

EPENTHESIS PATTERNS IN ARABIC DIALECTS:  
A GOVERNMENT-BASED APPROACH

by

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A dissertation submitted to the faculty of Languages and Cultures at the  
School of Oriental and African Studies (SOAS), University of London  
in partial fulfillment of the requirements for the degree of

Master of Linguistics

Department of Linguistics  
SOAS, University of London

September 2012

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# Epenthesis Patterns in Arabic Dialects: A Government-based Approach

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MA Linguistics

17<sup>th</sup> of September 2012

10,628 words

## **ACKNOWLEDGEMENTS**

My thanks and deepest gratitude go first to my supervisor Monik Charette who sparked my interest in the study of Phonology and introduced me to much of the theory which underlies this research. Throughout this dissertation, she has not only been the greatest mentor but also the most supportive friend.

I would also like to express my sincere gratitude to the people who have helped me and supported me throughout this dissertation. I am grateful to my parents who has been supportive of me and without whom I would be unable to complete this dissertation. At last but not the least I want to thank my sisters and friends who motivated me and finally God who made all the things possible.

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## **ABSTRACT**

This dissertation discusses patterns of epenthesis in three modern Arabic dialects: Cairene, Palestinian and Moroccan. It provides an account of patterns of vowel~zero alternations in these dialects within the model of Complexity Scales and Licensing (CSL). CSL is a modified version of the standard model of Government Phonology. It is based on the assumption the phonological organization of segments results from the interaction between various levels of syllabic complexity and the strength of nuclei as licensers of phonological structure. Furthermore, this theoretical model is fully compatible with the assumption that the syllable structure of Arabic is, in fact, a sequence of CV syllables.

Epenthesis in Arabic dialects is motivated to rectify undesirable clusters. However, the position of the epenthetic vowel in these clusters is variable across dialects. The variability in the position of the epenthetic vowel and diverse surface syllable structure are attributed to different licensing properties of nuclei. Therefore, cross-dialectal variation consists in dialects choosing how much syllabic complexity their nuclei will license. Syllabic complexity is, in turn, defined by the presence and the type of a governing relation between consonants.

## Introduction and Outline

The phonology of Arabic has extensively been studied within a number of different phonological frameworks. Research on syllable structure and syllabification of different dialects of Arabic has been a major focus of these studies. These studies include work on the standard variety of Arabic and the ancestor of the present-day dialects, Classical Arabic (e.g. McCarthy 1979, 1982). Work has also been carried out on the modern Arabic dialects, such as Palestinian (e.g. Abu-Salim 1982), Egyptian (e.g. Broselow 1976), Iraqi (e.g. Broselow 1992), Lebanese (e.g. Haddad 1984) and San'ani (e.g. Watson 2002), to mention just a few.

Previous theoretical literature on the syllabic typology of Arabic has displayed a number of cross-dialectal generalizations. However, most typological studies on the syllable structure of Arabic dialects have focused primarily on the divergent ways with which each dialect resolves unwanted consonantal clusters by epenthesis. Generally, the function of epenthesis is to repair an input that violates a language's structural requirements (Hall 2011). In the case of Arabic dialects, epenthesis is motivated when certain sequences of consonants are rendered illicit<sup>1</sup>. Interestingly, it has been reported that all dialects resort to epenthesis as a repair mechanism to rectify the undesirable clusters. However, these dialects disagree on the position of the epenthetic vowel in the cluster. This variability in the positioning of epenthesis provided fertile ground for epenthesis site typology.

The typological classification of Arabic dialects according to the position of the epenthetic vowel has been studied within a number of different phonological approaches. In these studies, epenthesis site has been accounted for from different theoretical perspectives. This dissertation discusses epenthesis patterns in Arabic dialects within an approach that

involves the presence of governing relations between consonants and licensing relations between nuclei and onsets. Fundamentally, this new approach is based on the assumption that the phonological organization of segments results from the interaction between the strength of nuclei as licensers of phonological structure, and different levels of syllabic complexity (Cyran 2010).

One of the goals of this dissertation is to demonstrate how the relative complexity of syllabic structure within a formal model can provide an understanding of a given individual linguistic system and the phonological processes that occur within that system. The approach advocated is, in fact, a modified version of the standard model of Government Phonology (Charette 1990, 1991; Harris 1990, 1994, 1997; Kaye 1990a, 1995; Kaye, Lowentamm & Vergnaud (KLV) 1985, 1990). However, it is based on the original idea of Government Licensing as proposed by Charette (1990, 1992), and the concept of 'complexity', which has been discussed before in Government Phonology but mainly in the context of the melodic structure of segments by Harris (1990, 1994). The modifications involve elimination or redefinition of some principles and parameters that defined phonological structure in the standard theory. Furthermore, it will be shown that the adopted modified model is entirely compatible with the assumption that the syllable structure of Arabic is in fact a strict consecution of non-branching onsets and non-branching nuclei, that is, sequences of CVs (Lowenstamm 1996, 1999; Rowicka 1999; Yoshida 1993, 1999).

The variability in epenthesis site and diverse surface syllable structure patterns in Arabic dialects will be shown to stem from the fact that the same type of nuclei may exhibit different licensing properties in different groups of dialects. Dialectal variation in this

model consists in dialects choosing 'arbitrarily' how much syllabic complexity their nuclei will license. However, it should be pointed out that syllabic complexity is defined as a scale that is non-arbitrary and neither reversible nor rankable.

Following Kiparsky's (2003) classification of Arabic dialects, this dissertation will continue to consider three groups of Arabic dialects: CV-dialects, VC-dialects and C-dialects. The analysed data are collected from different sources from the literature and from native speakers of three distant dialects from the three dialect groups. It is worth pointing out that the selection of the dialects primarily depended on the availability of data. The following dialects will be the focus of this dissertation: Cairene, Palestinian and Moroccan. The novel observations and the implications discovered are presented and explained under a government-based approach.

The dissertation is organized as follows. Chapter 1 explores previous studies of epenthesis patterns in Arabic dialects and the different analyses within different phonological approaches, while chapter 2 provides a theoretical background of the modified model which is advocated in this dissertation and the new analysis of epenthesis. Chapter 3 examines examples from one dialect from each of the three groups of Arabic dialects and compares them. Lastly, we draw some conclusions.