into the two tribes of Rabī‘a and Muḍar (al-’A‘lāq al-Nafīsa, p. 59). Al-Hamadāniyy states that to Rabī‘a belongs Asad (ṣifa, p. 171), one of the three best tribes in so far as pre-Classical Arabic is concerned. All Arab genealogists, though locate it under Muḍar. Qays, another trust worthy tribe, belongs to Muḍar (Mu‘ğam mā Ista‘ğam, vol. I, p. 87). The third and last trustworthy tribe is Tamīm, which is a division of Ilyās Ibn Muḍar (Mu‘ğam mā Ista‘ğam, vol. I, p. 88). One of the tribes that Arab grammarians trusted parts of is Huḍayl, and it is also a branch of Muḍar (ṣubḥ, vol. I, p. 349). Both the innovation and the traditional forms existed in the ‘Adnān branch. Also, both forms existed in the Qabīla of Muḍar.

All these branches of the four major tribes of the two peoples are technically called ‘imāra ‘body’. When we discuss the medieval Arab grammarians’ attitude towards dialects in pre-Islamic times, we will see that three of these full ‘imāras and parts of two ‘imāras are trustworthy and the rest of the Arabs are not as trustworthy as these were. As we can see from the previous paragraphs, these tribes, except for ṭayyi’, come from the ša‘b of al-‘arab al-musta‘riba. This distribution supports the precedence of the genealogical criterion over the linguistic criterion in the definition of the Arabs and their understanding of who they were. The ‘imāra as a technical term is often ignored by the Arabs, scholars and laypeople alike, in favor of the broader term qabīla. This use of a broader term to designate the subcategory can suggest a diversification of the clans a single tribe has and an expansion of their numbers.

‘imāra is a metaphorical designation. It likens the social structure to the human body. So are the following further tribal subdivisions: baṭn ‘belly’ and faxiḍ ‘thigh’. Al-baṭn is a subdivision of the ‘imāra, while the faxiḍ is a subdivision of the baṭn. Al-Azd is one ‘imāra under Kahlān. One baṭn of this ‘imāra is ġassān, which lives in the northwest part of Yemen to the south of Hijaz. This baṭn lived in different places in western Arabia, both in the north east and in Hijaz proper, namely in Madīna (ṣubḥ, vol. I, p. 319–320). The final social subdivision is a faṣīla ‘group’. Technically the Aws and Xazrağ of Madīna are each a faṣīla of ġassān. We know from different sources that

these two entities were called tribes, which can be an indication of their large size. Another interesting indication not only of the size a social entity can be, but also of the wide spread moving potential it can theoretically have is the same Azd.

To continue with the example of Azd, some of its clans were Bedouins who lived outside cities. Those were the Azd who lived to the north west of Yemen (al-Sharkawi 2010: 45). Parts of Azd also lived in urban or Oasis such as the Aws and Xazrağ of Madīna whose main activities were commercial. The ǧassān of the North West Arabian kingdom were also a part of the Azd. But not all tribes were that extended in territory or diversified in life style. It is very interesting that trustworthy tribes in so far as linguistic data are concerned, were limited in their geographical distribution to the inland Najdi area and in space to fairly small intertwined areas. ṭayyi' seems to have lived in southwest Najd only and never extended geographically. It also lived in places where no cities or towns of major importance existed (ṣubḥ, vol. I, p. 320). From the medieval Arab books of genealogy, we can understand that the rest of trustworthy full tribes as far as their language is concerned are as limited in space as ṭayyi'. Let us take Asad as an example. al-Qalqašandiyy (ṣubḥ, vol. I, p. 349) tells us that the territory of Asad was to the northeast of ṭayyi', and towards the east of the well-known north-south trade route of Hijaz.

After the physical structure, let me move to the genealogical emergence of the Najd tribes. This point allows us to understand the origin of the innovation. The three largest Najd tribes Asad, Qays and Tamīm occupy the central part of the Arabian Peninsula. However, they are both genealogically and territorially closely connected to the tribes of the Hijaz region. We will, in the following paragraphs, explain the relative history of their migration and the relative time of their split from the Western tribes.

Asad, genealogically belongs to the same Northern ancestor of the tribes that lived in Mecca. It is named after a certain Asad Ibn Xuzayma Ibn Madraka Ibn 'ilyās Ibn Muḍar Ibn Nizār Ibn Ma'd Ibn 'adnān (Ibn ḥazm, ǧamhara, p. 11). According to this simple linear genealogy, Asad is a northern 'adnāny tribe. It is a large tribe with scores of clans that are widely distributed all over Najd. It merges with Qurayš at Xuzayma Ibn Madraka. It also merges with Huḍayl at Madraka Ibn 'ilyās Ibn Muḍar (ǧamhara, p. 11). This means it split from the Qurayš clans after the split from Huḍayl. So, it must have migrated east one generation after Huḍayl did. The tribe became connected to Laxm and ǧuḍām in Yemen through marriage (al-Ya'qubiyy, tāriḫ, vol. I p. 239). It was also affiliated to ṭayyi' in the northwest politically so closely that their respective territories were considered united (al-Ya'qubiyy, tāriḫ, vol. I p. 230).

It seems that the establishment of ties with Yemeni tribes was more recent than the separation from Qurayš, which in turn was more recent than separation from other Hijazi tribes. Those various territorial connections and blood ties

made it difficult for early Arab scholars to identify its territory in any accurate fashion. It seems to have shouldered the Hijaz region from the northeast. It was to the southeast of Kalb, northwest of Tamīm, and the far north of Qays. It formed the northwestern triangle of the three Najd tribes.<sup>8</sup> It bordered the Nufud deserts from the northwest. Two geographical facts are especially relevant to our purpose here. First, its connections to the three main dialect groups was equally strong. Qays and Tamīm were ‘adnāny while tayyi’ and Huḍayl were Qaḥṭāniyy tribes. Second, Asad was not only the nearest to Hijaz in blood ties and political connection (Ibn ‘abd Rabihi, *al-‘iqd al-farīd*, vol. V p. 248), it was in fact the nearest Najdi dialect territorially to Hijaz. Politically also, Asad was in constant war with Tamīm clans, and was not in any war before Islam with the Hijazi tribes. There was in fact a peace treaty between Asad and Quay, which provided peace to western, northwestern and northcentral Arabia in a way that guaranteed safe mobility in the area in question (Ibn sa’d, *ṭabaqāt*, vol. I p. 127).

Tamīm, to non- Tamīmi medieval Arab historians and genealogists, was often described as the largest Najdi tribe after Qays (*al-Ya’qubiyy, tāriḫ*, vol. I p. 229). The tribe became perceived to be so large in the period immediately before Islam to the point that it covered central eastern Arabia (*tāriḫ*, vol. I p. 229). In addition, the tribe was so powerful to the point that Arab lexicographers correlate the name with might and perfection (*lisān, t m m*) despite the established use of the name as a proper noun from the beginning of the Common Era at least. It is also a northern ‘adnāny tribe. Tamīm merges with Asad and Qurayš at ‘ilyās Ibn Muḍar (*tāriḫ*, vol. I p. 229). One can, therefore, assume that its separation from the common ancestor was much earlier than Asad, which split at Xuzayma Ibn Mandrake and earlier than Huḍayl. However, medieval Arabic sources do not give us a lot of information about the history of Tamīm except in the period immediately before Islam. It spread geographically from the southeastern borders of Asad to the northern and northeastern borders of Qays. Despite its wide spread territories in the sixth century, it was confined in the period immediately before Islam to the region between Asad in the Northwest and Qays in the west and southwest (*Yāqūt, mu‘ğam al-buldān*, vol. V, p. 442).

Medieval scholars of genealogy tell us that Qays was probably the largest Muḍar non-Yemeni tribe before and after the emergence of Islam as far as population is concerned (Ibn ḥazm, *ğamhara*, p. 479 and 483). Therefore, although it inhabited Najd, it spelled westwards into the Hijaz by means of both long term settlements of large clans and roaming small clans for grazing territories. However, it was mainly situated in Najd to the west and southwest of Tamīm. From the North, it was bordered by the territories of ‘Asad and tayyi’

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<sup>8</sup> *şifa* (p. 131) gives essentially the same description with a connotation that there was no noticeable barrier between the territory of Asad and its surrounding tribes.

in the northwest. To its southeast, there was Xaṭ'am, and to the southwest was al-'Azd. From the west, were the two tribes of Huḍayl and Sa'd Ibn Bakr. It is, based on the above, situated among the best Arabic speaking data source dialects in pre-Islamic times. This territorial expansion of Qays and Tamīm refers less to their sheer size and more to their mobility, these two tribes lived on sheep herding and looting as primary economic activities (al-Ya'qubiyy, *tārīḫ*, vol. I p. 272).

We made the claim earlier that, based on books of genealogy, Tamīm split from Qurayš earlier than Asad and by the same token Qays split from Qurayš earlier than the previous two tribes. It split even earlier since it merges with both Qurayš and the other two Najd tribes at Muḍar. Asad and Tamīm come from 'ilyās from Muḍar, while Qays comes straight from Muḍar. From the general structure of the pre-Islamic tribes, one can understand that despite each of these fairly large tribes had a core territorial center, their sheer size and diversified mobile clan formation render physical space irrelevant. It is also worthwhile to note here once more that such an ecology is conducive to contact.

## 8. Discussion

It is worth our while to start our discussion of the previous points with a note on ecology. From the topographical structure of the Arabian Peninsula and tribal morphology of the pre-Islamic tribes, one can deduce two important general points. First, whenever any structural innovation occurred on the Arabian Peninsula, there was no prohibitive ecology that may have blocked its spread among the tribes. On the contrary, ecology was permissive to any potential movement of innovation. Second, from the discussion on tribal structure, one can also assume that social space (tribal dialects) was not prohibitive. These two points are important for our understanding of the spread of innovation in pre-Islamic Arabic in general and for our understanding of the 'imāla in particular. They raise the question as to the cause of the spread described elsewhere and alluded to above during the advent of Islam. Ecology compels us to ask why did not the 'imāla innovation spread to the rest of the pre-Islamic tribes.

As far as the 'imāla phenomenon itself is concerned, a number of points can be highlighted. The phenomenon, first and for most, was apparent in three different fashions in pre-Islamic Arabia. In the Hijaz region, the phenomenon was absent. In fact the pronunciation of the /a/ was more of a low central vowel, which the Arab grammarians designated as tafxīm. Secondly, in the tribes that realized the 'imāla, we can find in the literature two distinctive variants of the phenomenon. Both are marked by a distinctive terminological designation. The /a/ is designated as 'imāla in Tamīm and Asad. It means raising the tongue

position a degree higher to shift the sound to a medium front short and long vowel. In this case, the shift is not phonetically conditioned. The /e/ is realized in all environments. The third 'imāla phenomenon manifestation is different. It is designated as a manifestation of assimilation, 'itbā'. The grammatical literature shows that all Najdi tribes assimilated short and long vowels. The Western dialects of Hijaz do not exhibit that.

The /a/ and its longer counterpart when assimilated were realized as two different phonetic values. First, they changed into a simple /e/ or longer /ē/. Second, they can also be assimilated and pronounced as an off-glide and an on-glide. The literature does not tell us which pre-Islamic tribe assimilates into a glide /ai/ and /ie/ and which uses a simple /ē/ in assimilatory situations. However, the nature of the assimilated sound may have entirely depended on the surrounding phonetic environment. One can speculate however that Quys may have pronounced the three values as assimilation since it uses tafxīm. We can also speculate further that since Asad and Tamīm assimilated and are also known for the innovation, 'imāla must have been the default sound value and the glides may have been assimilatory values of the vowel. The picture, therefore, is of a Hijaz that uses tafxīm and no 'itbā'. The rest of Arabia used 'itbā'. There, 'itbā' influenced the non- tafxīm sound and caused it to be pronounced as a glide.

Traditional grammarians tell us that Asad and Tamīm realized the innovation alongside some other albeit less prominent non-Western tribes. Qays did not, alongside Hijaz. Genealogical data allows us to propose two points; first, the division could not have been clean or rigid since clans of the different tribes were in constant mobility and contact in a permissive geographical ecology. The second point I will propose here has to do with the relative chronology of the 'imāla. We can safely assume that the tafxīm pronunciation was the traditional form. Epigraphic North-Arabian data from the turn of the millennium onwards in the deserts of southern Syria and Jordan indicate the use of /a/ and /ā/ and not 'imāla. The Hijaz pre-Islamic and early Islamic tribes continued the traditional pronunciation of the vowel in question. Some Najdi tribes used the innovation. The genealogical data tell us that the most prominent three Najdi tribes split from the south in different points in history. The literature does not show or even indicate any relative chronology of that split among the Western tribes and those who migrated to Najd.

The genealogical literature, however, offers us relative generational distances from the common genealogical root. It is safe to assume that the further the genealogical distance along the ancestor line the deeper the actual historical split was. Since Qurayš, we claim here, represents the tribes that have retained the traditional form, it is safe to compare the Najdi tribes to it in order to establish the approximate chronology of the 'imāla innovation. All the relevant tribes met

at 'adnān. The nearer the split is on the geological ladder to 'adnān the older it is. This assumption is important because at the 'adnān level all the ancestors of the Pre-Islamic tribes must have used the traditional form.

Let us now make the analogy of the genealogical line as a descending ladder, the top being the genealogical ancestral origin 'adnān. Let us also envision the names along the ladder as a generation. Qays is the first major Najdi tribe to split from the common origin which combines Najdi and non-Najdi tribes. It merged with the rest of Najdi tribes and with Western tribes at Muḍar. The departure of Qays from line was one step down from Muḍar. The departure of Tamīm from the line comes after 'ilyās. This means that the departure of Tamīm was one generation separated from Qays. Asad is the lowest on the genealogical ladder, which means that it is the most recent to depart from the main line. The difference between Asad and Tamīm is Xuzayma and Madrake. The relative chronology of these three tribes, therefore, is: Qays departed first, one generation later Tamīm departed and two generations down from Tamīm Asad departed. We know from traditional Arab grammarians that Qays did not take part in the innovation beyond the assimilation process. This fact indicates that the 'imāla innovation must have taken place after the departure of this tribe from the genealogical line. Both Tamīm and Asad took part in the innovation. Both of these tribes departed from the genealogical line two generations apart.

The previous discussion shows that the innovation happened at or after the 'ilyās stage. However, the available linguistic, genealogical and/or testimonial data does not allow us shed any light on two relevant issues that remain largely obscure. First, while we can safely deduce the beginning of the 'imāla innovation, the data is not forthcoming as to the exact timeframe. However, the mere fact that the innovation did not spread to Qays despite favorable ecological factors is indicative of the possibility that the innovation probably took place after the migration of Asad to the Najd area. The recording of the phenomenon in medieval Arabic grammar books must have caught it the process of dissemination.

The second obscure point is the direction of innovation. It is not clear if the innovation started in Tamīm and was then acquired by Asad and the rest of the innovating tribes or otherwise. It also is not clear if the innovation started in one of the frontier tribes to the north or northeast of both tribes and moved southwards. The available genealogical and geographical ecologies does not offer any hints, let alone clear indications. However, the fact that Qays was, at least on the eve of the Arab conquests, not a part of the 'imāla innovation despite the permissive ecology allows us to speculate that the innovation must have taken place immediately before the emergence of Islam and the conquest.

## Conclusion

The 'imāla innovation and its distribution in the Arabian Peninsula on the eve of Islam reflects a Najd region that was in a state of contact. 'imāla is one feature that sets Najd apart from the Hijaz region. It, being a structural innovation, is also an indication that the Najdi tribes were not the linguistically conservative dialectal area as traditional Arab grammarians strongly believed. Hijaz was more conservative. However, the 'imāla innovation affirms the traditional dialect grouping of the Arabian Peninsula into three main dialects groups: Hijazi, Najdi, and the Southern Yemeni group. If 'imāla is any indicator, contact may have been one of the strategies of homogeneity building among the pre-Islamic peninsular dialects.

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