

Imala

In the final two chapters, I draw on data from both modern dialects and Old Arabic sources. In each chapter, I begin with the Old Arabic sources.

Arguably, the most complicated treatment of a subject in Sibawaih in relation to variational properties is that of the *Pimaala* (*imala*, as I term it). The term is Sibawaih's and like much terminology from the Arabic tradition has been taken over in the modern Arabistic literature. *Pimaala* means 'inclining, bending to'. Essentially *imala* involves the change of a long *aa* to an *ee*-like value in the context of an /i/ in a preceding or following syllable. As will be seen, the examples Sibawaih gives are often identical forms found in the modern dialects which have *imala*, e.g.:

- (1) *kilib* 'dogs' (II: 279.21)
 masiejid 'mosques' (II: 279.11).

Imala involves a long /aa/, medial or final, and it can, in Sibawaih's terminology, be applied to short /a/ as well, though this is much more restricted. *Imala* of final /aa/ and /a/ treated in comparative perspective involves a prohibitively large data set. In this chapter, the comparative goals of the work are served by a concentration on the medial *imala* of long /aa/, with one exception in sect. 7.1.3 where I treat short /a/ *imala*. In describing Sibawaih's summary of *imala*, I do, however, occasionally describe *imala* of final long -aa, as it allows elucidation of Sibawaih's systematic linguistic thinking.

7.1. *Imala* in Old Arabic

7.1.1. *Phonetics and phonology*

Before summarizing the various, sometimes contradictory rules pertaining to where *imala* occurs, I will first attempt to ascertain its phonetic form. Sibawaih describes *imala* as a type of assimilation (*ʔidʔaam*), comparing it to assimilation of one consonant to another in terms of emphasis or voicing. The long *aa* is assimilated by a following or preceding *i*. He describes *imala* as an inclination of the tongue in which the phonetic configuration of /aa/ is

made to resemble and approach that of /i/ (II: 279.16). Most Western scholars (e.g. Jastrow 1978; Levin 1998) who have worked on *imala*-dialects have not interpreted Sibawaih's description of the sound phonetically. They merely refer to it as *imala*. As phonetics is an important aspect of any linguistic reconstruction, however, some attention needs to be given to this issue. Schaade (1911: 23) represents it with the German umlaut [ä], which would imply a front [a]. He does not explain his orthography, however. Similarly, al-Nassir (1993: 92) suggesting only that the value of *imala* lies somewhere between [ee] and [εε], conventionally uses the symbol [ee]. He does not recognize a diphthongal value for it. Fleisch's interpretation is treated briefly in sect. 7.3.4 below.

Grünert (1875), although an early treatment among Western Arabicists, is a good one. Unlike some contemporary Arabicists (see sect. 7.3.4), he recognizes the close connection between classical *imala* and all the then-known modern dialectal varieties (Andalusia, Lebanon, Syria, Malta, even noting evidence in old Sicilian sources, 1875: 453).¹ Again in contrast to most contemporary sources (see above), Grünert attempts a very specific phonetic interpretation for classical *imala*. Unfortunately he bases his interpretation on post-Sibawahian texts only, and in the tradition of his compatriots (see Ch. 2), does not apply the comparative method to the contemporary dialectal sources.² The description of *imala* in later texts is quite unitary. Zamaxshari serves as an example. Zamaxshari says (*Mufaṣṣal* 335) that 'you incline an [aa] towards a [y]' (tumiyl al-Ḥalif naḥw al-yaa?). Crucially, Grünert recognizes in this formulation a diphthongal value. However, there is nothing in it which specifies an

¹ Grünert (1875: 453) specifically relates the *imala* of the Arabic grammarians to North African dialects, citing the forms *biib* and *lisiin* (= *lisiin* if at all correct). This would imply the *imala*-induced change of [aa] > [ii]. In fact, outside the special cases of Maltese and eastern Libyan Arabic treated in detail in sect. 7.2, North African Arabic does not, according to contemporary descriptions, have this reflex for *[aa]. Marçais (1977) is an extensive review of North African dialects and in all examples where *imala* is expected (i.e. on the basis of comparison with other *imala*-dialects), his examples have [aa], e.g. *kaan* ('he was' p. 71, *lsaan* 'tongue' p. 119, *ṯmaanya* 'eight' p. 174). Similarly, Caubet in her edition of Marçais's studies on the Arabic of Fezzan (Southwest Libya) gives a low vowel, non-diphthongal reflex for these words (Marçais 2001: 162, 221–2, 255).

North Africa does have the change *[ay] > [ii], as in *biit* 'house' < *bayt*, but as will be discussed in greater detail in sect. 7.2.5, relating this change to Sibawaih's classical description of *imala* is quite problematic. Marçais does state that *imala* is found in Central Tunisian dialects, though gives no examples so it cannot be judged what are to be understood as lexical and phonetic reflexes of *imala* in this case (I thank Catherine Taine Cheikh, p.c., January 2005, for discussion of this point).

² In fact, Grünert (1875: 453) would appear to explain the various manifestations of modern *imala* as a result of spread of Arabic and foreign language contact, rather than as a reflex of pre-diasporic developments, as argued for in this chapter. He justifies his view through a prioristic assumptions rather than by case-by-case argumentation ('what occurs to every language under similar conditions, which undergo vowel modification', 'wie das bei jeder Sprache unter denselben Vorbedingungen der Fall ist, der Vocalismus immer mehr modificiert').

on-glide [ia] or an off-glide [ai]. Grünert, without discussion, opts for the latter (1875: 465). To be fair, reading Zamaxshari and other later descriptions linearly, this is probably the most neutral reading. Zamaxshari begins with the [aa] which you incline towards a [y]. Logically, however, the reverse could also be intended, with the [y] value in the beginning. Note that if the on-glide interpretation developed in detail below is correct, this would already indicate that Zamaxshari's reading is based purely on a philological reading of the *imala* value (or based on those who developed such), not on actual aural phonetic interpretation. Zamaxshari's *imala* description is treated in more detail in Appendix 3.

By comparison, Sibawaih, probably not by chance, used a passive formulation, 'the [aa] is inclined (imalized) if there is a consonant after it with [i]' (fa-al-ʔalif tumaal ʔiḏaa kaan baṣdahaa ḥarf maksuwr...). This betrays no bias for on-glide or off-glide value. To decide between the two further textual material may be adduced, along with an application of the comparative method.

In this section, I first suggest a phonetic interpretation of the *imala* of long /aa/, then summarize basic distributional properties.

The phonetic realization of *imala* can be interpreted as a high falling diphthong: the tongue begins in the position of [i] and moves towards [a] under the influence of an [i] in a neighboring syllable. This same *imala* is attested even earlier than Sibawaih in the Koranic reading tradition (see Ch. 4). In fact, it is associated above all with the Kufan readers Abu ʕAmr ibn ʕAlaaʔ, the main protagonist of Ch. 4 whom Sibawaih sometimes took as an authority on Arabic (Talmon 2003: 43–7) and al-Kisaʔi, who has also been met above (see sect. 2.4.1.2, Didactic manuals). In Ibn Mujaahid *imala* is represented as the orthographic mark of a kasra placed before an alif, as in 'one who envies' حاسد, this token attributed to Abu Amr (Ibn Mujahid, 703).³ In Sibawaih *imala* is signaled by a straight line (a type of kasra) written beneath the line, similarly placed before the alif, kilāab. A direct phonetic reading of these phonetic signs gives the diphthongs *ḥiaasid*, *kiliaab*. Further in the reading tradition, Dani (49) describes Abu Amr and Kisaʔi's reading of the *imala* of the -aa in *kaafriyn* (= kiefriyn) as 'imalizing... the [a] of the [k-]' (wa ʔamaala Abu ʕAmr wa al-Kisaaʔiy ʔayḏan fiy riwaayat al-Duwriy fatḥat al-kaaf min 'al-kaafriyn'). On a componential reading of this statement, the -aa = alif is stable, whereas the short vowel /a/ (fatḥa) which comes before the alif is said to imalize. Taking 'imalize' as an i-like pronunciation (see below),

³ Similarly in the hand-written manuscripts described by Grünert (1875: 488), a kasra is usually placed before the alif.

this gives the form *kiafiriyn*. This falling diphthong is basically the phonetic shape assumed here for Sibawaih's *imala* value.⁴

Furthermore, as will be seen, emphatic and guttural consonants such as /q/ are *imala* inhibitors. They favor the maintenance of /aa/ as /aa/.

(2) *qaaʿid* 'standing'

In the Arabic terminology *imala* is often referred to as a *kasra* = /i/ quality, whereas the lack of *imala* is referred to as a *naṣb* = /a/ quality.⁵ As is well known, gutturals also have a lowering effect on imperfect verbs, so that as a rule verbs with a guttural (x, ʁ, q, ʕ, ħ, ʔ) at C₂ or C₃ will tend to have /a/, rather than /i/ or /u/ as stem vowel (Sibawaih II: 270, Ch. 470). In both instances the gutturals tend to favor a low, [a]-quality in the following vowel.⁶ The important point for phonetic interpretation is that for *imala* the guttural consonant can be seen as inhibiting the high-falling diphthong at the beginning of the vowel, i.e. because *imala* is a high falling diphthong, the tongue raising is prevented in the guttural context.

An alternative interpretation would have *imala* as a low rising diphthong, [ai]. The main problem with this interpretation is that this gives a value identical with the already existent diphthong [ay], as in *bayt* 'house', and Sibawaih nowhere draws attention to any similarity between the two sounds. To the contrary, he appears to emphasize the unique phonetic character of *imala*. Furthermore, in a chapter after the discussion of *imala*, Sibawaih discusses the case of certain Arabs (he names some Qays and Lafazaara) who change a final long /aa/ to /ay/ in pausal position.

(3) *ħublaa* → *ħublay*
'pregnant' (II: 314. 8)

This is a clear change of a long /aa/ to a rising diphthong, but Sibawaih does not include it in the category of *imala*. Were the *imala* similar to /ay/, one

⁴ The *imala* alone recalls a chain-shifted variant, as described by Labov. Labov (1994: 116) notes that in a chain shift long vowels tend to rise. Given the diphthongal value, *imala* falls within this category of change (*aa* → *ie*). In fact, the North Frisian phonetic change [ææ] → [ia] (ibid. 126, 135) is, alone, very close to what is proposed here as the original *imala* variant of /aa/. In the Arabic case, however, in general no chain is involved in *imala*; it is a conditioned variant. There are other vowel shifts attested, for instance *ay* → *ee*, summarized in various sections in 7.3 below, though this appears largely to operate independently of *imala*. A detailed discussion would take one outside the immediate subject of this chapter.

⁵ This terminology recalls the early use of *naṣb* purely as a phonetic designation for [a] (see e.g. Versteegh 1993b: 125 ff. on the early exegetical tradition).

⁶ Though the status of [ħ] and [ʕ] is problematic. In Sibawaihi they are not among the *imala* inhibitors. There are dialects, however, e.g. Maltese, where *[ʕ] is an *imala* inhibitor.

might have expected here mention of similarity. In fact, in this case there is a minimal contrast with the alternative

(4) *ħublaa* → *ħublie* (287. 18).

Example (4) is an alternative *imala* realization of the final *-aa* of *ħublaa*, and is discussed among the various issues in the chapters on *imala*. There are, therefore, two realizations for the final *-aa*, practiced, it appears, by different groups. The crucial point is that the *imala* realization has to be distinguished from a different realization, a difference which can be interpreted as [ie] (*imala*) vs. [ay] (Qaysi realization).

In this regard, as will be seen below in sect. 7.2, dialects with *imala* tend to preserve the diphthong *ay*. This supports the contention that the direction of tongue movement in the two cases is quite different, different articulatory movements being involved.

Where modern dialects do not have a monophthongal reflex of *imala*, the realization is always a high falling diphthong. In eastern Libyan Arabic (ELA), for instance the phonetic value of *imala* is [ie] and in Maltese variously [ie], [eɛ], etc., always higher to lower. I take the ELA value to be close to the interpretation of Sibawaih's description, a point which will be expanded upon in sect. 7.2.2 below, and therefore use [ie] as the canonical *imala* value.

As a final phonetic remark, in the Koranic reading tradition (though not in Sibawaih) certain readers or certain readings of *imala* are sometimes referred to as 'in between' (*bayna bayna*).⁷ This is said to be a value between [a] and [i] (Ibn Mujahid, 145), though unfortunately it is not specified more closely. I return to this terminology in sect. 7.3.3 below.

Turning now to distributional matters, while I concentrate in the rest of this section on issues of phonological distribution, it is ultimately impossible to separate the linguistic treatment from dialectological and sociolectal variation, as will be seen.

In Sibawaih *imala* is basically an allomorph of *aa*. *Imala* does not affect a long *aa* when /a/ or /u/ rather than /i/ occurs in the context, hence not in *taabal* 'coriander' or in *ʔaaqur* 'baked brick'. It is also usually prevented from occurring in the context of the so-called 'raised' consonants (*ħuruwf mustaʕliya*), which include the emphatics and gutturals, *q*, *x*, *ʕ*, *ḡ*, *ḥ*, *ʔ*, or *ʕ*. (II: Ch. 480). In addition, /r/ may act as a *imala*-inhibitor as well (II: Ch. 481), a context which I return to in sect. 7.1.3 below. Another way of looking at the phenomenon is to say that /aa/ imalizes unless prevented from doing so by one of the inhibiting consonants (Cantineau 1960: 96–7, Corriente 1977: 22).

⁷ The reading tradition also has degrees of *imala* where some *imala* is stronger than others (see Ch. 5 n. 16).

Levin (1998: 77–80) summarizes the context of Sibawaih's *imala* in three main categories (C = category).

- C1. In the context of an [i], as in (1). This may be termed allophonic *imala*.
- C2. Lexically conditioned: when a weak medial verb has an [i] in the paradigm. In these verbs *imala* can occur even in the context of an inhibiting consonant, as in *xief* 'he feared' (cf. *xif-tu* 'I feared', for the [i] in the paradigm). Other verbs cited here include *ṭaab* 'be good' and *haab* 'fear' (II: 281. 13).
- C3. Weak medial nouns, so long as no inhibiting consonant occurs, as in *bieb* 'door', *nies* 'people'.

(C3), it should be noted, is Levin's observation, correct I should add. Sibawaih (II: 285) views these as exceptional (ʃaaðð), a point taken up in sect. 7.3.3 below. It should also be born in mind that (C1) and (C3) serve as reference to types of *imala* that are also found in modern dialects, discussed in sect. 7.2.

In fact, the situation is more complicated than represented in (C1)–(C3), both linguistically and dialectally/idiolectally.

First, individual sounds have idiosyncratic effects, in particular /r/. Sibawaih devotes an entire chapter (481, 3 1/2 pages in all) to describing the effect of /r/ on *imala*. As always, there is a great deal of detail, which will be pared down to the essentials, as relevant to a later comparison with eastern Libyan Arabic (sect. 7.2.2). Sibawaih's basic observation is that an /r/ before /aa/ is an *imala* inhibitor, whereas an /r/ after /aa/ tends to favor it.⁸ As usual, there must be an /i/ in the environment to induce *imala*.

- (5) *ḥimier-i-k* 'donkey-GEN-your.M' (II: 290. 5)

vs.

- (6) *ḥiraaf-i* 'bedding.GEN'
raaḥid 'directing' (II: 289. 20)

In regard to *ḥimier-i-ka* it is interesting that Sibawaih considers this to be equivalent to *ḥaṣaalil* plural noun, i.e. with the suffixes -i-k conceived of as part of the stem. I return to this point in sect. 7.2.2 below.

Though less common than (6), the *imala*-abetting effect of pre-r /aa/ can even induce *imala* after a guttural sound.

- (7) *qierib* 'nearing'
ṭierid 'chasing' (II: 290. 6)

⁸ Post-aa /r/ as *imala* abettor is also treated in the *Qiraaʔaat* tradition (Ibn Mujahid, 147, 149–50).

The /aa/ need not immediately precede the /r/, as in

- (8) *kiefir* ‘unbeliever’.

With an initial guttural sound, however, the /r/ generally must come immediately after the /aa/, though even here *imala* is attested among some speakers.

- (9) *qaadir* ‘able’ more often than *qiedir* (II: 291. 12)

In terms of frequency of imalization, and leaving off further details, Sibawaih gives the following hierarchy of *imala* in the context of /r/.

- (10) Given an *imala*-inducing environment:

raa, ier > *Gier* > *GaaCir*

G = guttural consonant

Imala does not occur after /r/, does occur before it, can occur even after a guttural consonant, and generally does not occur after a guttural if the /r/ is not adjacent to /aa/.

Besides (C2) above, describing word-final *imala*, Sibawaih notes that there is a tendency for a final /aa/ to imalize, even if the stem has no /i/ or /y/ in it, as in *daʕie* ‘he called’ < *daʕawa* and *ʕaʕie* ‘show dim-sightedness’ < *ʕaʕaw*. He notes that such /w/ final nouns and verbs undergo *imala* because the vast majority of weak final verbs have /y/ rather than /w/ (II: 280. 10) and because there are forms, the passive of verbs, where even /w/ -final verbs have a /y/ in the paradigm (*duʕiya* ‘he was called’). Further complications are discussed below.

Furthermore, the three categories identified by Levin are not necessarily mutually exclusive. This can be exemplified in Sibawaih’s discussion of the *imala* of weak-medial nouns (II: 282). It should be emphasized that the following discussion is representative of a number of different cases, all of which display a great deal of internal variation.

Sibawaih notes that some speakers imalize /aa/ in /i/ contexts, as in (11). Anticipating sect. 7.1.2, in the following it is relevant to introduce briefly the groups whom Sibawaih associated with some of the *imala* variants. The designation ‘group’ identifies the people who Sibawaih says use the variant in question.

- (11) *bi-l-miel-i*

with-the-wealth-GEN

group: *qaaluw* ‘they (unspecified people) said’ (II: 282. 11)

This practice would seem to correspond to (1) above, as he gives the non-pausal variant (12):

(12) *bi-l-maal*

‘with the wealth’

group: minhum man yad^ṣuw ḏaalika fi l-waqf Ṣalaa ḥaalihi [i.e. in *imala* form because of genitive context] wa minhum man yansibu fiy l-waqf (II: 282. 11), ‘among them are those who leave the form in pausal position as it is in context, and those who leave it as /aa/ in all circumstances’ (see (13) below)

where lacking the conditioning force of /i/, the /aa/ of *maal* remains in its non-*imala* state.

However, Sibawaih goes on to note that there are also those (minhum man, see above) who imalize even when the conditioning genitive suffix does not occur, in the context of pause.

(13) *bi-l-miel*

group: as in (12)

Sibawaih, who always searched for parallels to help understand a given observation (see Owens 2005) suggests that the deleted -i suffix still has imalizing force. He cites as a precedent the active participle variant of weak-final participles, such as

(14) *miefiy* ~ *mief* ~ *maaf*

‘walking’.

The active participle has in addition to its ‘usual’ variant *miefiy* or *maafiy* a variant without the final -iy (see Carter 1990) and here an *imala* variant is attested, even though the conditioning -iy is deleted.

In this set of examples it appears that Sibawaih is basically talking about the same group of speakers, though this is not explicitly spelled out. If this is so, then there are among these speakers those who conform to (C₁), i.e. speakers who have the usage (C₂) and (C₃), and those, who, in Sibawaih’s description, conform to (C₁), and to yet another category, namely:

(C₄) *imala* in a non-*imala* context, on the basis of a lexicalized genitive, as in (13).

However, even this summary does not cover all cases. In a later chapter (II: ch. 479, 285) he notes the further variant:

(15) *haaḏaa mielun*

‘This is wealth’ (II: 285. 11)

group: wa qaala naas yuwḥaq bi-Ṣarabiyyatihim ‘people whose Arabic is reliable’

This is an unconditioned *imala*, as indeed Sibawaih notes, since *maal* comes from the stem *mwl*, with /w/ rather than /y/ as medial consonant, and the context does not have an-i suffix. Sibawaih explains this case as he does *daʿīe* discussed above: /y/ tends to predominate over /w/ as a stem consonant, and forms associated with /y/ stems spread analogically to other classes.

In Levin’s classification this is a case of (C₃). The interpretive problem, however, is whether (11), (13), and (14) are in fact separate cases. While (15) is treated in a separate chapter from (13), the groups using the variants are identified so vaguely that one cannot say with certainty how many sociolinguistic groups one is dealing with. This problem is discussed in greater detail below. Linguistically, one can represent the three cases on a cline of values, moving from most *imala* to least *imala*:

(16) a. *haaḏaa mielun* (*imala* in all cases)

b. *bi-l-miel-i*, *bi-l-miel*, *maal-un* (*imala* in non-pausal and pausal genitive context, not with nominative suffix)

c. *bi-l-miel-i* vs. *bi-l-maal* (*imala* before surface -i, otherwise /aa/).

d. *bi-l-maal-i* (never *imala*)

(16) looks very like a change-in-progress type hierarchy, with *imala* generalizing from a conditioned (16c) to a non-conditioned (16a) variant of an original /aa/. Unfortunately, one can do no more than speculate that this was the situation Sibawaih was observing, as precise data is lacking. While one can extrapolate a very neat hierarchy out of Sibawaih’s various descriptions, one should not lose sight of the fact that Sibawaih’s goal was to make order out of chaos, and one can construct a case for Sibawaih idealizing his grammatical rules at the expense of ignoring alternative explanations.

I would like to follow up this point with two further examples. First, Sibawaih notes that some Arabs imalize *miet* < *maata* ‘he died’. Ordinarily, according to (C₂) above this lexeme should not imalize, since *maata* has a lexical /w/ as its medial consonant (cf. *mawt*, ‘death’). Sibawaih rationalizes this by noting that those Arabs who do imalize *miet* also say *mit-tu* ‘I died’ in the perfect, i.e. do have an /i/ in the overall paradigm (wa hum allaḏiyṇa yaquwluwna ‘mittu’). While there are modern dialects with /i/ as the perfect vowel (Nigerian Arabic *mit*), most have /u/ (*muttu*) and this is the usual form

in Classical Arabic.⁹ Of course, Sibawaih's linkage (see below), i.e. all who imalize actually have /i/ as the perfect vowel, may be correct. On the other hand, given the variation described below, it is equally plausible that Sibawaih is idealizing his grammatical rule to the case of a verb which in fact should not have *imala*, i.e. some Arabs do indeed say *miet*, but these could be those who say *mut-tu*. Given the information at our disposal, it could equally be that the imalization of *miet* is of the same category of the unconditioned *imala* of *bieb*, discussed below. Sibawaih interprets the matter in another way, however, since he, like any good linguist, is above all concerned to explain as many variants as possible according to a general rule.

A similar point pertains to Sibawaih's observation that *maal* is sensitive to the influence of an /i/ in a preceding word. He notes that those who use *maal* in pausal context (= (13) above)

(17) *bi-l-maal*

can imalize when an /i/ occurs in a preceding word,

(18) *li-zayd-in miel*

to-Zayd-GEN wealth

'Zayd has money'.

Again, this may be the actual situation. But it is equally possible that Sibawaih has observed a speaker who always uses *imala* in this word (as in (15)). Sibawaih, however, ascribes to him the conditioned *imala*, since this is explicable by phonological rule.

The cautionary note I am introducing here is that while Sibawaih's observations were certainly cogent as far as they pertained to the usage of certain individuals, in a few cases groups of individuals, Sibawaih, unlike present-day linguists, did not have at his disposal models for describing language variation as a general or group-based phenomenon, nor did he develop them.¹⁰ There is no way of controlling in his descriptions who uses which variants to what extent, though it is clear that the use of *imala* cuts across all segments of the speech community (see sect. 7.1.2 below). For this reason (16) is an interesting summary of what forms did occur, but cannot be used to draw detailed inferences about how the language was developing in the late eighth century. What one can say is that *imala* was a very widespread phenomenon with a plethora of conditioning factors.

⁹ In the *Lisaan al-ʿArab* (2: 91) the variant *mittu* is given, based on Sibawaih.

¹⁰ In contrast, in a certain manner, to the *QiraaʾPaat*, the Koranic reading tradition which at least made an exhaustive listing of variants ordered against various readers and chains of transmission.

7.1.2. Imala: a variationist's dream

How confusing the situation was is attested directly by Sibawaih.

Know that not everyone who imalizes the /aa/ agrees with others of the Arabs who do so. Rather, each one of the two groups might differ from the other, in that one might use /aa/ [in a word?] where his neighbor imalizes, while he will imalize where his neighbor uses /aa/. Similarly, someone who [basically?] has /aa/ will differ from another who [basically?] has /aa/, in a way similar to those who [basically?] use *imala*. So if you should encounter an Arab with such forms, don't assume that he is simply mixing up forms. Rather, that is how the matter stands. (II: 284. 1)¹¹

Sibawaih's style is obscure in certain respects here (as often elsewhere) and I have edited in words (marked with a question mark) to facilitate an understanding of the text. In any case, his observation is fully consistent with the data as it is presented. To give some quick examples here, regarding (C₁), he says that many Tamim and others do not use it at all (281. 4). Previously he had said that none of the Hijaz use it, so it may be surmised that (C₁) is a non-Hijazi application, though variable. (C₂) on the other hand, is used by 'some of the Hijaz' (281. 12). *biyyieʿ* 'seller' may be imalized, but many Hijazi, as well as many Arabs do not apply the *imala* to it (281. 21). In general Sibawaih notes that *nies* 'people' and *miel* 'wealth' (see (13) above) may imalize, but that this is to be regarded as exceptional and most Arabs do not imalize these words (ch. 479).

What characterizes this topic, more than perhaps any other in the *Kitaab*, however, is the extent to which Sibawaih points to linkages between different groups. This was met in the discussion of *miet* ~ *mit* above. A typical formulation is to observe that those speakers who say form x, also use y; in the above example, those who use /i/ in the perfect also use *imala* in the third person form of the weak medial verb.

All in all, the discussion of *imala* is marked by Sibawaih's frequent reference to various groups of speakers, or to individual experts. These can be termed 'social identities'. What one traditionally terms 'dialects', as illustrated in a previous paragraph, in fact represent only a small minority of all such group-based references. Individual grammarians figure hardly at all, and the Koranic readers are not well represented.¹² By far the largest groups are the bedouins

¹¹ In the light of this passage, which Fleisch himself cites, Fleisch's statement is incomprehensible: 'In the writer's opinion, in addition to a conditioned *imala*, there exists an unconditioned *imala* which is widely used, which Arab grammarians have not recognized as such and have forced into the framework of the first, without, however, leaving us the means to discriminate precisely between the two' (Fleisch 1961: 1162). Besides the passage quoted, Sibawaih's category of 'ʾaʾdḏ', (exceptional) to describe the *imala* of *nies* 'people' takes cognizance precisely of the situation Fleisch summarizes.

¹² Examples of (C₂) are also found in the reading tradition. Sibawaih does note that the Koranic readers (unnamed ʾaʾamma) use *imala* in verbs where the medial consonant is /y/, as in *xaaf* (II: 281,

(ʕArab), and the grammar-internal groups marked by linkages. In all I have counted fifty references to groups of speakers who are referred to with an independent noun or pronoun. The figures are presented in Table 7.1. Plural verb forms alone, such as *qaal-uw* ‘they said’, often referring to bedouins, are not counted. With the table I include an index, formed of the total social identities divided by the pages per topic.

By way of comparison, I also counted references to social identities in the chapters on noun modifiers which themselves govern a complement (*marartu bi rajulin muxaalitīn ʕalayhi daaʔun* ‘I passed a man afflicted with an illness’, see Carter 1972). This is a topic which covers twelve pages and hence is roughly comparable in length to the fifteen pages in which *imala* is discussed.

There are two striking differences between the social identities found in the two topics, one quantitative, the other qualitative. For present purposes the first is the more important, though I will first comment briefly on the second. The section on noun modifiers deals with syntactic matters, which in Sibawaih are often subject to analogical reasoning. In these particular chapters he

TABLE 7.1. Social identities in the chapters on *imala*, Sibawaih II: 279–94

Entities	Observations
ʔ Ahl al-ḥijaz	3
Tamim	2
ʔ Asad	1
Qays	1
Al-ʕamma = (consensus) of Koranic readers	2
Xalil	1
Abu ʔ Iṣḥaaq*	1
Bedouins, (al-ʕArab)	10
Those of reliable Arabic	3
‘those who say x . . .’ (man qaala x/allaḏīyna qaaluw x)	14
Many people (naas kaṡiyr)	1
People (qawm)	4
Some of them (baʕḏuhum)	4
These (haʔulaaʔ)	2
The two groups	1
Total: 15	50
Index	3.3

* A Basran Koranic reader, d. 129/746 (or 117/735). He is reported to have heard xiefa ‘fear’ as ʕiera ‘become’ (Kitaab II: 281).

see n. 9). Dani (48) reports that the reader Hamza (one of the seven) used *imala* in ten verbs, more than the number Sibawaih attributes to the readers. All these follow Sibawaih’s rule whereby the medial consonant must be /y/.

TABLE 7.2. Social identities, noun modifiers (Sibawaih I: 195–207)

Entities	Observations
Bedouins	11
Xalil	7
Yunus	3
Grammarians (naḥwīyyuwn)	2
ʕIysaa	1
Common language (<i>kalaam al-naas</i>)	1
Those who say x (linkages)	3
Total: 7	28
Index	4

takes issue with a number of other opinions on various constructions, and therefore almost half the social identities cited are grammarians (see Talmon 2003: 48, 57). There appears to be a lower need to cite native speakers, since here matters of correctness are decided by grammatical rules. Clearly, it is a question of general import beyond the scope of this chapter, what the relation is between social identities and individual grammatical topics.

In the discussion of *imala*, on the other hand, Sibawaih is confronted with various usages by native speakers, which he appears to record faithfully, even if, as suggested above, he probably idealizes the homogeneity of the forms in regards to individual speakers or groups of speakers. As far as the realization of phonological forms goes, he cannot reject them on the basis of false grammatical reasoning. At best, and this is to his enduring empirical credit, he can note them as exceptional (*ʃaaðð*).

As far as the actual count goes, there are both a larger number of social identities and observations for *imala*, overproportional to the number of pages in the two topics (fifteen for *imala*, twelve for modifiers). The lower index for *imala* indicates that Sibawaih was noting linguistic variation on a finer scale for *imala* than for the nominal modifiers in that he invoked a larger number of entities to account for a larger number of observations. The high number of linkages indicates a complex web of phonological dependency, at least in Sibawaih's way of thinking, and it is probably this phonological complexity which underlines Sibawaih's invocation of many grouping categories.

7.1.3. *Imala of short /a/*

Before leaving Sibawaih and turning to the situation in the modern dialects, it is necessary to consider the last chapter of the section on *imala*, which deals, inter alia, with *imala* of short /a/ (II: 293, ch. 482). The general theme of the

chapter concerns the *imala* of an /aa/ or /a/ before an /r/. An /r/ has an imalizing effect on a preceding /aa/ or /a/. Rather than *min maṭar-in*, for instance, one has *maṭier-in*. The diphthong, however, is not indicated as long.¹³

Among the forms cited are *xieyr* < *xayr* ‘better’ and *ḡieyr* < *ḡayr* ‘insult’. As will be seen in sect. 3.2 below, the phonetic interpretation of this form is important, so it is relevant to look at Sibawaih’s description in greater detail. He adds in relation to these two examples:

- (Q 2) ‘and you don’t sniff them, because otherwise it would disappear in the /y/[of *xayr*], just as an /i/ does’ (fa-lam tuḡmim liḡannahaa taxfaa maḡa l-yaaḡ kamaa ḡanna al-kasra fiy l-yaaḡ Paxfaa).

This phonetic description is somewhat difficult for the use of two technical terms. *ḡafamma* ‘give the phonetic coloring to, lit. smell, sniff’, is generally used in form IV, with the verbal noun *ḡifmaam*. *Paxfaa* is ‘hide’. Discussion of each is necessary.

Wehr (1974: 485) gives as a translation of *ḡifmaam* the pronunciation of a sound with a trace of [i]. This is only a partial translation. In Sibawaih, two distinct usages of *ḡifmaam* are discernible. In the first, Sibawaih discusses *ḡifmaam* along with other pausal phenomena in chapter 494 (II: 307). In all there are four different ways to effect a pausal form. One of these is termed *ḡifmaam*. As noted in sect. 1.6.3, it appears that *ḡifmaam* is realized as a voicelessness of a final nominative /u/. This can be seen in two places. First, Sibawaih notes that *ḡifmaam* occurs only in the nominative, not genitive or accusative (II: 309. 1). This rules out an interpretation of *ḡifmaam* in this context as lip rounding. /u/ is already a round vowel, and the case ending which would make an otherwise unrounded vowel into a rounded vowel is the genitive. This, however, cannot have *ḡifmaam*. Second, Sibawaih very carefully explains that when one uses *ḡifmaam*, it is only a visible feature, not an audible one; if you were to do *ḡifmaam* before a blind person he would not recognize it.

In other contexts *ḡifmaam* is used to describe lip rounding. This occurs in the discussion of passivization, for instance in the example:

- (19) *ḡuxṣiyya* < *ḡuxṣiya*
 ‘it was attacked’, 447. 6 (also II: 280. 10, II: 398. 4)

¹³ One hundred and thirty years after Sibawaih, Sarraj (III: 169) summarizes this type of *imala* simply as *imala* of short /a/ (*fathat al-Pimaala naḥw al-kasra*, as title), without specifying the /r/ conditioning context. In general later grammarians systematized and summarized Sibawaih’s treatment of *imala* in a concise fashion, but added nothing new as far as its workings go. In App. 3, I show this on the basis of a comparison between Sibawaih’s treatment of *imala* and that of Zamaxshari.

where Sibawaih suggests that the lip rounding of the vowel before /y/, which in the passive model should be [i], is due to the fact that the stem *ʔazaa/yaxzuw* is originally a /w/ final verb. This has to be seen as a different usage from the first, as the vowel is in non-pausal position.

In passing it can be noted that *Piſmaam* is also used elsewhere in the larger Arabic grammatical tradition. In Ibn Mujahid (105), for instance, the quality of the /š/ in *širaat* ‘way’ (Q 1.5) is discussed in which four variants are noted, [š, s, z, *Piſmaam*]. The first three are values represented in the normal Arabic script. The last is said to be a value between š and z.

The term *Piſmaam* is used to designate a medial value, this usage derivable from its original etymology. A sound has the scent of something else, without being that.

Turning to the second term, Sibawaih uses the stem *Paſfaa* ‘be hidden’ in various forms, adjectival *xaſiyy* ‘hidden’, *xaſfaaʔ* ‘hiddenness’, *Paſfaa* ‘more hidden’, etc. (see Troupeau 1976: 84). It has a complex of meanings, in a phonological sense related to the idea that some sounds are inherently less perceptible or less salient than others. These are in particular /aa/, /iy/, /uw/, /h/, and /n/. Additionally, *Paſfaa* describes a process whereby a sound may (1) not appear, as when an underlying /i/ does not appear between two ys, as in *Paḥiyya* < *Paḥiyya* ‘she camel’s private parts’ (pl. of *ḥayyaaʔ*, II: 431. 9, *Lisaan* 14: 219), (2) have a moric value, but not necessarily a vocalic realization,¹⁴ as in *tātanaajaw* ‘you speak together secretly’ (II: 457. 10), an alternative to *ttanaajaw*, and (3) assimilate to another, as when an /n/ is said to assimilate to oral consonants (II: 464. 24). In the last case, it appears that *xaſfaaʔ* is an alternative to *Piḍxaam* ‘assimilation’ when the assimilated consonant has the property of *xaſfaaʔ*.

Having briefly considered Sibawaih’s technical terminology, I return to the interpretation of *bi-xieyr* in (Q 2) above. The term *Piſmaam* remains problematic. It could be that Sibawaih is saying that the imalized short /a/, here given the phonetic interpretation [ie], does not have a rounded vowel (lam *yufmam*), i.e. not *bi-xüeyr*. What would remain unexplained, however, is why *Piſmaam* in the sense of lip rounding would be mentioned in this context at all, since *Piſmaam* in this sense usually occurs only when an [u] or a /w/ is somewhere in the paradigm, to induce the rounding, as in (19). In any case, should an *Piſmaam* quality be contemplated here, it cannot occur because the

¹⁴ In this context, the property of *taxfiyya* is qualified with ‘with the weight of a short vowel’ (*bi-zinat l-mutaharrik*), i.e. a vowel is ‘hidden’, but it still has metrical weight.

[i] value which arises from the *imala* is so close to the /y/ that no *Piḡmaam* is possible.

I would note in passing that if this interpretation is plausible, it would be another argument for the [ie] quality of *imala* as opposed to [ai] or [ei]. The latter would give a geminate y, *xaiyr* = *xayyr*, which is a value Sibawaih nowhere hints at.

7.2. *Imala* in the Modern Dialects

In this section, I summarize the reflexes of *imala* in the modern dialects. Today there are three separate areas with reflexes of word-internal *imala*, eastern Libya, Malta, and the *qultu* dialects of Mesopotamian Arabic. In addition, *imala* was well attested in the Arabic of Spain (Andalusia), and this will also be included in this summary. One further related reflex from southern Iraq will also be summarized in this section.

While the reflexes of *imala* in all four locations are broadly similar, they always differ on points of detail. *Imala* is summarized according to conditions of occurrence and for phonetic reflex.

Before beginning, some general distinctions can be noted which have been applied in the description of modern-day *imala*.

Imala can be lexical or allophonic. While lexical *imala* often has a phonological origin when examined in a historical perspective, it is irregular in that a comparable context in a paradigmatically related word will not display *imala*. Allophonic *imala*, on the other hand shows a regular alternation between *imala* and *imala*-less forms. (C1) is a classic example of this, and indeed will be met with below. Allophonic *imala* has often been termed productive *imala* (e.g. Blanc 1964: 47). However, there are various degrees of productivity. As will be seen, Mesopotamian *imala*, for instance, is largely restricted to the allophonic conditioning element of the plural suffix *-iin*. ELA *imala*, on the other hand, is unrestrictedly allophonic, any suffix *-i* inducing *imala*.

The word-internal *imala* of /aa/ which I restrict myself to here is also sometimes termed *i-imala*, as it is induced by an underlying or overt [i]. I prefer not to use this terminology, as it implies that the *imala* of, say, *klied* 'dogs' (ELA) is somehow conditioned differently from that of *nies* 'people'. This may or may not have been the case historically ((C1) vs. (C3) above, see sect. 7.3.2). However, the two can be subsumed under a common rule (*imalize* unless an inhibiting factor occurs) and hence can be conceptualized as a single phenomenon, something the '*i-imala*' formulation prohibits.

7.2.1. *Andalusia*

For Spain, Corriente (1977: 22) simply formulates *imala* in the converse way from Sibawaih (type (C1)). Sibawaih takes the non-*imala* form as the input, and specifies conditions where it occurs. Corriente says that in Andalusia the unmarked case is for *imala* to occur, 'whenever this tendency (*imala*) was not checked by inhibiting factors'. As seen above, Sibawaih was describing a speech community where *imala* and non-*imala* varieties existed side by side. In Corriente's Andalusian data, apparently, the *imala* variant had become so widespread that it was easier to note exceptions than to give rules for *imala*. For the inhibiting factors Corriente refers the reader to Cantineau's summary of *imala*, which are basically those of (C1) above. It thus appears that Andalusian Arabic and the classical description are similar.

In Spanish Arabic the value of *imala* is generally /ee/, though /ii/ also occurs. Both varieties are attested throughout the existence of Arabic in Spain, though it appears that the /ii/ variant became more common in later sources.

- (20) *yibede* 'worship' (< *ṣibaada*)
moneeda [almoneda] 'auction'
niis 'people' (Ferrando, p.c., citing Pedro de Alcalá, early fifteenth century, < *naas*)
kiin 'he was' (Corriente 1977: 24 n. 6, < *kaan*)

Corriente (1977: 23 n. 3) also notes examples of *imala* occasionally occurring in inhibiting contexts.

- (21) *ribeete* 'strip' < *ribaata*
maqeem 'holy place' < *maqaam*

As far as the diphthong *ay* goes, it is generally maintained as *ay* in Spanish Arabic (Corriente 1977: 29).

- (22) *al-qasr-ayn*
 'the two castles'

7.2.2. *Eastern Libyan Arabic*

In eastern Libyan Arabic conditions for *imala* are very like those in (C1) above. Emphatic consonants and an /a/environment prevent *imala*. Otherwise a long /aa/ is realized as [ie].¹⁵

¹⁵ In Owens (1984) *imala* in Benghazi Arabic is described as a palatalization of the preceding consonant, followed by a low front vowel, *iḥḍʿaa* 'near him'.

(23) *iCaa* or *aaCi* → *ie*

Mitchell (1975: 52–7) offers a detailed discussion of sometimes singular conditions for *imala*, but by and large it can be said that inhibiting contexts are emphatics, /x/ and /ɣ/ and following /a/.

- | | |
|--|---|
| (24) No change | <i>Pimaala</i> |
| a. <i>ṭaaliṣ</i> ‘leaving’ | <i>mieṣi</i> ‘going’ |
| b. | <i>misieziid</i> ‘mosques’ |
| c. <i>aṭfaal-hin</i> their.F. children | |
| d. <i>baal-kam</i> ‘look out.MPL.’ | <i>biel-ik</i> ‘look out.FSG’ (Mitchell 1975: 56) |
| e. <i>saamaḥ</i> ‘he forgave’ | <i>siemiḥ</i> ‘forgive!’ |
| f. <i>mooz-aat</i> ‘banana-PL’ | <i>mooz-iet-ik</i> ‘your.F bananas’ |
| | (Owens 1980: 42) |

This *imala* is allophonic in that the occurrence of *imala* is conditioned by the suffixation of an *imala*-inducing front vowel, as in (24d) and (24f). Mitchell (1975: 52) notes that the allophony is sensitive to the status both of a potentially inhibiting consonant, and to the morphological status of the following front vowel. Emphatics and gutturals always inhibit (24c).

The behavior of /r/ in ELA is interesting, because it allows a direct comparison with Sibawaih’s detailed description of /r/ in *imala* (see (10)). Distilling over a long discussion, the four main conditions in Mitchell regarding /r/ and *imala* in ELA may be summarized thus: /r/ does not inhibit if a following /i/ is in the same stem as the /aa/, but if it is in a suffix it does.¹⁶

Before /aa/ a /r/ is an *imala* inhibitor.

(25) *ṭaami* ‘having thrown’

An /aa/ before /r/ allows *imala* (in Sibawaih’s terms, is an *imala* abettor), provided the /i/ is within the word stem.

(26) *dieri* ‘take care of!’ (< *daari*)

A word-final post-aa /r/ is an *imala* inhibitor.

(27) *uḥmaar* ‘donkey’
daar ‘house’

¹⁶ Mitchell gives the further example *siemiḥ-ih* ‘he forgave him’ < *saamaḥ* + *-ih*, where the /a/ of the final syllable in the verb is raised to /i/ in an open syllable, by regular phonological rule in the dialect. This raised /i/ then induces *imala* in the long /aa/. The effects of a phonological rule in turn inducing *imala* may be compared to a form such as *ṣimied-ie* ‘support.ACC’ < *ṣimaad-aa*, cited as a variant of some people, where the initial /i/ induces *imala* of the following /aa/, and this in turn of the accusative suffix (282. 14).

Imala does not work across morpheme boundaries, so that given (26), if a suffix such as *-i* ‘my’ is added, no *imala* is induced, in contrast to (24d, f).

(28) *daar-i* ‘my house’

Summarizing these contexts:

(29) *raa, aar#, ieri*

What is noteworthy is that broadly speaking two of the three contexts are comparable to Sibawaih’s observations on /r/ *imala* summarized in (10) above. An /aa/ in post /r/ position does not imalize while an /aa/ before /r/ does. The main difference is that an /aa/ before /r/ does not imalize in ELA across morpheme boundaries, which it does in Sibawaih’s description. However, even here it was noted that Sibawaih conceived of *himierik* as a single stem. This is a somewhat mysterious classification. Perhaps Sibawaih expected *imala* not to occur across a morpheme boundary here, as in ELA, and therefore assumed that a type of post-morphemic phonological realignment was needed to explain the *imala* of *aar*. In these terms, the difference between ELA and Sibawaih’s description in this third respect would be that in Sibawaih’s variety *aar-i* realigns to *aari* allowing → *ieri*, whereas in ELA no realignment occurs, so *aar-i* remains *aar-i*.

In ELA *imala* occurs only in stressed syllables, so alternations such as the following are found.

(30) *kitab-na* ‘we wrote’ *kitab-’nie-hin* ‘we wrote them.F’
sa’amiḥ-li ‘forgive me’ *’siemiḥ* ‘forgive’

Lacking inhibiting consonants, *imala* will occur in monosyllabic nouns ((C₃) above).

(31) *nies* ‘people’
bieb ‘door’

The diphthong *ay* is either maintained, particularly after a guttural consonant, or, and this is more common in Benghazi, monophthongized to *ee*.

(32) *Ṣayn* ‘eye’
beet ‘house’

7.2.3. *Malta*

In general Maltese *imala* is similar to that of ELA, except that, having lost emphatic consonants, *imala*-induced *aa has a wider distribution than in ELA. Maltese is dialectally diverse, so I begin with standard Maltese (Aquilina 1973: 53–6) and then briefly consider dialect differences.

Imala is realized as [iə], represented as 'ie' in Maltese orthography.

- (33) **baab* > *bieb* 'door'
θalaaθa > *tlieta* 'three'
banaat > (?*binaat*) > *bniet* 'girls'
xaddaam > *haddiem* 'workman'
kaan > *kien* 'he was'

As in ELA, the diphthongal realization occurs only in stressed syllables. When unstressed the vowel shortens to [i] or [e],

- (34) *bniedem* 'man', but *bnedm-iin* 'men'
bi'rik-t 'I blessed', *bi'ark-u* 'they blessed', *n-bi'erek* 'I bless'
 (Vanhove 1993: 28).

When final /a/ is unstressed it does not imalize. If a suffix is added, lengthening the /aa/, it does.

- (35) *ktib-na*, 'we wrote', *ktib-nie-hum* 'we wrote them'
sewa 'he did', *swie-l-a* 'it cost her' < *sewaa-l-ha* (Aquilina 1973: 56)

Maltese has lost the classic inhibiting contexts of *imala*. Nonetheless, one trace of a former emphatic context, ʁ or x is the lack of *imala* in the vowel. This pertains to r,¹⁷ etymological emphatic consonants, ʁ, and x and also ʕ. *Imala* inhibition appears particularly strong when the former inhibiting context preceded *aa.¹⁸ Unless otherwise stated, the following examples were culled from Borg and Azzopardi-Alexander 1997.

- (36) *dyaar* 'houses' < *diyaar* (Aquilina 1973: 22, 43)
Paali 'expensive' < ʁ*aali* (ibid. 22, 43)
rhaam 'marble' < r*xaam* (Ambros 1998: 26, 34)
sfaar-u 'they got yellow' < s*ƣarr* (Vanhove 1993: 29)
am 'he swam' < ʕ*aam* (għam)
il-ħames 'the fifth' < il-*xaamis*
sittaf '16' < *sittaaƣ*
ndafa 'cleanliness' < n*đaafa*
saɹ 'he drove' < *saaq* or ʕ*aaq*

In addition the suffix *-an* < **aan* does not undergo *imala*.
daħk-an 'laughing'

¹⁷ Presumably *ʁ, see Schabert 1976: 51.

¹⁸ Schabert (1976: 46) explicitly observes that etymological /aa/before ʕ imalizes, ʔi-ee-t 'sitting' < ʔaaʕid, even in the context of etymological emphatics, **taaʕam* > *tiam* 'taste,

Nonetheless, *imala* may still occur in etymologically inhibiting contexts,

- (37) *tielaʔ* ‘going up’ < *taaliʕ*
rieʔed ‘sleeping’ < *raaqid*
sieʔ ‘leg’ < *saaq* (cf. above)
Piet ‘staying’ < *qaaʕid*

In recent textbooks describing Standard Maltese (Borg and Azzopardi-Alexander 1997: 305; Ambros 1998: 24) the dominant realization of *imala* is stated as [ii]. Ambros notes that [iə] is heard in slow, careful speech, while Borg and Azzopardi-Alexander give this realization in open, phrase-final contexts. However, Vanhove (1993) notes the usual realization as [iə].

Turning to Maltese dialectology, the Standard Maltese situation appears to reflect closely the dialect of the eastern end of the main island, Malta, as described in Schabert (1976). Aquilina and Isserlin (1981) describe the dialectology of the second island, Gozo. The contexts of occurrence of *imala* are identical as for Standard Maltese. In their description of individual lexical reflexes, *imala* is realized either as a diphthong along the lines of [iə], or as a pure vowel, as they describe it, in the region of cardinal vowel 1 [i], 2 [e] or 3 [ɛ]. In the following are given words with various phonetic realizations in different Gozo dialects.

- (38) *wiaʔ* ‘valley’, *weet*, *wɛɛt* (81) < *waadi*
lsiin ‘tongue’, *lseen* (87) < *lisaan*
tlietv ‘three’, *tliitv*, *tleetv*, *tleeʔv* (93) < *θalaaθa*

Commenting on the diphthong *ie*, Aquilina and Isserlin state (104): ‘Maltese spelling frequently features *ie*, but a corresponding realisation in the range of [ie] is rarely found in Gozitan pronunciation (though it is found in Standard Maltese).’ They go on to note that the common realizations are variously [ii], [ee], [eɛ], or [iɪ].

The diphthong *ay* is generally maintained in Maltese.

7.2.4. Northern Mesopotamia, Cyprus

Imala is found in a wide band of dialects stretching from northern Iraq across the isolated Anatolian Arabic dialects, northern Syria as far as Damascus and Lebanon, central southern Turkey including Hatay province, and ending in the isolated dialect of Cyprus. It is usually associated with the so-called *qultu* dialects of the area, though there are some dialects with [q] as reflex of classical ‘qaaf’ in the region which do not have *imala* (e.g. Hiit, Khan 1997).

As Levin (1998: 84) points out, the *imala* contexts in this area in general are like those described in Sibawaih, though the original conditioning

environment may have been subsequently lost. In *kleeB* ‘dogs’, for instance, the short high vowel has been elided, but presumably after it had induced *imala* in the following vowel, *kilaab* > *kileeb* > *kleeB*. The realization of the imalized /aa/ is either /ee/ or /ii/. A representative set of examples is as follows, taking examples from Jewish and Christian Baghdad (= JB, CB respectively), Mardin in Anatolia (Sasse 1971), Cilicia (S. Prochazka 2002), and the Cypriot dialect of Kormikiti (Borg 1985) as examples.

(39)	JB	CB	Mardin	Cilicia	Cyprus
<i>kilaab</i> ‘dogs’	<i>kliib</i>	<i>kleeB</i>	<i>kleeB</i>	<i>kleeB</i>	<i>klep</i>
<i>miizaan</i> ‘scale’	<i>miziin</i>	<i>mizeen</i>			<i>mi’zan</i>
<i>naas</i> ‘people’	<i>niis</i>	<i>nees</i>	<i>nees</i>	<i>nees</i>	<i>nes</i>
<i>ḥamaaniya</i> ‘eight’	<i>ḥmiini</i>	<i>tmeeni</i>	<i>ḥmeenye</i>	<i>tmeeni</i>	<i>xmenye</i>
<i>ḥalaaḥa</i> ‘three’	<i>tlaaḥi</i>	<i>tlaati</i>	<i>ḥaḥe</i>	<i>tlaati</i>	<i>tlaxe</i>

In general, *imala* inhibitors are the usual emphatic consonants, as well as /x/, /ʁ/, /q/, and /r/. However, there are many individual variations according to dialect, worthy of an individual study. It will suffice here to note some patterns of variation in the realization or not of *imala*, as well as to note individual lexical variation.

On the whole, Cypriot Arabic displays a robust system of historical lexical and allophonic *imala* (Borg 1985: 54–63). However, there are regular exceptions. Class 3 verbs, for instance, do not have *imala* in the imperfect, *pi-saʕed* ‘he helps’ (96). There are also irregular exceptions. The participial pattern CaaCiC has members both with and without *imala*. In some instances the non-*imala* variants go back to old inhibiting consonants, e.g. emphatics, which have been lost in the dialect, e.g. *ṣater* ‘smart’ < *ṣaaṭir*. In other cases, however, historical inhibiting factors may play no role, *qetʕe* ‘passing’ < *qaṭiʕ* (58). Similarly in Mardin and other Anatolian *qultu* dialects usually *imala*-inhibitor contexts may allow *imala*, *qeeʕid* ‘standing’ (Sasse 1971: 218; Jastrow 1978: 66). In Cilician Arabic, S. Prochazka (2002: 47, 88) notes that in class 3 verbs weak final verbs never undergo *imala*, *ydaawi* ‘he heals’, and that in other class 3 verbs some have *imala* in the imperfect only, some in the perfect and imperfect, and others in none, *yqeerib/qeerib* ‘he is related/was related’ vs. *yṣaaliḥ/ṣaalah* ‘he reconciles/reconciled’.¹⁹ Similar irregular application of *imala* is found in nominal patterns, e.g. *minxeel* ‘sieve’ with *imala* despite the /x/ vs. *minṣaar* ‘saw’ without. In JB and CB, Blanc (44) notes that

¹⁹ This situation, in fact replicates the overall situation for form III verbs described in Behnstedt’s Syrian language atlas (1997: 123): some dialects have no *imala*, *saafar/yasaafir* ‘he traveled/travels’, others have *imala* only in the imperfect, *ṣaalah/yṣeeliḥ* ‘he reconciled’, others only *imala*, *ṣeelah/yṣeeliḥ*.

neither variety has *imala* in class 3 verbs, *asaameh* 'I forgive'. All in all a broad tendency is for *imala* to occur in what are historically *imala* (non-inhibiting) contexts, and for *imala* to intrude into inhibiting contexts on an irregular basis (see Jastrow 1978: 63–70 for more examples). The example of the word '3' in (39) underscores the lexical irregularity of the *imala* process in this region. In Maltese '3' undergoes *imala* as expected, *tlieta* 'three' (Borg and Azzopardi-Alexander 1997: 356). At the same time, it is a consistent exception in the Mesopotamian region.²⁰

Another source of irregularity is the realization of *imala* as /ee/ or /ii/. In most Mesopotamian dialects it is /ee/. In a few, for instance JB, its usual reflex is /ii/, but in the active participle of form I verbs has *ee*, *weeqef* 'standing'.

Looking at the region as a whole, allophonic *imala* as found in Maltese and ELA does not occur, where *imala* and non-*imala* forms co-vary on a fully automatic basis. The exemplification of class 3 verbs above illustrates this point. In CB and JB no *imala* occurs in form 3 imperfect verbs, though this is a classical conditioning context, in other dialects *imala* may extend to the perfect, though this is not an *imala* context, and in others *imala* may occur, according to the standard rule as it were, in the imperfect only. Apparently in the dialects in this region the only inflectional suffix which regularly induces *imala* is the plural suffix *-iin* (e.g. *nəjjaar*, *nəjjeer-in* 'carpenters', Sasse 1971: 99, cf. sect. 7.2.2 for ELA, with object suffixes inducing *imala*).²¹

The diphthong *ay* is usually maintained in the more northerly *qultu* dialects.

(40) *bayt* 'house' (Jastrow 1978: 78, for Aazex)

rm-ayt 'I threw' (Mardin, Sasse 1971: 165, Cypriot, Borg 1985: 89)

In the more southerly ones it may be realized as *ee* (Blanc 1964: 50; Jastrow 1978: 79).

(41) CB *beet*, *rmeet*

7.2.5. Southern Mesopotamia and other areas

In southern Mesopotamia an *imala*-like form is found as the reflex of the diphthong *ay.

(42) *biet* < **bayt*, 'house', *mifiet* 'I went' < *mafayt*

²⁰ In Behnstedt's Syrian atlas (1997: 585) there are only about twenty individual sample points out of 567 with *imala* in the word '3', e.g. *tleea*, *θaleeθi* etc., and one large area, Qariiteen, northeast of Damascus.

²¹ Sasse (1971: 55) reports that in Mardin the FSG imperfect verb suffix does induce *imala*, *tnam* 'you.M sleep' vs. *tnem-in* 'you.F sleep'. Jastrow, however, observes only *tnaam-iin* (1978: 69).

So far as I know, these forms, little discussed apart from Ingham (1982: 80), are not considered *imala* reflexes. They have, however, the same phonetic reflex as ELA *imala* and they play a role in the analytical discussion in sect. 7.3 below.

Outside of these five regions, there are no reflexes of word-internal *imala*. As far as the diphthong *ay* goes, its most common reflex is probably *ee*, *beet* ‘house’ (the entire Sudanic region, most of Egypt), though *ay* (*bayt*) is still maintained (most *qultu* dialects, Najdi, most northern Yemen). In a number of dialects it falls together with *ii* (e.g. most Tunisian, Algerian, and Moroccan dialects).

7.3. Reconstruction

In these summarizing sections, I will consider a reconstruction of *imala* in Arabic from two perspectives. First, I will work out lines of development for each of the four dialects where *imala* occurs. Thereafter, I will bring the results of this endeavor into line with the earlier description of Sibawaih and present an overall synthesis. In the following I begin with the simpler cases and move to the more complex.

7.3.1. Individual dialect reflexes

Before beginning it will be useful to refer to the contexts where *imala* does or does not occur by a single binary term. In general there are two broad categories of *imala* inhibitors, a low vowel and an emphatic or guttural context. This conditioning difference is evident in ELA today (see sect. 7.2.2). A high, front context on the other hand favors *imala*, the vowel [i] and consonants not marked by the feature of emphasis or backness. I will use the contrast palatal–non-palatal to represent this broad class of differences. Palatal contexts (high vowel, non-back, non-emphatic consonants) favor *imala*, non-palatal ones (low vowel, back, and emphatic consonants) do not.

I begin with ELA, as it is the simplest to describe. [ie] is an allophone of /aa/, which occurs in non-guttural contexts, non -a contexts. A negative formulation, ‘not in palatal contexts’ seems to be the most appropriate, as what Sibawaih termed exceptional *imala* in forms such as *nies* ‘people’ are covered in the statement. Gutturals are /x, ʁ, emphatics (sometimes including r)/, while an -a context is one where a long /aa/ is followed by /a/, or a back vowel. This is probably close to the original situation, as the dialect was brought to the ELA area. There is no need to reconstruct intermediate phonetic values of *imala*.

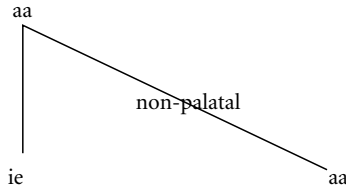


FIGURE 7.1. Eastern Libyan Arabic *imala*

In Andalusian Arabic, the context is similar to ELA, though apparently there is less detail in the written texts at our disposal, so that it can be said with certainty only that the guttural context inhibits *imala*. Phonetically the situation is more complicated as there are two realizations, [ee] and [ii], and neither of these are identical to the original reconstructed value [ie]. A development such as the following needs to be proposed, with [ie] developing into [ee] or [ii]. This looks like an unconditioned split in Andalusian Arabic. A progressive development might be imagined on the basis of the changes attested in Maltese (Fig. 7.3 below). Since [ie] is not attested in Andalusian Arabic texts (Ferrando, May 2004, p.c.), it needs to be postulated as a reconstructed form.

In Maltese the situation gets more complicated for two reasons. First, all phonetic values of *imala* are attested in one dialect or another. Secondly, when emphasis was lost, *imala* was still a living phonetic process, so former inhibiting emphatic contexts became non-inhibiting. Original guttural contexts, however, remained inhibitors. Furthermore, it appears that historic [ʕ] was an inhibitor. The situation can be sketched as in Fig. 7.3.

Finally, the situation in Mesopotamian Arabic is essentially similar to Andalusian, except for one important complication, namely the reflex [ie]

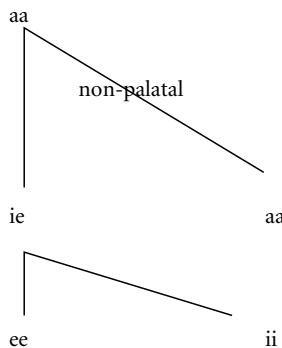
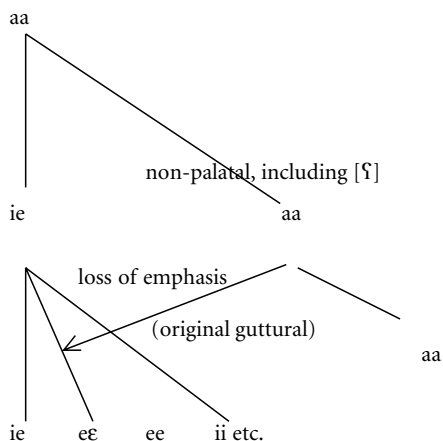


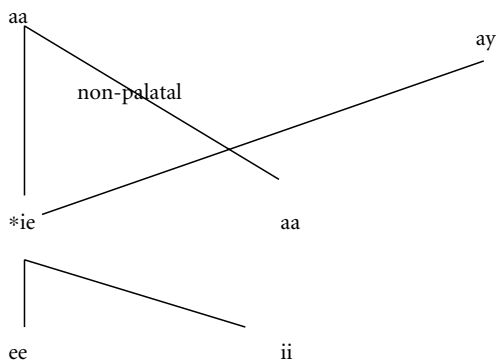
FIGURE 7.2. Andalusian *imala*

FIGURE 7.3. Maltese *imala*

for *ay* discussed in sect. 7.2.5. I assume that it is no coincidence that precisely the same phonetic reflex as *imala* should appear in precisely the area Sibawaih described 1,200 years ago. What is anomalous, of course, is its very different lexical distribution. In Fig. 7.4, *ay* is represented as converging with the [ie] reflex of the *imala*.

7.3.2. A synthesis

Given the overlap between both the realization and the contexts of *imala*, as well as the broad similarities with Sibawaih's description of *imala* (see below) it is clear from a linguistic perspective that *imala* is not to be reconstructed as

FIGURE 7.4. Mesopotamian *imala*

arising in four separate events. Except for the *ay* > **ie* change, the Andalusian tree (Fig. 7.2), for instance, is a clone of the Mesopotamian one. Rather, one is dealing with a pre-diasporic phenomenon which happened once, and was spread from a central point to Andalusia, ELA, Maltese, and the Mesopotamian *qultu* dialects. I outline this development in Fig. 7.5.

I assume that at some stage proto-Arabic had no *imala*, though I have presented no evidence in favor of this, and at this point in our research at least, nothing depends on this assumption. While I have argued that Sibawaih's description of the *imala* variant is [ie], I have also included the other variants among them as well. These are to be understood as unattested in the early grammatical literature, but nonetheless reconstructible *imala* variants. They are reconstructible to Sibawaih's time, which is what I term pre-diasporic Arabic, since the variants [ee] and [ii] are found in Andalusia and Malta, and in the *qultu* Mesopotamian dialects. Parallel, independent development may be ruled out. Furthermore, the *qultu* dialects themselves are spread throughout a number of discontinuous areas, and have apparently been out of contact with each other for some time, yet the *imala* reflex is fairly uniform throughout the region. Further and rather speculatively, one might relate the monophthongal realization [ee] to the 'intermediate *imala*' (*bayna bayna*) noted in sect. 7.1.1. This is found in the Koranic reading tradition, and indicates that there was more than one rendition of *imala*, at least by the time Ibn Mujahid had compiled his work. Unfortunately, the phonetic description of the *bayna bayna* form is not specific enough for firm conclusions to be drawn. ELA, as well as the [ie] variant of Standard Maltese, are the same as Sibawaih's phonetic variant.

It is assumed that the original *imala* variant was [ie]. This either remained [ie], or monophthongized to [ee] or [ii]. In the latter instance *imala* falls together with /ii/, as in JB *kliib* 'dogs' < *klaab* and *ktiir* < *ktiir*. In the former it usually forms a new phoneme, as the diphthong *ay* is usually maintained

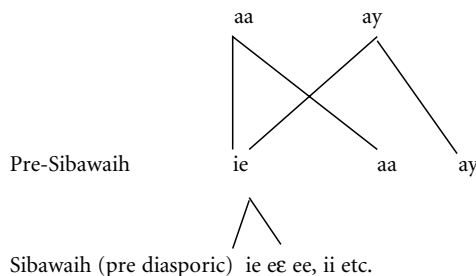


FIGURE 7.5. *Imala*, a synthesis

where *ee imala* occurs (Andalusia, the more northerly Mesopotamian *qultu* dialects). In some dialects *ee* < *imala* merges with *ee* < *ay*, as in CB *kleeb* < *klaab* and *beet* < *bayt*. Given that this merger is mostly attested in Iraq and Syria where *imala* dialects are in close contact with dominant *imala*-less dialects with the *ay* > *ee* change, it is probably best to regard the latter as a later borrowing or substrate-induced shift into a dialect originally with *ay*. More work needs to be done to confirm this.

- (43) **bayt* > *bayt* > *beet* (Muslim Baghdad, borrowing influence)
klieb > *kleeb*

Note that in ELA, while *ay* > *ee* is spreading in the dialect, it remains distinct from *imala*, which has the reflex [ie].

As far as the monophthongization process to [ii] or [ee] goes, the detailed phonetic observations of Aquilina et al. for Maltese are instructive. All their diphthongal variants have a high to low tongue movement, but in some variants the movement is slight, e.g. mid-high to mid-open [eɛ]. This perhaps indicates that monophthongization proceeded in stages, reducing gradually from a saliently-differentiated diphthong [ie] as in ELA, to [eɛ] and then finally to [ee].

It may be necessary to put in another step in historical derivation between *[ie] and the various Sibawaih-era reflexes, namely (1) a conditioned *imala*, followed by (2) an unconditioned one. Conditioned or allophonic *imala* would be the original reflex, followed by a spread to unconditioned contexts (as in (C3) above). By Sibawaih's time, conditioned and unconditioned clearly lived side by side.

The most problematic aspect of the reconstruction is the [ie] reflex of **ay* in southern Mesopotamia (e.g. *biet* 'house'). Very tentatively, this can be seen as a reflex of Sibawaih's short /a/*imala* discussed in sect. 7.1.3 above. As mentioned above, I assume it is not a coincidence that this is the reconstructed and attested *imala* value. The problem is how to account for its historical relation to *imala*.

The southern Mesopotamian dialect (otherwise) does not have *imala* reflexes. Its relation to *imala* can be assessed in two ways. First, *ay* would have merged with *imala* [ie] in [ie], as in *xieyr*, discussed in sect. 7.1.3 above. *Imala* in Sibawaih is an allophonic process (C1), so speakers would always have had the non-*imala* [aa] in their repertoire. That group of speakers who had merged *ay* with *imala* in [ie] could subsequently have come into close contact with those who did not have *imala*. They would have converted their *imala* allophones into non-allophonic [aa], while maintaining the *imala* variant of

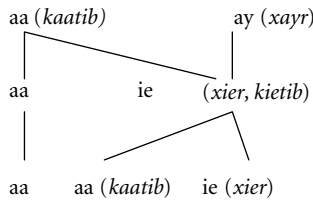


FIGURE 7.6.

ay. These are the speakers of the southern Mesopotamian dialect described by Ingham. This can be sketched as follows:

While this accounts for the present-day facts, as it were, there is no independent evidence for it, and it involves the merger of *ay* and *imala*, followed by their demerger. Such an explanation would probably be ruled out on a priori grounds, lexical demerger being an unlikely process (Labov 1994: 33–5), but for the fact that *imala* is allophonic, not lexical. While there are no variational studies on the matter, it has been observed that *imala* and non-*imala* usages can reside in the same speaker (sect. 7.1.2). I observed (1980) that Mitchell (1975) described an *imala* operative in more contexts than I described for Benghazi Arabic. Thus, de-imalization alone is not only plausible, but in fragmented ways, actually attested. Since the *imala* of *xieyr* would not have been allophonic, there being no *imala*—non-*imala* alternation associated with these forms, they could have survived an allophonically based general de-imalization of the dialect.²²

Looking to analogies elsewhere in the history of Arabic dialects, contemporary variational studies attest to a part of the demerger process, at least in local contexts. As is well known, many Arabic dialects throughout eastern Arabia, Jordan, Syria, and Israel have undergone the change $k > c$ in front contexts, *kammal* > *cammal* in Jordanian (see sect. 8.7.1). Abdel-Jawad (1981) observes in urban areas a tendency for *c* to re-merge with *k*, essentially under the influence of what Abdel-Jawad sees as a dominant prestige variant $\text{ʔ}/k$. This can be compared to the suggested remerger of *ie* > *aa*. It would become a complete parallel if the remerger would go to completion, except for a residue in a certain morphological pattern, or a certain morpheme, e.g. the 2.F.SG. suffix *-ic*. This of course is not yet attested, though is at least in principle conceivable.

²² Labov treats apparent mergers with subsequent demergers as actual near mergers, with subsequent differentiation (1994: 371–90). There is not adequate phonetic detail either in the historical record or in the contemporary dialects (e.g. southern Mesopotamia, eastern Libya) to follow up this possibility at this time.

Note that this account feeds into the further development of the diphthong to *ii* (see above). It could be that [ie] was a stage in the development of North African *biit* etc., the de-diphthongization of *biit* running parallel to the de-diphthongization of *imala*.²³ Such an analysis would imply that *imala* was an ancestor of more dialects than where it is found in present-day Arabic.

7.3.3. *The reconstruction and Sibawaih*

By and large the reconstruction of *imala* based on application of the comparative method to attested post-Old Arabic variants reproduces the same phenomenon as that described in Sibawaih. The main points of identity are as follows.

- I. /aa/ is realized as [ie] or a related value
- II. *Imala* is conditioned by an /i/ in a neighboring syllable.
- III. This value is inhibited in the context of emphatic consonants and gutturals /x/, /ʕ/, /q/ and sometimes /r/.
- IV. The phenomenon is not completely regular: many lexical and morphological pattern exceptions occur.

In addition, there are points of difference which distinguish Sibawaih's *imala* from one or more of the four dialects where *imala* is attested today.

- V. The class of inhibitors may differ.
- VI. The realization may be [ee], [ii], or various other values (as in Maltese).
- VII. According to Sibawaih's description, there are types of *imala* for which there is no direct correspondence in the dialects, (C2) for instance.

In this section I expand upon points V–VII.

Regarding V, in Maltese *ʕ inhibits *imala* (see sect. 7.2.3). Given that *ʕ as an inhibiting consonant is attested only in Maltese it should probably be seen as a local innovation relative to tree 5 (Fig. 7.5). Whether this local innovation took place in Malta or among an ancestral pre-immigrant group is an open question.²⁴ For VI, I have noted above that the reconstruction of the pure vowel variants follows from the widespread distribution of *imala* in today's dialects.

²³ As pointed out in n. 1 above, this was already suggested by Grünert (1875: 453), though on the basis of false lexical correspondences.

²⁴ Given that it is only in Maltese that [ʕ] is an *imala* inhibitor, it should probably be seen as an innovation. However, given the recognized class of guttural consonants (mustaʕliya) to which [ʕ] traditionally belongs, it is a natural extension for *imala* inhibition to spread from some members of the class [x, ʕ, q] to others.

As for VII, one has to distinguish between Sibawaih as a theoretical linguist and Sibawaih as a field linguist, who was trying to accommodate many observations in his grammatical description. A basic precept of Sibawaih's methodology is that no observation should go unexplained. I believe it is in the context of this approach that one needs to understand (C2) and (C3) above. Sibawaih very acutely observed that the basic conditioning factor of *imala* was an [i] in a syllable preceding or following an [aa] (C1). He also noted the inhibiting effect of various consonants.

Observationally, however, *imala* in the Basra of his day was a form expanding out of its basic realization. Phonetically the change [ie] → [ee]/[ii] can already be postulated. Distributionally Sibawaih notes that it occurs even when no conditioning [i] context is present in a word. This is a problem for Sibawaih, as indeed it would be for any linguist true to his or her principles of accounting for data in a principled fashion. Observing that *imala* occurred even in back contexts, as in *xiefa* 'he feared' and *tieba* 'be good', Sibawaih solved the contradiction by observing that such verbs have an [i] elsewhere in the paradigm (e.g. *xiftu* 'I feared'). With Fleisch (1961) I would agree that what is involved here is something beyond regular, phonologically specifiable variation, and that Sibawaih's explanation is unconvincing. After all, every verb minimally has an [i] in the passive form (*fušila*). Indeed, this is perhaps why Sibawaih could accommodate irregular verbal *imala* with less problem than irregular nominal *imala*, since nouns do not always have cognate forms with an [i] somewhere in the paradigm. It is clear, however, that Sibawaih is rather overwhelmed by what he observes. This is clear in the quote at the beginning of sect. 7.1.2, and it is further in evidence in his ultimate observation that *imala* in nominal forms such as *bieb* (< *bwb*) and *maal* (< *mwl*), both from roots with a medial /w/, not /y/, are simply exceptional (*ʃaaðð*). For Sibawaih, who valued theoretical accountability above all else, this is indeed a radical categorization. Interestingly, these forms are considered exceptional, but are not judged pejoratively (*qabiyh* 'ugly', *radiy* 'bad', or the like). In the context of these observations categories (C2) and (C3) above can be understood as Sibawaih's solution to the problem of accounting for a great deal of variation, within a relatively simple rule-based grammar which does not allow for such contemporary constructs as variable rules or statistically representable realizations. Sibawaih's solution should be regarded as an extremely clever way of integrating variational observations without seriously compromising basic linguistic precepts.

The variation observed in Sibawaih obviously bears on an interpretation of the variation in the modern dialects. An initial perspective would be that variation in the modern dialects continues a situation already initiated during

Sibawaih's era. At the same time, local developments reflected in regularizations of paradigms, development of lexical irregularities, or the expansion of *imala*-inhibiting contexts as noted for Maltese above, certainly must have occurred. A clarification of these issues, however, requires a much closer historical treatment of development in individual dialects.

7.3.4. *European Arabicists' accounts of imala*

The historical interpretation of *imala* among Arabicists can be roughly divided into two categories.

In the first category are treatments which basically recognize the identity between the Old Arabic *imala* and that found in the modern dialects. These identities are always noted for the individual dialect the researcher is working on, and not generalized to the overall history of Arabic, understandably, given the specific dialectal nature of these works. Corriente (1977) for Spanish Arabic, Aquilina and Isserlin (1981) for Maltese, Levin (1998, 2002), Borg (1985) and other researchers for Mesopotamian Arabic can be mentioned in this regard.

The second are those where the writers for one reason or another simply do not mention that the given phenomenon is related to Old Arabic *imala* (Borg and Azzopardi-Alexander 1997 and Ambros 1998, both for Maltese). Particularly critical in this regard is the summary of Fischer and Jastrow (1980: 55). Without argumentation, they assume that *imala* in Malta and Spain was an unconditioned development, not related to the *imala* of Mesopotamia or of Sibawaih.²⁵ In more than one place (1978: 66, 1980), Jastrow misses Sibawaih's ch. 479 which explicitly mentioned the unconditioned *imala* of *nies* and other forms. Furthermore, Fischer and Jastrow observe that *imala* in Mesopotamia was of a different status from *imala* in Maltese (for instance), in that in Mesopotamian *qultu* dialects it leads to a phonemicization of /ee/, whereas in Malta *imala* does not lead to the creation of a new phoneme. This statement is, however, (1) incorrect and (2), for historical purposes, irrelevant.

²⁵ I conclude this by triangular logic. Fischer and Jastrow relate Sibawaih's *imala* to that found in the Mesopotamian *qultu* dialects. The other dialects have a completely different type of *imala*, i.e. one unrelated to Sibawaih's. Fischer and Jastrow relate this second type of *imala* to a general fronting of /a/ in non-emphatic contexts. Such fronting is found in many dialects. They then observe that this general fronting can lead to [ie] or [ii]. That is to say, dialects with [ie], they give the example of Maltese, arise historically by a different process of imalization from the Mesopotamian dialect.

However, given the identity of form between Mesopotamian *imala* and, for instance Andalusian (both have [ii] and [ee] variants), and the near identity of basic conditioning contexts, and the basic historical fact that the Arab diaspora evolved out of the same demographic milieu, the onus of proof is surely on those who would see two completely independent developments to show under what conditions basically the same phenomenon arose independently. Fischer and Jastrow merely claim them to be different.

It is incorrect because the variant [ie] in Maltese is a 'new' phoneme (cf. the contrast *sieP* 'leg' vs. *saaP* 'drive' in (36), (37) above). It is irrelevant because for historical purposes it is not the synchronic status of *imala* which is crucial, but rather the systematic similarity and/or difference between purported stages in linguistic history. As argued here, in both the C1 category of Sibawaih's Old Arabic and in ELA (sect. 7.2.2) *imala* is allophonic, conditioned by broadly the same conditions, as well as sharing the same form. ELA simply continues the Old Arabic *imala* as described by Sibawaih. Indeed, a systematic allophonic similarity can provide cogent evidence of close relationship, since conditioning contexts need to be maintained over long periods of time.

Finally, I would note that few scholars have dealt with the question of the phonetic value of *imala* in Sibawaih. Most simply term it *imala*, as if it were an abstract entity. Sibawaih, however, was an acute phonetician, and he attempts a specific phonetic characterization of *imala*, as described above, even if ultimately his description is not completely unambiguous. Old Arabic *imala* did have a specific form, and using the comparative method and drawing correlations with Sibawaih's description, a specific ur-form can be reconstructed. I have suggested *[ie], which is also the same as the realization of *imala* in ELA and some Maltese varieties (as well as, paradoxically, the reflex of *ay in southern Mesopotamian dialects). This reconstruction is commensurate with Sibawaih's phonetic description, orthographic practice, e.g. in the *QiraPaat* tradition, with the observation that *imala* and the other 'a' diphthong [ay] are different phenomena, with realizations in modern dialects, and the phonetic logic of deriving the widely attested [ii] and [ee] variants historically from *[ie]. Fleisch (1961: 1162) does suggest a phonetic realization for Sibawaih's *imala*, giving [e] or [ä]. These two are distinguished as strong vs. weak *imala*, a distinction probably referring to the *bayna bayna* realization in the *QiraaPaat* tradition. The problem with Fleisch's suggestion recapitulates that often found in the Western Arabicist tradition. It is based simply on a reading of Sibawaih's text, without working through the implications of the interpretation for the history of the grammar as a whole. A simple problem is, given *[e], how does one get ELA *imala* [ie] on the one hand and [ii] on the other? To my knowledge, no Western Arabicist has addressed the issue.