The purpose of this dissertation

The purpose of this dissertation is to explain irregular phonological correspondences in Arabic dialects. Especially the non-correspondence of verbal stem-vowels (chapter 4) and differences between forms shortened due to lexicalization or grammaticalization and their original forms. These data could tell us something about the history of Arabic dialects.

The Arabian dialects compared in this paper

Arabic dialects can roughly be divided into the Arabian Peninsula, Maghreb (North Africa), Egypt, Central Africa, Syria, and Mesopotamia. And simultaneously there is a classification of Bedouin (nomad) and sedentary dialects. Each of these has common features across different dialectal areas. One dialect was taken from each areal classification in this dissertation. Although the Arabian Peninsula was further subdivided into three, only two dialects of these were chosen. Further, peripheral dialects such as Nigerian, Bukhari, and Maltez were also taken.

Colloquial Arabic
Bedouin
the Arabian peninsula
  South Arabia --- San'a
  North-east Arabia --- Gulf
Central Africa --- Nigerian
Sedentary
  East (Mesopotamia) --- Baghdadi, Bukhari
West (Mediterranean)
  Maghreb --- Moroccan, Maltez
  Egypt --- Cairene
  Syria --- Damascene
Correspondence of consonants and regular changes (chapter 2)

Correspondence of consonants and regular changes are surveyed in Chapter 2. The letter 'Dad' of Classical Arabic represent as 'D' merges to $\phi$ in both nomad and sedentary dialects. Thus it appears that there was a Proto-dialectal Arabic common to Bedouin and Sedentary against Classical Arabic. And Sedentary dialects divide to west (Mediterranean) and east (Mesopotamian) sedentary dialects on the basis of the interdentals $\theta$, $\delta$, $\phi$. Proto east sedentary must have maintained the interdentals for some time, while Proto west must have merged these into the alveolar-plosives.

Correspondence of vowels and regular changes (chapter 3)

The vowel system of proto-colloquial is 3 vowel system of $a$, $i$, and $u$. Modern dialects succeed this system basically. In Moroccan $a$ and $i$ have merged into $a$. In Baghdadi $a$ in a open syllable is alternated to $i$ or $u$. In many dialects the phoneme $a$ is pronounced in plain environment as $x$, $e$, or $i$ by 'inclination' (Zimacla in Arabic). In Maltese the inclined $a$ has phonologized as $e$.

Although different forms of cognates between Arabic dialects are explained by phonological regular changes mentioned above, non-correspondence of verbal stem-vowel and differences between forms shortened due to lexicalization or grammaticalization of their original forms is remained unexplained.

Verbal stem-vowel shift (chapter 4)

The Arabic verb is analyzed into a root and a template. With CaCaC type verb, the most basic type, verbs have distinct stem vowels in past stem and present stem. Across Arabic dialects the verbal stem-vowel corresponds in some verbs but not in other verbs. This is the first problem of non-correspondence in dialectal Arabic in this dissertation.

The verbal stem vowel has been studied until now in view of differences of Classical Arabic verbs in individual dialects (Cohen 1970: Maltese; Abboud 1976: Cairene; Holes 1995: Cairene & Bahraini). This dissertation is the first research of verbal stem vowel across the whole spectrum of Arabic dialects.

In order to find the distribution of verbal stem vowels in several dialects, I observed what stem-vowel in a verb agrees with many dialects. A different stem-vowel from the stem-vowel that agrees with many dialects should have shifted by a certain cause. The stem-vowel that agrees with many dialects is considered as the proto stem-vowel in a proceeding hypothesis. The differences could be explained as historical shifts from the proto stem-vowels.

Consequently, common tendencies of stem-vowel in dialects revealed. And a common stem-
vowel in dialects against Classical Arabic gave us an evidence of a proto colloquial Arabic against Classical Arabic. For example, the present stem-vowel of "D-r-b 'to hit' is U in 7 of 8 dialects, while I in Classical Arabic. If the Pidgin or Creole have come into exist in various areas and have pulled back by Classical Arabic and became modern dialects, the present stem-vowel of 'to hit' in most dialects must agrees with Classical Arabic as I. Thus the result support the Arabic Koine proposed by Ferguson (1959).

The phonological non-correspondence in word shortening (chapter 5)

Although the original form of some words or auxiliaries in dialects is known, these do not correspond phonologically and as far the process of the changes have not been explained. In observing the lexicalization, the word 'now' and interrogatives were taken. In Damascene dialect a form "hal-waʔi 'the-time' was shortened as hallaʔ. When some words or morphemes combined and lexicalized, the root and the template are no longer maintained. Original forms change toward syllable structure of CvCCv(C) in word shortening due to lexicalization.

Auxiliaries from verbs were taken in observation of the shortening due to grammaticalization. The forms of verb change drastically in grammaticalization: Damascene raʔiθ 'going' to rah, ha 'will'. It became clear that original verb forms change toward syllable structure of CvC when the target is a clitic, and further Cv when the target is a prefix. These directions of shortening due to lexicalization or grammaticalization are same across Arabic dialects.

Conclusion

In this dissertation the phonologically non-correspondence forms are explained. Since the Arabic lexical items are distinguished mainly by the root consonants and the templates, consonants do not drop or change. As seen in Chapter 4, verbs mostly maintain consonants. However, the stem-vowels can alternate. Thus it is possible to shift the stem-vowel by analogy using it grammatically (indicating transitivity or tense) such as in Cairene, or to neutralize all the stem-vowel such as in Moroccan. In word shortening due to lexicalization or grammaticalization, the root and the templates are rearranged toward the syllable structures. Thus the consonants drop or fuse in shortening. Lexicalized form such as hallaʔ 'now' in Damascene, ʔahhini 'now' in San'ani has 3 consonantal root.