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Urban Mediterranean Dialects of Arabic:

Tangier and Tunis

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Urban Mediterranean Dialects of Arabic:

Tangier and Tunis

by

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Abstract

Urban Mediterranean Dialects of Arabic:
Tangier and Tunis

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This thesis compares two urban Mediterranean dialects of Arabic in North Africa: the Arabic dialect of Tangier, Morocco and the Arabic dialect of Tunis, Tunisia. Both of these dialects have traditionally been classified as "pre-Hilalian" varieties, which originated with the first wave of Arab Muslim invasions of North Africa in the late 7th century CE. Tangier and Tunis not only underwent similar historical developments; the Arabic dialects of these two cities also underwent similar developments, in addition to sharing the features used as criteria for the pre-Hilalian dialect grouping. This thesis shows the similarities between the language contact situations in Tangier and Tunis historically in order to explain the parallel development of the morphosyntactic features—specifically the paradigms for the 2nd person category in pronominals as well as perfective, imperfective, and imperative verb inflections—shared by the Arabic dialects of these two cities today.

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Introduction

This thesis compares two urban Mediterranean dialects of Arabic in North Africa: the Arabic dialect of Tangier, Morocco and the Arabic dialect of Tunis, Tunisia. Both of these dialects have traditionally been classified as "pre-Hilalian" varieties, which originated with the first wave of Arab Muslim invasions of North Africa in the late 7th century CE. Tangier and Tunis not only underwent similar historical developments; the Arabic dialects of these two cities also underwent similar developments, in addition to sharing the features used as criteria for the pre-Hilalian dialect grouping. This thesis shows the similarities between the language contact situations in Tangier and Tunis historically in order to explain the parallel development of the morphosyntactic features—specifically the paradigms for the 2nd person category in pronominals as well as perfective, imperfective, and imperative verb inflections—shared by the Arabic dialects of these two cities today. In order to highlight historical and linguistic connections between the contemporary Arabic dialects of Tangier and Tunisia, this study analyzes prior descriptions of these dialects as well as recorded speech data from sociolinguistic interviews, focusing on clues from the morphosyntactic features of speakers' utterances.

The present paper is the culmination of sociolinguistic fieldwork in Tangier, Morocco, conducted as part of a larger effort by the Center for Arabic Dialect Research to build a Comparative Arabic Dialectology Corpus.[1] The corpus project aims to document a wide range of contemporary dialects of Arabic in order to improve our understanding of the linguistic geography of the Arabic-speaking world (Brustad, 2013) (Brustad et al, 2013). The gaps in scholarship on Arabic may result partially from the

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[1] See unpublished manuscript of the proposal of the Comparative Arabic Dialectology Corpus, a research project at the University of Texas at Austin led by Principal Investigator Kristen Brustad.

tendency to treat Arabic as one unified language even though it could be more accurately described as a continuum of related dialects that vary according to geographical and social factors (Watson, 2011). Each Arabic dialect shares features with its neighbors and also bears unique characteristics that distinguish it. These traits play a significant role in marking local and social identity. However, dialects may not only share features with neighboring dialects, but also with the dialects of geographically discontiguous and even geographically distant speech communities. Such similarities suggest that shared features may derive either from a common linguistic inheritance or from independent—but parallel—linguistic developments. For instance, this investigation started with the observation that Arabic dialects in northern Morocco and Arabic dialects in the Tunis area shared features that did not appear in neighboring dialects. Understanding the development of such features will increase scholars' comprehension of the history of Arabic dialects and of Arabic-speaking societies. This is especially important given the demographic changes motivating people to move away from their native dialects and toward regional, national and urban dialects.

This particular study aims to compare Arabic dialects in the North African region, defined as follows:

> 'Arabic in the North African Region' is a linguistic term which includes the Arabic vernaculars of Morocco, Algeria, Tunisia, Libya, Ḥassāniyya Arabic spoken by the Moors of Mauritania and the former Spanish Sahara, and Maltese, as well as the Arabic dialects of western Egypt, dead languages like Andalusian Arabic and the Arabic of Sicily, and the Arabic vernaculars spoken in the Diaspora (Pereira, 2011)

Comparative work exploring theoretical problems such as the historical and contemporary relationships between dialects of Arabic in the North African region is

scarce; most of the work in the region has documented the dialects of particular cities or social groups. The first work to synthesize the features shared by Arabic dialects in North Africa was *The Maghrib Arabic Dialects* (Zawadowski, 1978), originally published in 1962. More recently, scholars have of North African varieties of Arabic have begun to draw comparisons between the features shared by dialects in the linguistic area of the Maghrib, but overviews such as Pereira's (2011) are based on outdated research. In contrast, Madigow's study (2013) takes a closer look at the socio-historical context of the Arabization of North Africa, including the relationship of nascent North African dialects of Arabic to dialects in the Arabian Peninsula and the Levant.

The present investigation addresses the need in the literature for language documentation and description as well as comparative study. This thesis aims first to provide a new analysis of the commonalities between two urban dialects of Arabic on the Mediterranean coast of North Africa, and more generally to address the scarcity and limitations of scholarship comparing such dialects. After examining how traditional dialect categorization has placed the dialects of Tangier and Tunis in relation to other dialects of the region, this study will outline the morphosyntactic features shared by the Arabic dialects of Tangier and Tunis that support the delineation of a common dialect grouping. The question guiding this research and analysis is two-fold: Would a different classification system for such dialects be more adequate? Further, what does a close comparison of two non-contiguous but historically parallel urban dialects reveal about the pre-Hilalian dialect grouping?

DATA AND TEXTS

This investigation relies both on primary sources, including transcriptions of speech data gathered in Tangier, and on secondary sources—existing descriptions of the Tangier and Tunis dialects—to compare relevant features of the dialects of Arabic spoken in present-day Tangier, Morocco and Tunis, Tunisia. The choice of these two dialects in particular is motivated not only by the researcher's familiarity with Tangier and Tunis, but also by the need to investigate the factors that played a role in the development of linguistic features that these two geographically distant dialects share with each other but not necessarily with neighboring dialects.

OVERVIEW OF CHAPTERS

Chapter 1 reviews the literature on Arabic dialects in Tunisia and northern Morocco. It also discusses some of the ideological impediments to the rigorous and objective study of Arabic dialects in North Africa and foregrounds the implications of the language ideologies that show up in the literature. Chapter 2 provides some socio-historical background on North Africa and the Maghreb generally as well as socio-historical information about the language contact situations of northern Morocco and Tunis specifically. Chapter 3 analyzes recent linguistic data on the Arabic dialects spoken in Tangier and Tunis today and evaluates how well the data fits into current models of dialect categorization. The conclusion discusses the results of the data comparison and implications for the field of Arabic dialectology.

Chapter 1: Studies on North African Dialects

RESEARCH NEEDS

Part of the challenge faced by linguists in Arabic dialect studies is the lack of sufficient information about what bearing sociolinguistic factors (age, gender, ethnicity, religious affiliation, occupation, education, places of residence, etc.) have on speech practices in the Maghreb. Up-to-date research on language choice and language change in Moroccan and Tunisian Arabic is limited. Much of the existing scholarship on these dialects has focused on its formal aspects and grammar or elucidated the phonological and morphological properties of dialects in specific urban or rural speech communities.

STUDIES ON ARABIC DIALECTS OF NORTHERN MOROCCO

Moroccan Arabic is a well-documented dialect group compared to Tunisian Arabic; this overview will primarily cover works on Arabic dialects spoken in northern Morocco, especially in Tangier, Tetouan, and Chaouen.

The earliest work on the Arabic dialect of Tangier, Morocco available to this researcher is William Marçais' *Textes arabes de Tanger* (1911). Earlier works on the Tangier dialect include texts by Lüderitz (1899), Meissner (1905), Blanc (1905, 1906), Marchand (1905), and Kampffmeyer (1909), among others (Marçais, 1911, p. vii). Marçais himself offers detailed phonetic transcriptions (both in Arabic script and a special transcription system) of five narrative texts gathered from speakers in Tangier, along with translations of the texts in French. The main topics of these texts are 1) the bread bakery, 2) celebrations of the Pentecost in Jebel Elkebir, 3) children's games including playing with spinning tops, 4) the lives of pupils studying in Qur'anic schools in and around Tangier, and 5) children's songs. This work is useful for its documentation

of the phonology and morphosyntax of the Arabic dialect of Tangier about a century ago; the structure and organization of narrative discourse; and, of course, valuable information for ethnographic study. Marçais' work became "the model for subsequent Arabic dialect studies in Morocco by Francophone scholars" (Heath, 2002, p. 19).

Almost a century later, Moscoso García also used texts as the basis for a study of the dialect of Chaouen (also known as Chefchaouen), a town about 100 km south of Tangier, but Moscoso García's work also provides an extensive analysis of the phonology, verbal morphology, and nominal morphology of this dialect (2003). There is also a lexical study from 1968 of the dialect of Tetouan—located approximately halfway between Tangier and Chaouen—which is essentially a dictionary with etymological information for some, but not all, of the entries ('Abd al-'Āl, 1968).

In addition to these works on the Arabic dialects of specific cities in northern Morocco, some studies of Moroccan Arabic generally also contribute useful information about northern Moroccan dialects specifically. Colin's linguistic survey of Moroccan Arabic dialects in the Encyclopedia of Islam (second edition) entry on Morocco, as well as the EI entry on Tangier (Mansour, 2015), provides some socio-historical context for the development of Moroccan Arabic dialects. The main caveat to relying on these sources is that they incorporate subjective value judgments about the different groups of people who have contributed the linguistic ingredients of Moroccan Arabic: there is a strong current of "purity and contamination" in Colin's entry, for example.

The *Encyclopedia of Arabic Language and Linguistics (EALL)* also includes useful overviews of the language situation in Morocco (Aguadé, 2006) and a description of the Moroccan Arabic koiné (Caubet, 2006), which, as we will see later, differs

substantively from old urban dialects spoken in northern Morocco. Heath's (2002) work on the Jewish and Muslim dialects of Moroccan Arabic is invaluable for understanding the historical and contemporary relationships among different dialects and religiolects[2] in Morocco. Sayahi's (2014) recent book situates Moroccan dialects of Arabic in the context of language contact, reevaluating contact situations in Morocco in light of diglossia (and not only contact between speakers of Arabic and speakers of Berber, French, Spanish, etc.).

STUDIES ON ARABIC DIALECTS OF TUNIS & ENVIRONS

Hans-Rudolf Singer's volume on the Arabic of Tunis (1984) is well researched and thorough but already 30 years old . Works on other varieties such as the Judeo-Arabic of Tunis (Cohen, 1964), as well as the dialects of Sousse (Talmoudi, 1981), Rades (Jabeur, 1987), and Korba (Walters, 1989), are useful descriptions of contemporary Arabic dialects in various speech communities of North Africa. Further, scholars have studied variation in Tunisian Arabic in terms of phonology (e.g. monophthongization of diphthongs vowels), for example. However, patterns of variation have yet to be determined. Thiry recommended examining the impact of the variables of age, sex, education, and occupation on speakers' preference for the "synthetic" (construct) or "analytic" genitive in Tunisian Arabic, for instance, indicating a need to expand the sociolinguistic study thereof (1990). Brustad's analysis of the use of so-called synthetic and analytic genitive as possessive constructions in spoken Arabic demonstrates that

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[2] Here I use Hary's term *religiolect* to refer to the varieties of Judeo-Arabic spoken in Morocco historically. A religiolect is "a language variety with its own history and development, which is used by a religious community. A Jewish religiolect, then, is a spoken and/or written variety employed by the Jewish population of a specific area, although it may later extend to other communities and areas as well" (Hary, 2011, p. 45).

pragmatics—especially individuation, specification, and contrast—as well as sociolinguistic motivations, play a role in syntactic variation (2000, pp. 76–88). A similar analysis of the roles of pragmatic functions and sociolinguistic motivations for the variable use of the construct and genitive exponents in Tunisian Arabic would further our understanding of sociolinguistic variation in this dialect and possibly other North African dialects of Arabic as well.

Recent studies on Tunisian Arabic inform us of the outcomes of dialect contact within Tunisia as well as pragmatics and discourse organization in this dialect area. In terms of dialect contact phenomena, Gibson has improved our understanding gender marking (1996), dialect contact (1998), and dialect leveling in Tunisian Arabic (2002). More recently, others have analyzed terms of address (Maalej, 2010) and discourse markers in Tunisian Arabic (Adams, 2012); and Tunisian and Egyptian speech accommodation and dialect leveling in media Arabic (Faust, 2012), for example. The majority of the other sociolinguistic investigations of Tunisian Arabic have examined bilingualism, multilingualism, and code switching (Bach Baoueb, 2009; Belazi, 1992; Post, 2010). Bach Baoueb remarked in a 2009 case study on code switching in the Tunisian business sector that scholarship on code switching between Arabic and French in various bilingual speech communities is hardly lacking, but "few studies have dealt with the Tunisian context" (2009, p. 425). Thus, even in the popular subfield of code switching, much remains to be examined vis-à-vis Tunisia. Since code switching is one of many mechanisms for lexical and structural borrowing in language contact situations, patterns of switching between Tunisian Arabic and Romance languages such as French and Italian may reveal insights about similar situations of language maintenance.

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DIALECT CLASSIFICATION SCHEMES

As mentioned in the introduction, one of the aims of Arabic dialectology today is to compare dialects across the Arabic-speaking world. One way that linguists have accomlished this objective is by proposing classification schema that group dialects based on shared features. For instance, one of the prevailing dialect categorization schemes in the study of Arabic in the Maghrib is the pre-/non-Hilalian dichotomy. In this model, *pre-Hilalian* (also called *non-Hilalian*) dialects formed partially due to a superstratum influence from the dialect of Arab Muslims who invaded what is now Tunisia and Algeria in the mid-7th century CE, though Morocco avoided conquest by this group's successors until the end of the 7th century (Heath, 2002, p. 2). In contrast, the varieties classified under this schematic as what Colin called *Hilalian* dialects of Arabic derive partially from a superstratum influence from the dialects of the members of the Banu Hilal Bedouin (nomadic) tribe. According to the historian Ibn Khaldoun, the Banu Hilal settled in the Maghreb many generations after the first wave of Arab Muslim invaders, in the 11th century (Heath, 2002, p. 8).

This classification scheme is based on the premise of a fundamental link between the language varieties spoken by the groups that conquered and Islamicized North Africa and the dialects found in various speech communities today. Mining historical texts—with all their lacunae—for clues is only one part of the process of categorizing dialects based on shared historical factors. However, the socio-historical context provides a framework within which to work backward, using the linguistic features of present-day dialects to reconstruct a prior language situation or even argue that a specific group left a linguistic imprint in a particular place at a particular time. Indeed, scholars such as Magidow (2013) have argued for a socio-historical approach to the reconstruction of

Arabic dialect diversity. As Pereira points out in a recent overview of Arabic in the North Africa region, the fact that the overview itself is "based on traditional dialect categorization and the published literature" poses a problem since "some of the sources are dated, and immense zones remain unstudied, particularly in Algeria and Libya" (2011, p. 966). Moreover:

> The distinction between pre-Hilālī and Bedouin dialects is, however, based on a historical demarcation that has evolved significantly over time, with population movement and inter-mingling often giving rise to hybrid dialects. The impact of migration is particularly evident in the development of Arabic urban vernaculars (Pereira 2007). In some cases, it is no longer possible to categorize a dialect as Bedouin or sedentary. With the progressive settlement of former Bedouin groups, a process of koineization has occurred, leading to the emergence of mixed, urbanized, bedouinized vernaculars (Miller 2007). (2011, p. 955)

While it may still be possible to recognize the pre-Hilalian or Hilalian elements in Arabic dialects today, historical and social developments besides the prevailing view of two main waves of Arab migration must be given more thorough consideration. Magidow re-evaluates not only the origins, but also the timing and the impact of the groups of Arabic speakers who migrated to North Africa in the 11th century CE (2013, pp. 241–256). On the basis of this analysis, Magidow concludes: "the groups of Arabic speakers that moved into North Africa in the 5th/11th century probably represented a mix of dialects … it is quite unclear what exactly the origins of their dialects were, in contrast to the traditional narrative where the answer is overtly simple" (2013, p. 241). Further, in many cases, historical documents on towns and cities with Arabic dialects that are typically classified as pre-Hilalian do not always match the chronology of the narrative of prototypical pre-Hilalian dialect genesis (ibid, 2013, p. 242). Magidow concludes that overall, the impact of Arabization is probably exaggerated (2013, pp. 243–246).

More than just being convenient, sources that explain away variation are also ideologically motivated. Even in 20th-century Arabic dialectology, there was a strong current of thought that posited a single point of origin for Arabic, likened to classical Arabic or literary Arabic, whose speakers lived in the Arabian Peninsula. However, such a premise would assume that speakers of Arabic were concentrated in the Peninsula, that they all spoke a uniform or similar form of Arabic, and that they were not in contact with speakers of other languages. These assumptions go against archeological and textual evidence that speakers of Arabic not only lived outside the Arabian Peninsula but were also in contact with speakers of other languages, especially Semitic languages, prior to the arrival of Islam on the scene (Phillip Stokes, p.c.). Therefore, the assumption of a uniform Arabic explains away variation and lends itself to the creation and maintenance of a standard language ideology that hearkens back to a golden of age of perfect language. Further, Brustad argues that the culture of standard language ideology vis-à-vis Arabic derives part of its legitimacy from non-elite speakers of Arabic who nonetheless have a stake in the maintenance of performance registers like Classical or Modern Standard Arabic (2011). In Arabic dialectology, Classical and Modern Standard Arabic often serve as a point of reference for comparison: for example, dialect features are often described in terms of what "old" (i.e. classical) features they retain or deviate from. In contrast to studies that compare Arabic dialects with classical, literary, or standard Arabic features, the analysis in this thesis takes *dialect diversity*—now and at any point in the past—as its starting point.

Further, and more importantly for the purpose of comparative dialect studies, the data that *is* available "must also be seen in the context of widespread migration and

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urbanization in North African countries in the second half of the 20th century, linked to the growth of capital cities and contributing to processes of koineization and standardization of urban vernaculars," following Miller (Pereira, 2011, p. 966). Taking the traditional dialect classification—and the linguistic features it uses as criteria for grouping dialects together—as a starting point, it is possible to evaluate the relevance of these historical relationships in the face of contemporary data. In other words, the question we need to answer is: can we still classify North African dialects of Arabic as pre-Hilalian or Hilalian, and is it useful to do so?

This investigation will contribute recent speech data from Tangier and compare it with data on the Arabic dialect of Tunis. Though these two dialects are discontiguous geographically, they are presumed to have similar ("pre-Hilalian") origins. Further, due to geographical location, the speech communities of Tunis and Tangier also may have similar contact patterns. This study examines these linguistic origins, examines the contact patterns in both locations, and uses that information to understand how the Arabic dialects of Tangier and Tunis are similar today. Taking cues from Hachimi's work, this study will examine clues from morphosyntax, namely the simplification of inflectional verbal morphological paradigms that do not mark gender for second-person addressees in perfective, imperfective, and imperative verb inflections.

Chapter 2: Socio-historical background and language contact situations

This chapter reviews the shared socio-historical influences that affected the populations of both Tangier and Tunis, starting far before the Islamic conquests of the 7th century CE. A full view of these shared influences, especially human migration and interaction, will better enable us to understand the language contact situations that shaped the Arabic dialects of these two cities into what they are today.

GEOGRAPHY AND SHARED INFLUENCES

This investigation recognizes and highlights the connections facilitated by geography, especially the availability of the Mediterranean Sea as a medium of transport running parallel to land routes used for trade and conquest. Part of the reason for choosing the Arabic dialects of Tangier and Tunis as case studies is the fact that both cities are located on the Mediterranean coast along the ancient Phoenician trade route. Partly on the basis of geographical factors and partly on the basis of linguistic features, this study adopts the distinction proposed by Gibson, who contrasted the *coastal dialects* of Tunisia with the *dialects of the interior* (Michael Gibson, 1996, p. 98). This distinction also works for the Tangier case study since Tangier, like Tunis, is located on the Mediterranean coast, in this case at the northernmost point in Morocco.

Further, the populations of both cities have borne the brunt of conquests by invaders from Phoenicia in the eastern Mediterranean as well as Muslims from the Arabian Peninsula and Muslim outposts. Moreover, the indigenous peoples of both cities share common Berber ancestry and speak genetically related languages that constitute comparable linguistic substrates in the subsequent language contact situations.

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THE INDIGENOUS PEOPLES OF NORTH AFRICA

Berbers have inhabited North Africa since before the Phoenician conquest. The term "Berber" (from Greek) denotes a whole group of people native to North Africa. Languages spoken by Berbers are considered dialects of a larger Berber language family, though such linguistic taxonomies are problematic because terms like *language* and *dialect* are not "actual entities that are clearly distinguishable" (Haugen, 1966, p. 922). Berbers call themselves the Imazighen, (sometimes translated as, "the free people"), and they refer to the Berber language family as Tamazight. The Imazighen have been subjugated repeatedly, fomenting resistance in many forms over the centuries of conquest that the Imazighen have endured. Berber languages are widely spoken in Morocco today, though estimates of the number of speakers vary. Below we will discuss the role of Tamazight languages in forming Moroccan dialects of Arabic.

There are still people living in Tunisia today who speak the Shilha (Chilha) dialect, though they are few in number. Most Imazighen in Tunisia converted to Islam in the wake of the Arab conquest and shifted to Arabic over time. Consequently, most Tunisians today are descended partly from the Imazighen, but their native language is Arabic, and most do not speak Shilha at all. Some Tamazight words are still in use by the general population, but because the Imazighen have assimilated into Arabo-Islamic civilization, Tamazight language and ethnicity have been largely subsumed in Tunisia.

LANGUAGE CONTACT IN NORTHERN MOROCCO & TANGIER

The contact situations that have played out in northern Morocco have resulted in large part from human migration to the area by land and by sea. The Mediterranean Sea gave seafaring groups like the Phoenicians and the Carthaginians access to Morocco long

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before the Roman Empire established the Province of Africa. Scholarship on language contact in Morocco tends to take only a cursory glance (Mansour, 2015; Sayahi, 2014, p. 16) at the Phoenician settlements, including Larache, Asilah, and Tangier, established almost three millennia ago on the Atlantic and Mediterranean coasts of Morocco (Oliver & Fagan, 1975, p. 9). Similarly, Carthaginian enterprises in northern Morocco at the beginning of the 5th century BCE receive little mention in linguistic descriptions of Arabic in the North African region (Sayahi, 2014, pp. 16–17). In uncovering the sedimentary layers of Morocco's linguistic topography, the linguistic imprint of Mediterranean traders and long-standing commercial outposts may only show up in toponymy. Nevertheless, the settlements and social networks that resulted from these waves of migration along the southern Mediterranean corridor laid the groundwork for the emergence of speech communities subsequently.

Further, the restricted lexical imprint of Phoenician or Punic on the languages of Morocco today should not prevent historical linguists from acknowledging prior language contact situations whose short-term outcomes surely looked very different than they do today. The long Phoenician presence in the Western Mediterranean, as well as the documentation of Berber words etymologically related to Punic (Vycichl, 1952). Speakers of a Semitic language other than Arabic, i.e. Phoenician or Punic, may have provided the "deviant" morphological and syntactical paradigms that show up in northern Moroccan Arabic.

Substratum influences

Though the vicissitudes of prehistory and the ancient Mediterranean do not figure largely in linguistic descriptions of the language situation in Morocco, scholars do agree on one premise. Indigenous Berbers and their Afroasiatic languages, which Sayahi terms "autochthonous," are a constant factor through invasions by Phoenicians, Carthaginians, and Romans in the mid-second century BC (2014, p. 16). The constancy of the Berber presence from prehistory has provided fodder for the argument that any substratum influence on Moroccan Arabic must *a priori* be from a Berber language. The evidence for this claim is plentiful, and Chtatou (1997) argues that Arabic in northern Morocco shows significant influence from Tarifit Berber, especially in phonology and morphology (Sayahi, 2014, p. 27). Examples include:

- **Phonology:**
    - spirantization of the occlusives *k*, *t*, and *d* to the fricatives /x ~ χ/ or *tʃ*, *θ*, and *ð*; labialization of *k* and *g*; affrication of *t* > *tˤ* (Aguadé, 2006, p. 293)
    - Berber-type syllable structure; syllable-initial consonant clusters with shortened/elided vowels; loss of short vowels in open syllables (Sayahi, 2014, p. 27)
- **Derivational nominal morphology**:
    - the circumfix *t< >t* around an Arabic root (Sayahi 27);
    - retention of the Berber plural pattern *a< >ān* (Colin, 2015)
- **Syntax:**
    - words for flora, fauna, and agricultural tools have often retained the Berber prefix *a-*
    - plural treatment of singulars applied to liquids (e.g. water) in the highland dialects;
    - retention of the Berber possessive particle *-in* in construct genitive (Colin, 2015)

Nonetheless, not everyone agrees that Berber languages constitute the main substratum influence on Moroccan Arabic (Aguadé, 2006, p. 293). In the first place,

sifting out a Berber substratum from an Arabic superstratum poses the same difficulty encountered in other cases of typologically related languages in contact. Colin, for instance, suggests that the shared phonological and morphological features that linguists ascribe to substratum effects may actually have resulted from the fact that "Arabic, a Semitic language, and Berber, a proto-Semitic language, are not sufficiently differentiated." Linguists today understand the relationship between Berber and Arabic differently than Colin did: within the Afro-Asiatic phylum, Berber languages group together rather than with the Semitic group into which Arabic fits, so linguists today would reject the idea that Berber languages are proto-Semitic. Nonetheless, broadly speaking, Berber and Arabic do have some shared inheritance, which obfuscates our view of how contact between speakers of the two language families plays out in terms of language change.

The historical presence of speakers of Latin(ate) languages in Morocco further undermines the idea that the only substratum effects worth considering with regard to Moroccan Arabic come from Berber languages. Prior to the arrival of Arabs in Morocco in the late 7th and early 8th centuries CE, the populations of major urban centers of northern Morocco, especially Tangier, Ceuta, Sala, and Volubilis, included speakers of an unspecified Romance language (Aguadé, 2006, p. 287). Heath also mentions the likelihood that the Arab Muslim invaders who raided Morocco in the late 7th century CE would have encountered cities "on or near the Mediterranean coast that were still populated by Romans (including Romanized Berbers) who spoke a form of North African Late Latin" (2002, p. 2). There is no solid evidence of North African Late Latin, but we can draw an analogy with the northern Mediterranean, where the Classical Latin used in

inscriptions does not reflect the development of vernaculars in Italy and beyond. Admittedly, the incorporation of loanwords from contemporary Romance languages, especially French and Spanish, can confound efforts to identify elements of a Latinate substrate, but recall that here we are exploring the language contact situation in northern Morocco over a millennium ago and the short-term outcomes of contact between speakers of Latinate languages and Arab invaders. There may be scarce *extant* evidence of a Latinate substrate in Moroccan Arabic today, but the point to take away here is that this community has a long history of contact with speakers of Latin, Latinate, and Romance languages.

Further, the linguistic developments resulting from contact situation in northern Morocco would have depended on social dynamics such as the Arabs' choice of pre-existing settlements as opposed to building new cities. The case of northern Morocco differed from the case of Kairouan—a *new* town built by the Arab Muslim invaders in present-day Tunisia—because in Morocco the invaders primarily occupied existing Roman garrisons rather than building new towns (Heath, 2002, p. 3). Heath posits that the conditions in post-conquest Morocco "presented better conditions for blending of Latin and Arab culture and language since the Arabs occupied pre-existing garrison towns rather than immediately building new Arab cities" (2002, p. 3). Prima facie, this proposal seems plausible, though it seems equally likely that settling in pre-existing garrisons would have created a hostile environment for Arab invaders. After all, Arab soldiers who raided Tangier in 681 took Roman women by force as slaves, concubines, and euphemistically-termed "wives" (Lugan, 1992, p. 36). Nonetheless, intermarriage between Arab settlers and Latin-speaking women in Tangier, Volubilis, and perhaps a

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few other garrisons would have created a contact situation where these women "could have played a major role in simplifying and generally (re-)shaping Moroccan Arabic" (4). If Heath's hypothesis is correct and these Latin-speaking concubines/ wives influenced the development of the first iteration of Moroccan Arabic by learning it imperfectly, what did they simplify and in what ways? The literature on Moroccan Arabic does not answer this question in any satisfactory way. In the same vein, based on the scant evidence—historical or linguistic—at our disposal, any hypotheses about Latinate substratum-influenced processes of simplification remain unfalsifiable.

Other hypotheses about the Latin substratum include the idea that Latin cultural loanwords could have been borrowed into Berber and then Moroccan Arabic. Latin loanwords for implements, flora, and fauna show up in Berber as well as Moroccan Arabic. However, Colin argued that especially in the far north of Morocco, a number of nominal plurals ending in -əʃ (or a variant thereof) are incontrovertibly of Latinate/ Romance origin, preserved in a form that precludes their having passed through Berber before being borrowed into Moroccan Arabic (1926, pp. 65–68). Alternatively, given the clear documentation of migration between Morocco and the Iberian Peninsula, especially in the 10th century CE, Latinate lexicon might have come in with migrants from the south of Spain (Heath, 2002, p. 4). It is even possible to admit the potential existence of multiple strata of Latin borrowings, though more evidence is needed.

Let us now return to the social factors in the language contact situation precipitated by the Arab raids on northern Moroccan settlements in the late 7th century CE. Without going so far as to classify first-generation Moroccan Arabic as a "true" creole, Heath proposes that the Arabic spoken in Morocco in the years after the Islamic

conquest "probably underwent extensive phonological restructuring and grammatical simplification in one or two generations, as a Latin- and Berber-speaking population shifted rapidly to Arabic" (2002, p. 4). In other words, Heath suggests that Moroccan Arabic is the outcome of language shift over a generation or two. While this is consistent with Heath's line of argumentation, the process of shift probably took many generations in a staggered manner. There are several other problems with Heath's proposition above. Even though Heath acknowledges dialectal variety within the Arabian Peninsula, the Heath describes Arabic dialect groups in Morocco in terms of whether they preserve "old" phonological and morphosyntactic features. What about the variety in "old" dialects of Arabic? Here we see a glimpse of the premise that "old" Arabic is equivalent to classical or literary Arabic, which goes against the more probable premise that the same dialect variety we see today probably existed at any given point in the time in the past as well. Moreover, it is unclear whether the first iteration of Moroccan Arabic went through a pidgin phase and/or a creole phase in which restructuring or simplification would apply. More likely, the shift to Arabic was slow, far less extreme than shift over a generation or two. Berber resistance to Arab Muslim conquest lasted many decades after the initial raids across North Africa (Savage, 1997),[3] and this resistance alone casts doubt on the claim that the shift to Arabic was quick and painless. Nonetheless, the indigenous women enslaved by and/or married to Arab soldiers who settled in northern Moroccan garrisons probably did learn some of the Arabic they spoke, and their children likely acquired Arabic also. The shift to Arabic may have been restricted to that particular community for some time. The shift to Arabic under duress by this particular group of

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[3] The Kharijite revolt of 740 CE—a full six decades after the initial raid on Tangier—is one of many examples of the indigenous response to the Arab presence in Morocco.

women in garrisons such as Tangier may or may not have caused grammatical (morphosyntactic) restructuring that differentiates northern Moroccan varieties of Arabic from even the surrounding dialects. We will evaluate this proposal later.

However, descriptions of the subsequent isolation and development of Moroccan Arabic rest on problematic premises. For instance, Heath, quoting Mikesell (1961), claims that the "chasm" between the townspeople and nearby Berber tribes restricted interaction between the two groups for a whole century and a half (2002, p. 3), which is spurious reasoning. A similar presupposition is necessary for arguing that Moroccan Arabic did not spread from the cities in which it originated until the 12th century CE (Heath 4). As unsatisfying as these claims may be, they could explain the incubation of an emergent Moroccan Arabic confined to the urban centers in which it originated.

Pre-Hilalian versus Hilalian dialects of Arabic in Morocco

Having covered the proposed main elements of the Moroccan Arabic substrata, we will move on to the typological concerns which, along with various aspects of contact with speakers of Arabic, shaped different dialects spoken within Morocco. Arabists tend to group Arabic dialects of North Africa into two types (Aguadé, 2006, pp. 287–288; Heath, 2002, pp. 1–2). The **sedentary** type supposedly bears a genetic relation to dialects of Arabic spoken by invaders from the Arabian Peninsula who led sedentary lifestyles back home; the presence of the phoneme [q] is the main linguistic criterion for classifying dialects as sedentary-type varieties. In contrast, the **Bedouin** type purportedly bears a genetic relation to the dialects spoken by formerly Bedouin (nomadic) settlers and is evidenced by the phoneme [g], as opposed to the sedentary [q]. In scholarship on Moroccan Arabic, the sedentary type was carried over to North Africa in the Islamic

conquests of the 7th century CE, and contact with speakers of dialects of this type resulted in the formation of Moroccan varieties that bear the same traits. Contact with—among others—the Banu Hilal invaders, who spoke a Bedouin-type dialect, in the 12th century CE shaped Moroccan Arabic dialects that bear "Hilalian" traits. The sedentary-type dialects are thus classified as **pre-Hilalian** or **non-Hilalian**. (See appendix chart of features.)

However, the fact that certain dialect categories were associated originally with groups living either sedentary or nomadic lifestyles did not necessarily reproduce this relationship in Morocco. According to Heath, there is "no evidence for a sedentary-beduin dialectal bifurcation (e.g. cities versus outlying villages) in Morocco in the formative centuries" (2002, p. 4). While it is unlikely that a uniform pre-Hilalian Arabic was spoken throughout the western Mediterranean,

> It is possible … to recognize a modest degree of dialect mixing due to these contacts [with vernaculars of coastal western Algeria] while still insisting that the core of northern (pre-Hilalian) MA was home-grown, given the geographical isolation of the early Arab garrisons in Tangiers and Volubilis and the relatively late date of Arab military control of the Taza corridor linking them to Algeria. (Heath, 2002, p. 5)

Following this line of argumentation, sedentary-type, pre-/ non-Hilalian Moroccan Arabic dialects that arose in contact with the first wave of Arab Muslim invaders starting in the late 7th century CE bear certain features and constitute a clearly delineated isogloss on various levels, including phonology, morphology, and syntax (see appendix). Based on these shared features, the dialects of Tangier, Tetouan, and the towns on the Atlantic coast just south of Tangier together along with the Jebli (highland) dialects of Chaouen, Taounate, and Branes group together into a **northern-type** category

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(Heath, 2002, p. 19). Old Jewish religiolects[4] spoken in Morocco historically also fall into this category (Aguadé, 2006, p. 288). The argument in favor of the existence of a northern Moroccan dialect area is therefore strong and corroborated by recent linguistic data. Further, the northern-type Arabic dialects in Morocco show traits that do *not* appear in other dialects of Arabic in Morocco, allowing historical linguists and dialectologists to delineate clear counter-isoglosses corresponding to Hilalian dialects including the **central type** and the **Sarahan** type (Heath, 2002). Since these features are preserved until the present day, these criteria provide an excellent diagnostic for delineating the northern Morocco dialect area, even as it shifts due to dialect contact resulting from migration to urban areas.

Outcomes of language contact in northern Morocco

On that note, the morphosyntactic features of the northern-type dialects, particularly the simplification of verbal morphology, might eventually lead speakers in contact with northern-type dialects to simplify verbal morphology in central Moroccan dialects as well. This remains to be seen, but dialect contact could result in simplification (loss of certain morphological categories), leveling, or both. In this case:

> The 2FeSg circumfix *t-…-i* in the sample "mainstream" paradigm is merged in some dialects (Tangier, Tetouan, Chaouen, Taouanate, Branes) with 2MaSg *t-…* by omitting the suffix. Since the imperative is the imperfective minus the 2nd person prefix *t-*, the loss of *–i* in the imperfective entails its loss in the imperative as well. The result is a merger of 2FeSg and 2SgMa into a simple 2Sg category. This merger also

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[4] Here I use Hary's term *religiolect* to refer to the varieties of Judeo-Arabic spoken in Morocco historically. A religiolect is "a language variety with its own history and development, which is used by a religious community. A Jewish religiolect, then, is a spoken and/or written variety employed by the Jewish population of a specific area, although it may later extend to other communities and areas as well" (Hary, 2011, p. 45).

occurs in many of the same dialects in the independent pronoun and in the perfective subject suffix. (Heath 215)

On this basis, we can either predict that speakers of northern-type dialects in Morocco will level these features of their speech when in contact with speakers of central-type or Saharan-type dialects, or conversely, that "prestigious" dialects of central Morocco may eventually simplify verbal morphology, particularly gender distinctions, under influence from the northern type. In northern Morocco, multifarious influences, including the steady influx of loanwords from French and Spanish, have shaped various dialects of Moroccan Arabic. Still, we can examine clues from verbal morphology to see the effects of contact and predict what effects it may yet have.

LANGUAGE CONTACT IN TUNIS & ENVIRONS

In order to contextualize the issues addressed later on, we will review the various influences that constitute the sedimentary layers of Tunisia's linguistic topography. Tunisia's geographical location is one of the primary factors that has shaped its linguistic landscape and catalyzed its population's encounters with other Mediterranean peoples. Tunisia is at the northern tip of the African continent, with Algeria on the western side and Libya to the southeast. As Kenneth Perkins wrote in his introduction to *A History of Modern Tunisia:*

> The southern curve of the African coastline at the Cap Bon peninsula has given Tunisia two windows on the Mediterranean Sea, one opening towards Europe, the other towards the Middle East. Since antiquity, this situation made it easy for peoples from both regions – Phoenicians, Romans, Arabs, Turks, Spaniards, Italians, Maltese, British, and French – to enter, and often take control of, the region. (2004, p. 5)

The inhabitants of the area included in present-day Tunisia have been subjected to conquest by peoples from throughout the Mediterranean basin for three millennia. Tunisia's position at the center of the Mediterranean has made it an attractive destination.

Phoenicians and Carthaginians

More than three thousand years ago, a group of **Phoenicians** from the eastern Mediterranean began seafaring and established a number of settlements, including Carthage, which is near the present-day capital of Tunis. The Phoenicians who settled at Carthage displaced the area's Berber inhabitants, and over several centuries they developed what became known as the **Carthaginian or Punic civilization**. The Phoenician-Carthaginian language, from the Semitic family, was adopted as an official language in the Numidian kingdoms and continued to be used for hundreds of years (Baccouche, 2006, pp. 571–572). Some evidence of the Carthaginian presence remains, but over time, the physical structures of Carthage have been dismantled and used to build other cities. Nonetheless, the memory of figures such as Hamilcar, Hannibal, and Queen Dido persists in present-day Tunisia, where famous Carthaginians still appear on coins and stamps as well as in place-names. To this day, collective memory retains Carthaginian-Punic elements embedded into Tunisian toponymy and anthroponymy, which Tunisians use as a point of reference and which maps onto the landscape they navigate daily.

Romans

In the mid-second century BCE, **Roman** troops defeated the Carthaginians in the third Punic War and established the Roman province of Africa. The marks left by the Roman occupation are much more visible today than are the monuments attesting to the

Phoenician presence at Carthage. We can still see Roman provincial infrastructure, including well-preserved roads, aqueducts, baths, and amphitheaters at sites like El Djem (formerly Thysdrus). Nevertheless, the Roman Empire does not figure as largely in Tunisian national symbolism as do elements of Carthaginian heritage, though the era of Roman occupation is the first era in which we have sources attesting to multilingualism in the area. During this period, "three languages were used side by side: Berber, Phoenician, and Latin," the latter of which was the official language (Belazi, 1992, p. 63). Romans took great pains to suppress Carthaginian culture, but multilingualism persisted nonetheless. It is unlikely that the situation would differ much in Tunisia or Morocco, where the processes of Islamicization and Arabization depended solely on the efforts of a much smaller cadre of Arabs. In any case, there is a high likelihood that language contact during this period cultivated a multilingual situation in the Roman province of Africa, and thus we have strong reason to believe that the history of Tunisia's multilingual situation stretches back at least two thousand years.

Visigoths, Vandals, Byzantines

In the fifth century CE, the Roman province of Africa fell to the **Visigoths** and then the **Vandals**, and the weakening of Roman influence allowed autonomous Berber polities to emerge. These independent Berber polities maintained control of their territories even after the **Byzantine (Eastern Roman) Empire**, which saw itself as the successor to Rome, re-captured the former Province of Africa and took control of the coastal settlements under the reign of Justinian in the 6th century CE. The Byzantine presence infused multilingual Tunisia with elements of Greek, which along with Latin

and Phoenician-Carthaginian, forms part of the linguistic substrate of Tunisian Arabic (Baccouche, 2006, p. 572).

Arab Muslims

These historical developments lay the groundwork for the entrance of **Arab Muslims** onto the North African scene beginning in the mid-7th century CE. The impacts of Islamicization and Arabization on Tunisia are in a different order of magnitude than the impacts of Roman and Byzantine rule in northern Africa. As Perkins argues, "of all the rich legacies bestowed on Tunisia, that of the Arabs has unquestioningly proven the most profound and enduring. The language, faith, and culture that the Arabs brought to the Maghrib … almost fourteen centuries ago have forged the innermost identity of the region's people ever since" (2004, p. 5). Any claim based on the premise that ever since a specific point in time, a certain situation has been a certain way, fails to acknowledge the staggered and messy process of any major historical or linguistic change, which takes place gradually. While we should question the "unquestioningly" profound and enduring influence of the Arab Muslim conquerors, we should also recognize the power that this kind of rhetoric has had in establishing Muslim Arab dominance in Tunisia and perpetuating it until this day.

We should also acknowledge the reality that the Muslims who came from the Arabian Peninsula to establish control over vast swathes of North Africa faced resistance from groups of people who led a different way of life and spoke different languages. Berber resistance to Arab conquest was a major obstacle to establishing and maintaining Muslim control over the Maghreb (Savage, 1997). This reality is important even for linguistic analysis, since it confirms that Arabization did not take place overnight or even

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in a single generation, due in large part to protracted resistance from the people being subjugated. The strongholds of this protracted resistance were in mountainous regions rather than the newly founded cities or Islamic capitals, which might give us a good way discern archaic linguistic features by comparing the old cities to the mountain communities (Brustad, p.c.). The **Umayyad caliphate**, the dominant Muslim power from 661 to 750 CE, succeeded in converting some Berbers to Islam but failed to gain political control of North Africa. Its successor, the **Abbasid caliphate**, had only nominal power in the area subsequently known as Ifriqiya (the Arabic version of "Africa"). In 779 CE, influential missionaries founded the **Rustamid Imamate**, an independent Shiite political entity that took advantage of the relative weakness of Abbasid control on the periphery of the Islamic empire to establish control (Savage, 1997, p. 38). At its greatest extent, the Rustamid Imamate controlled what is now Tunisia, as well as parts of present-day Morocco, Algeria, and Libya. It remained in power for a little over a century, until the **Fatimid** conquests in 909. The most important legacy of the Rustamid period is the network of alliances between missionaries and traders, Christians, and Berbers—and the fact that members of all of the latter three groups converted to Islam themselves (Savage, 1997). These alliances laid the groundwork for the rise of Islam in North Africa, which people have mythologized and which still figures largely in ideas of ethnicity and nationalism in Tunisia.

Scholarly descriptions of the linguistic background of Tunisian speech communities are not immune to the effects of language ideology. For example, according to Belazi, Arabic as the language of the Qur'an and of Islamic administration was powerful enough to "supplant completely the indigenous dialects of Tunisia, in particular

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Berber" (1992, p. 65). Further, Belazi argues that the linguistic situation in Tunisia remained stable even throughout the four centuries of Ottoman rule (16th-19th centuries CE), as classical Arabic remained the official language of administration and education even under Ottoman rule, which lasted until 1881 (1992, p. 66). Belazi also asserts that during the Arab and Ottoman periods, we see the development of an Arabic dialect referred to as Tunisian Arabic, used mainly in the home (1992, pp. 66–67). Here Belazi pinpoints the emergence of a diglossic situation in Tunisia. We should be wary of sweeping generalizations such as Belazi's, and though we cannot accept such assertions at face value, we must take them seriously because they represent the discourse legitimating Arabo-Islamic dominance in North Africa, which we will expand upon later.

French Protectorate

Though the Arabo-Islamic influence on Tunisia has endured, shaping Tunisia's cultural and linguistic landscape in significant ways, the period of the **French Protectorate** in Tunisia from 1881 to 1956 altered this landscape in important ways, too. Even prior to the establishment of the protectorate, people from what are now the countries of Spain, Genoa, and Malta all left imprints on Tunisia, and at one point, the urban population of Tunis comprised various expatriate communities. For their part, the French had invaded and occupied Algeria in 1830, establishing a military presence in North Africa. The French coerced the Bey—the governor of the Ottoman province—into signing the Treaty of Bardo in May 1881, establishing the French Protectorate in Tunisia and handing control over to France (Perkins, 2004, p. 10). The French Protectorate set up a "modern" infrastructure as well as a system of administration and French-language education. However, the relationship between France and Tunisia was essentially a

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relationship between a colonial power and a colonized people. Eventually Tunisians began to think of themselves as such, and they conceived of a Tunisian nationalism, which fueled their struggle against French dominance. Tunisia achieved independence from France in 1956, but the country is still going through post-colonial recovery today. The January 14 Revolution in 2011 was yet another assertion of Tunisian identity, however defined, as a way to claim the right to self-determination.

THE MEDITERRANEAN AS A CONTACT ZONE

Because of the waves of migration and conquest that have taken hold of Tunisia throughout its history, Tunisian identity consists of many layers, some of which are in tension with each other, occasionally competing for dominance. At any point in time, Tunisia was "awash with an array of exogenous influences" and further, that "contemporary Tunisians take great pride in their ancestors' skill in blending the many stimuli to which they were exposed into their own distinctive culture" (Perkins, 2004, p. 6). Thinkers in Mediterranean Studies have described multiplicity in Mediterranean territories and communities in a similar way. In 2008, scholars working together under the auspices of the Mediterranean Study Group published a sourcebook to "demonstrate [their] conception of bodies of water as entities that create cultural exchange, and of the Mediterranean as a highly varied yet also integrated space" (cooke, Göknar, & Parker, 2008, p. xiii). The group characterizes the Mediterranean Sea using literary critic Mary Louise Pratt's term "contact zone" (2008, p. 1). According to Pratt, contact zones connect people and cultures "previously separated by geographic and historical disjunctures" (Pratt, 2008, p. 7). Within the context of the Mediterranean Sea, contact zones have the potential to alter the lens through which we see the region:

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They change centers into margins; they foreground the logs of voyages over the histories of individual places, and . . . they emphasize ports of call over single destinations. Such exchanges and translations forge Mediterranean identities that are at once connected across the Sea and rooted in particular places – identities that are not predicated on single languages and territories or on myths of a timeless nation-state. (cooke et al., 2008, p. 1)

This is all to say that settlements like Tangier and Tunis have been and continue to be a point of contact between all sorts of people moving back and forth across the Mediterranean basic. Tunis and Tangier are both Mediterranean contact zones *par excellence* given how well they meet the various criteria laid out by Perkins, the Mediterranean Study Group, and Pratt. This is especially evident linguistically. Even a cursory glance at the lexical inventory of Tunisian Arabic shows the influences and contributions of not only Arabic and French, but also loanwords from Spanish (e.g. /sˤabbaːtˤ/ for shoe), Italian (e.g. /kuʒiːna/ for kitchen), Turkish (e.g. /briːk/ for fried crepe), and of course, Berber. Moroccan Arabic contains a large array of loanwords from Spanish, French, and other European languages also.

The concept of a Mediterranean contact zone can be extended to include Tangier and Tunis and used as a framework to compare two cities and dialects separated by 1,400 kilometers but linked by analogous geographical positions and historical and linguistic developments. It is in the spirit of contact and connectedness that the comparison of two distant but surprisingly similar dialects will be undertaken in the chapter that follows.

Chapter 3: Case Studies

The first two chapters of this study outlined the history of language contact in Tunisia and northern Morocco and elucidated how traditional dialect categorization has placed the dialects of Tangier and Tunis in relation to other dialects of the North Africa region, grouping the varieties spoken in both cities into a class of sedentary/ pre-Hilalian dialects. This chapter will demonstrate that the Arabic dialects of Tangier and Tunis show morphosyntactic features that support the delineation of a linguistic area or at least a common dialect grouping. The evidence gleaned from the comparison of these two dialect case studies will support the hypothesis that the contemporary Arabic dialects of Tangier and Tunis share similarities beyond the classic pre-Hilalian features because of shared substrate influences as well as parallel linguistic developments.

This chapter takes as its starting point Atiqa Hachimi's work on dialect leveling in Morocco as evidenced by morphosyntactic features (2011b), especially the lack of distinction between masculine and feminine 2nd person in perfective, imperfective, and imperative verbs. These two features will be used to compare Tangier Arabic with Tunis Arabic and demonstrate the similarity between them with the aim of proposing that they be categorized in the same subtype.[5]

SHARED MORPHOSYNTACTIC FEATURES

Northern Moroccan dialects of Arabic share the following morphosyntactic features (Heath, 2002, pp. 5–8), with caveats about their purported developmental trajectory:

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[5] It should be noted that though every source used in this section seems to use a slightly different transcription system, both the phonetic and the broad phonemic transcriptions used here will use the International Phonetic Alphabet transcription system for accuracy, uniformity, and comparability.

1. **Gender is "neutralized" in 2PL and 3PL pronominals.** Perhaps it would be more accurate to say that 2PL and 3PL pronouns mark only number, not gender. We should keep this point in mind when evaluating claims that speakers of these dialects "neutralized" a distinction that existed in the parent dialect.

2. **Gender is "neutralized" in 2SG pronominals**, e.g. *enti:na,* which is used in Tangier to refer to both male and female 2nd person addressees. Again, this assumes that the parent language/dialect marked gender in 2SG pronouns, a distinction later neutralized.

3. **F.PL category is "lost" in modifying adjectives and participles.**

4. TAM: ***ka-*** (not *ta-* as in the koiné) is the **durative prefix before imperfective verbs**:
   ka-j-ktəb
   DUR-1SG.M-write
   'he is writing'

5. **Verbs (V) are negated as *ma V-ʃi*** (as opposed to *ma + V*). This is quite common and widespread in dialects of Arabic in North Africa west of Egypt.

6. **Negated copular predication of type *ma-ʃi X* 'he/it is not X'.** Note the presence of the *ʃi* morpheme, similar if not identical to the verbal negation morpheme. Other dialect groups in Morocco use the strategy
   ma + pronoun *X*.

7. **Existential participle *kayn* 'exist, be present, there is/are'.** Other dialect groups use the participle *xa:ləg* but the same morphosyntactic structure for existentials.

8. **Participles *maʃi* 'going' (-*mʃi* 'go') and *maʒi* 'coming' (-*ʒi* 'come')**

9. **Future with *maʃi* 'going' (often reduced to *maʃ*) plus imperfective.** This future morpheme situates northern Moroccan dialects within a very large isogloss (from Tunisia to Morocco) in which the future marker is *maʃ(i) ~ baʃ ~ biʃ.*

Interestingly, the northern Moroccan dialects of Arabic share not only share the morphosyntactic features outlined above, but they also share a feature of verbal morphology that further distinguishes them from central Moroccan koiné varieties. After

reviewing the verbal morphology of spoken Arabic, we will examine northern Moroccan dialects to evaluate the trajectory of their development relative to other Moroccan dialects.

VERBAL MORPHOLOGY IN SPOKEN ARABIC

In spoken Arabic, the verb stem, usually a triliteral root carrying some basic semantic material, takes inflectional affixes that indicate person and number (and, arguably, tense, aspect, and/or mood). Saâda discusses the difficulties of categorizing verbs in terms of tense and aspect (1967, pp. 66–69). Following the suggestion of McCarus and Yacoub, Saâda uses the terms *suffix conjugation* (which corresponds roughly to past tense and perfect(ive) aspect) and *prefix conjugation* (which corresponds roughly to non-past tense and imperfect(ive) aspect) (1967, p. 69). However, in discussing the morphosyntax of northern Moroccan Arabic, this study uses Brustad's framework, which distinguishes between the two basic morphological stems of spoken Arabic using the terms *imperfective* and *perfective* (2000, pp. 142–143). These terms correspond roughly with *suffix-stem* and *prefix-stem* as referred to above, respectively, but they do not avoid tense, aspectual, or modal specification as in Saâda's treatment, which relies mostly on a distinction between completive and incompletive aspect. Thus, reference to the *imperfective* form/meaning of verbs in the discussion that follows will usually denote non-past time reference as well as an incompletive aspect.

The *imperative* is used in the usual sense of a command or request. The latter is valuable because the only possible addressee of an imperative verb form is a second-person addressee, so it is useful as a counterpart to 2nd-person addressee inflections in imperfective verbs.

Person categories and marking in Tunis Arabic

Baccouche points out that Tunis Arabic is distinctive among Arabic dialects in several respects, as it has "no gender marking whatsoever in the 2nd person, a characteristic it shares with other urban Tunisian dialects and Maltese" (2006, pp. 565–566). The lack of gender marking and distinction between masculine and feminine in the 2nd person extends beyond personal pronouns to verbs. Tunisian Arabic has seven personal pronouns, shown in Table 4.1 below.

Table 1: Pronouns in Tunis Arabic

	Personal pronoun	**Direct suffix object suffix**	**Indirect object suffix**	**Preposition with suffix**	**Possessive**
3rd sg. m.	*hu:wa*	*-u, -h**	*-lu*	*fi:h*	*-u, -h**
3rd sg. f.	*hi:ja*	*-ha*	*-ilha*	*fi:ha*	*-ha*
3rd pl.	*hu:ma*	*-hum*	*-ilhum*	*fi:hum*	*-hum*
2nd sg.	*inti*	*-ik, -k**	*-lik*	*fi:k*	*-ik, -k**
2nd pl.	*intu:ma*	*-kum*	*-ilkum*	*fi:kum*	*-kum*
1st sg.	*ʔa:na*	*-ni*	*-li*	*fi:ja*	*-i, -ya**
1st pl.	*ʔaħna*	*-na*	*-ilna/-inna*	*fi:na*	*-na*

= after vowels

(adapted from (Baccouche, 2006)

Verbal morphology in Tunis Arabic

Imperfective and perfective verb inflections

In the verbal morphology of Tunis Arabic, several features stand out. First, Tunis Arabic is characterized by the leveling of forms between the different classes of weak verbs, as well as "the movement of the initial vowel in regular verbs due to the preference for avoiding light syllables" in this dialect (Baccouche, 2006, p. 569). As mentioned

earlier, verb inflections for the 2nd-person singular masculine and the 2nd-person singular feminine are identical, lacking gender marking. Further, the forms for 1st and 2nd person singular are identical as well (569). The inflections for the imperfective and perfective verb forms (for comparison) are shown in Table 4.2 below.

Table 2: Conjugation of the imperfect(ive) in Tunis Arabic

	I 'write'	II gem. 'like/love/want'	II *w/y* 'be'	III *y* 'go/walk'	III *y* 'forget'
3rd sg. m.	*jiktib*	*jħabb*	*jku:n*	*jimʃi*	*jinsa*
3rd sg. f.	*tiktib*	*tħabb*	*tku:n*	*timʃi*	*tinsa*
3rd pl.	*jiktibu*	*jħabbu*	*jku:nu*	*jimʃi:w*	*jinsa:w*
2nd sg.	*tiktib*	*tħabb*	*tku:n*	*timʃi*	*tinsa*
2nd pl.	*tiktibu*	*tħabbu*	*tku:nu*	*timʃi:w*	*tinsa:w*
1st sg.	*niktibu*	*nħabb*	*nku:n*	*nimʃi*	*ninsa*
1st pl.	*ʔaħna*	*nħabbu*	*nku:nu*	*nimʃi:w*	*ninsa:w*

(adapted from (Baccouche, 2006, p. 568; Saâda, 1967, pp. 80–81; Singer, 1984, p. 325)

Table 3: Conjugation of the perfect(ive) in Tunis Arabic

	I 'wrote'	II gem. 'liked/loved/wanted'	II *w/y* 'was'	III *y* 'went/walked'	III *y* 'forgot'
3rd sg.m.	*ktib*	*ħabb*	*ka:n*	*mʃa*	*nsa*
3rd sg.f.	*ktibit*	*ħabbit*	*ka:nit*	*mʃa:t*	*nsa:t*
3rd pl.	*kitbu*	*ħabbu*	*ka:nu*	*mʃa:w*	*nsa:w*
2nd sg.	*ktibt*	*ħabbi:t*	*kunt*	*mʃi:t*	*nsi:t*
2nd pl.	*ktibtu*	*ħabbi:tu*	*kuntu:*	*mʃi:tu*	*nsi:tu*
1st sg.	*ktibt*	*ħabbi:t*	*kunt*	*mʃi:t*	*nsi:t*
1st pl.	*ktibna*	*ħabbi:na*	*kunna*	*mʃi:na*	*nsi:na*

(adapted from (Baccouche, 2006, p. 568; Singer, 1984, p. 320)

The imperative in Tunis Arabic

Just as there is no gender marking in the 2nd person for imperfective and perfective verb forms, there is no gender distinction in imperative forms, which derive from the 2nd person prefix conjugation by omission of the subject prefix (Saâda, 1967, p. 82).

Tunis Arabic as an old urban vernacular in decline

What bearing do these morphosyntactic and other features have on the possibilities for classifying and categorizing Tunisian Arabic? According to Hachimi, Tunis provides "an excellent example of the decline of an old-urban vernacular" as well as male-led sociolinguistic change (2011b, p. 35). With regard to Tunis in the past three decades, Trabelsi has reported a "community linguistic shift" in which "men of all ages have shifted away from the old urban [aw] and [ay] to adopt the modern monophthongs [u:] and [i:]," whereas "women on the other hand are found to vary across generations" (2011b, p. 35). Trabelsi attributes this "community linguistic shift away from older urban features and towards the modern urban koiné features" to a widening of access to traditionally male domains, as well as "the decline of the old-city elite and culture," though the latter statement must be qualified somehow (35). However, Hachimi argues in the case of young Fessi women in Casablanca, "access to male domains does not necessarily lead to the adoption of the modern koiné" (35). Social factors and linguistic features hang in a delicate balance in this case.

It is worth noting that in the case of Tunis Arabic today, Hachimi refers to the diphthongs as "old urban" features and monophthongs as "modern" features, which seemingly contradicts Heath's assessment. (Recall that Heath's list of sedentary features includes the monophthongization of "old" short diphthongs *aw and *ay to *u* and *i* except when adjacent to pharyngealized, uvular, or pharyngeal consonants.) These two disparate characterizations of old-urban/ sedentary dialect groupings underscore the problematic nature of the terminology used in Arabic dialect studies today. If "pre-Hilalian" is used as a proxy for "more archaic than Hilalian," which are the presumably more archaic vowels: are they monophthongs or diphthongs? Given the timeframe of these linguistic developments, it is possible that these vowels have undergone *multiple* evolutions.

Person categories and gender marking in Tangier Arabic

According to Hachimi, gender distinctions and neutralizations in North African dialects of Arabic work roughly as follows:

> Neutralizing the distinction between masculine and feminine in the second person singular, either in the pronominal system or the verbal conjugation, is a feature of urban varieties in North Africa. In the Fessi dialect, the female is addressed in the masculine both in the imperative and the imperfective and bears zero suffix. Casablancan dialect, like other rural dialects in North Africa, is conservative toward second person singular gender marking. It distinguishes feminine and masculine in suffixed pronouns in imperfective and imperative aspects by distinguishing the feminine with [-i]. (2011b, p. 41)

Though the influence of the Moroccan koiné(s) of the capital Rabat and the commercial center Casablanca is pervasive linguistically, Tangier Arabic features a distinctive gender-neutral 2ⁿᵈ-person singular personal pronoun, /ʔenti:na/. This pronoun is analogous to the pronoun /inti/ in Tunis Arabic, which is not marked for gender. Of course, just as in Tunis Arabic, pronominal suffixes *do* distinguish (obligatorily) between masculine and feminine gender.

Verbal morphology in Tangier Arabic

Imperfective and perfective verb inflections

On the morphological level, Moroccan Arabic dialects as a whole do not mark gender in the third person plural and the second person singular in the perfective tense. Hachimi describes this morphosyntactic phenomenon in terms of the "retention" of certain inflections, presumably from an earlier form of Arabic or in reference to classical or Modern Standard Arabic. As mentioned previously, to linguists this is not a useful point of reference since it presumes the pre-existence of features that are then retained or

lost, when in reality the loss or addition of morphological category markings may not have proceeded from either of those two "high register" starting points. According to Hachimi, "in the plural it is the masculine inflection that has been retained in Moroccan Arabic, but in the singular it is the feminine ending that has been preserved" (2001, p. 30). Again, though, the fact that in many Arabic dialects the zero-suffix in perfective verbs marks 3sg.m and the *–i* suffix marks 3sg.f does not mean that the *–i* suffix in the Moroccan Arabic perfective "retains" the originally "feminine" inflection and somehow emasculates male addressees, any more than the lack of *–i* suffix in imperfective 3sg.f verbs deprives female addressees of their femininity. Hachimi demonstrates that this is unlikely to have happened by showing that current patterns of accommodation show sensitivity to these socio-cultural factors (Hachimi, 2005, 2007, 2011a).

The imperative in Tangier Arabic

Recent speech data recorded in the summer of 2014 in Tangier shows that in this dialect, imperative verb forms do not distinguish between male and female addressees. In a text in which a middle-aged female speaker born and raised in the old medina of Tangier explains how to make Moroccan mint tea, all examples of imperative forms directed toward a female addressee do not contrast with forms for a male addressee:

1. /**zi:d** ʃwijja/
   'add some more'

2. /**ʔəmill** qitˤaʕat assukkar/
   'put in the sugar cubes'

3. /**ʃu:f** il buχχa:r djal maʔ/
   'look at the steam'

4. /**hizz** il maʔ/
   'bring the water'

5. /ʒi:b ʔəl barra:d/
   'bring the teapot'

6. /ħarrak mzja:n wə ʃu:f issukkar/
   'stir it well and look at the sugar'

7. /qajjis-o/
   'measure it'

8. /jalla habbt-o/
   'go on, take it downstairs'

These examples provide us with further confirmation of the morphosyntactic similarities between Tunis Arabic and Tangier Arabic in the imperative as well as the imperfective.

ALTERNATIVE EXPLANATIONS FOR MORPHOLOGICAL CATEGORY MARKING

In Hachimi's work, which investigates contact between speakers of different Moroccan dialects, it makes sense to refer to processes of merging and/or neutralization. Since speakers from Fez would use the same verbal inflection for a male 2nd person addressee as for a female addressee, contact with speakers of the Casablancan dialect—in which verbal inflections for 2SG.F bear the [-i] suffix—would be expected to spur the process of dialect leveling. The interesting part of the dialect leveling process in this case is that leveling by a Fessi speaker toward the Casablancan host community's dialect would involve Fessis making *more* morphological distinctions than in the L1 dialect. In this case, the process of dialect leveling does not involve simplification or merger of morphological categories: quite the opposite.

On a more fundamental level, though, it is unfortunate that linguists still describe dialects like the Moroccan koiné spoken in Casablanca as "conservative" because they "preserve" more morphological distinctions between gender categories, for example. Recall that the Arabic dialects of northern Morocco are categorized as pre-Hilalian and therefore presumed to be several centuries older than Hilalian dialects that shaped

Saharan and central Moroccan dialects of Arabic. Magidow has shown why this chronology is problematic in many cases (2013, pp. 241–243). It is possible that dialects like the Arabic dialect of Tangier reflect a pre-Hilalian morphosyntactic paradigm that did *not* mark gender in 2nd person pronominals or in imperfective, perfective, and imperative verbs. We should reevaluate our points of reference: rather than speaking of mergers or neutralization of gender categories based on a default gender-distinguishing paradigm, we can simply refer to a lack of distinction, or to a shared zero-suffix paradigm for perfective verbs inflected for the 2nd person singular category, for example.

The move from fewer category markings to more category markings brings us to one of the most important questions in this discussion: what does it mean that some dialects, especially the Arabic dialects of Tangier and Tunis, lack gender marking in the 2nd person pronoun and three of the major verbal categories? We have already seen why the simplification of an "original" paradigm—variously called a merger of the gender categories and a neutralization of gender—may not be an adequate explanation for this difference. Even though the pre-Hilalian dialects are presumably older than the Hilalian dialects and would therefore have had several more centuries to develop into what they are today, pre-Hilalian dialects nonetheless do share a number of features, ostensibly due to genetic relation to an ancestor dialect, and it is possible that these features have not changed significantly.

What I propose are two alternative explanations. First, based on the similarities between the language contact situations in these two cities historically, it is possible that some combination of Berber and Latinate substrates (discussed in Chapter 2) may have influenced the development of the morphosyntactic paradigm in which gender marking is absent. Second, and more likely, it is possible that some pre-Hilalian varieties of Arabic may have had similar non-gender marking verbal paradigms and that the lack of gender

marking is not a simplification of a prior paradigm at all: morphological distinctions between male and female may result from innovations, possibly due to dialect contact.

FUTURE TRAJECTORIES OF LINGUISTIC DEVELOPMENT

In both Tunisia and northern Morocco, multifarious influences, including the steady influx of loanwords from French and Spanish, continue to shape various dialects of Tunisian and Moroccan Arabic. Still, clues from verbal morphology may not only allow us to see the effects of contact; it may also allow us to predict what effects contact between speakers of different Arabic dialects in North Africa may yet have.

The morphosyntactic systems and unique features of the coastal dialects of Tangier and Tunis—particularly the lack of gender marking in some major tense/aspect/mood categories of verbal morphology—face one of two likely fates. One of the possible outcomes of dialect contact between speakers from northern Morocco and speakers from central Morocco is a merger or simplification of morphological paradigms in central Moroccan dialects that do currently distinguish between male and female genders in perfective and imperative verbs. In other words, they may eventually lose this distinction and use the same inflection for male and female addressees in the 2SG category. The main argument in favor of this possible outcome is a tendency toward simplification in situations of dialect contact.

Alternatively, contact between speakers of coastal (Mediterranean) urban dialects of Arabic and speakers of other dialects could motivate accommodation or leveling in the direction of a koiné. In Morocco, the prestigious koiné does have different personal pronouns and verb inflections for 2SG.M and 2SG.F in perfective and imperative verbs. The demographic changes in both Morocco and Tunisia make predicting future developments difficult since identity marking and accommodation are in competition.

Conclusions

This thesis compared two urban coastal (Mediterranean) dialects of Arabic in North Africa: the Arabic dialect of Tangier, Morocco and the Arabic dialect of Tunis, Tunisia. As this study showed, both dialects have traditionally been classified as "pre-Hilalian" varieties, which originated with the first wave of Arab Muslim invasions of North Africa in the late 7th century CE. Further, Tangier and Tunis not only underwent similar historical developments; the Arabic dialects of these two cities also underwent similar developments, in addition to sharing the features used as criteria for the pre-Hilalian dialect grouping. This thesis analyzed the similarities between the language contact situations in Tangier and Tunis historically as a possible explanation for the parallel development of the morphosyntactic features shared by the Arabic dialects of these two cities today. Specifically, this study analyzed pronominal categories and the lack of gender marking in the verbal paradigms in both dialects. Finally, this investigator proposed that these morphosyntactic paradigms are not the product of a process of simplification, but rather that they may originate in substratum influences or pre-Hilalian dialects that did not mark gender in the 2nd person pronominal or the perfective, imperfective, and imperative verbal categories.

Audio Corpora: Resources and Gaps

One of the most significant gaps in the body of resources on Arabic dialects in North Africa is a comprehensive data set that would allow scholars to investigate unstudied varieties of this dialect alongside high-prestige urban dialects. The only audio recordings of speakers of Arabic in Tunisia that are widely available to researchers are in the *Semitisches Tonarchiv*, but there are only 27 such recordings, 22 of them are from the

town of Douz alone, and they are outdated and of low quality (2014b). The *Semitisches Tonarchiv* database contains no recordings at all from northern Morocco (2014a). Needless to say, this source leaves something to be desired.

Even in the field of corpus linguistics, efforts to document both Moroccan and Tunisian Arabic are still quite limited despite the array of technological capabilities available to us, both in the recording of high-quality audio samples and in the storing of large quantities of sound files. On the one hand, the Tunisiya.org project, which seeks to build a four-million-word corpus of Tunisian Spoken Arabic, is based largely on text and only to a lesser extent on audio transcriptions (McNeil & Faiza, 2014). On the other hand, Tunisiya.org is a unique project, compiling a corpus from the traditional written sources and newer written sources mentioned earlier, as well as audio transcriptions commissioned from native speakers. Other recent corpus projects—such as Cross Lingual Arabic Blog Alerts (COLABA), a large effort to create resources and processing tools for dialectal Arabic blogs—focus exclusively on texts written partially or fully in one or more dialects. For instance, COLABA aims "to create resources and processing tools for Dialectal Arabic Blogs" (Diab, Habash, Rambow, Altantawy, & Benajiba, 2010). These corpus projects address the need to process and analyze texts in varieties other than Modern Standard Arabic, a task that would be easier if corpus linguists could benefit from work in descriptive and comparative Arabic dialectology. For example, comparative studies that highlight syntactical and morphological similarities between dialects could simplify NLP functions like POS tagging. However, currently both Moroccan and Tunisian spoken Arabic lack the adequate documentation necessary for sociolinguistic research, let alone other applications. In the absence of this documentation, we are at a loss to describe and compare varieties of Arabic in North Africa, which precludes finding other applications for linguistic data on these varieties. This investigator hopes to

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contribute a comparative study to highlight similarities between the dialects of speech communities such as Tangier and Tunis and contrast linguistic developments in each.

The Comparative Arabic Dialectology Corpus

Arabic dialectology as a whole would benefit from the expansion of speech corpora to include more data for dialects of Arabic in North Africa. Expanding speech corpora will allow sociolinguistic researchers to compare and contrast varieties within the Arab world as well as investigate variation within speech communities and linguistic areas such as the North African region. The dearth of data described in the previous section is not restricted to Moroccan and Tunisian dialects, which is why some researchers are working to expand the data set. For instance, Kristen Brustad and a group of graduate students at the University of Texas at Austin have formed the Center for Arabic Dialect Research (CADR) and begun forming a Comparative Arabic Dialectology Corpus. The aim of this project is to build "a corpus of high-quality digital audio recordings of a wide range of contemporary dialects of Arabic in order to further our understanding of the linguistic geography of the Arabic-speaking world" (Brustad). The data being collected – and hopefully made available to the wider sociolinguistic research community – will enable scholars to describe all kinds of Arabic dialects as well as compare and contrast different varieties.

Appendix

Table 4: Northern-type features and Sarahan-type features

Northern-type (pre-/non-Hilalian, sedentary) features and Saharan-type (Hilalian, Bedouin/nomadic) features, adapted from Heath (2002, pp. 5–8)

Northern-type features	Sarahan-type features
Vowel length neutralized in closed syllables	Preservation of old vowel length distinctions except for word-final loss of short V
Old short diphthongs *aw and *ay usually monophthongized to *u* and *i* except when adjacent to pharyngealized, uvular, or pharyngeal consonants	Old short *i and *u generally merge as ə (schwa), but old short *u, though shifting to ə, may leave behind a trace of its rounding in the form of pharyngealization of adjacent labials; this phonological feature may still induce what is now allophonic (nonphonemic) rounding of the ə to phonetic [u] Old diphthongs *aw and *ay usually do not monophthongize to high V's *u* and *i,* though they can be phonetically realized as mid-height vowels [oː ~ əː], [eː ~ ɛː], the more open allophones [əː] and [ɛː] being typical before pharyngealized C's
Old alveolar fricatives (spirants) merge with stops (e.g. *ð > *d*)	Alveolar fricatives (spirants) remain distinct from stops
q is the usual reflex of Classical Arabic *q	*g* is the usual reflex of Classical Arabic *q
In most paradigms and derivational sets involving stems with *r, any emergent *r ~ rˤ* alternations correlated with different vocalic environments were leveled out, with either plain *r* or pharyngealized *rˤ* generalizing depending on the lexical item	A respectable number of *r ~ rˤ* alternations are preserved in ablaut derivation, even when the original vocalic basis for the allophony has become opaque (*ʃrˤab* 'drink, participle *ʃaːrəb* 'having drunk' < *ʃaːrib)
Geminated /ʒʒ/ pronounced as an affricate [dʒ], and similar affrications of some ungeminated cases	No affrication of /ʒ/, including geminate /ʒʒ/
Extensive syncope of old short vowels ("v"), e.g. *CvCw *CvCy nouns resyllabified as *CCu* and *CCi* (*dlu* 'bucket')	Relatively limited syncope of old short vowels, e.g. *CvCw and *CvCy nouns are not resyllabified (*dalu* 'bucket', *dalw-i* 'my bucket')

Northern-type features	Sarahan-type features
n- (instead of *l-*) as preposition 'to, for' before nouns (far northern dialects)	*l-* 'to, for' before nouns
Dative enclitics after verbs are *li-* plus pronominal	Postverbal dative enclitic *–l-* plus pronominal
dyal or *d-* as Possessive preposition	*ntaʕ* (Hassaniya *nta:ʕ*) available as analytic possessive preposition (but synthetic, i.e. "construct" possessive preferred)
ka- as Durative prefix before imperfective verbs	No durative prefix on imperfective verbs
CCaC(ə)C plural from e.g. *CCCVC* singular noun	Bisyllabic *CCaCiC (CCa:Ci:C)* plural from e.g. *CCCVC (CvCCVVC)* singular noun
Gender is neutralized in 2Pl and 3Pl pronominals	Gender distinctions in 2Pl and 3Pl pronominals are retained
Gender is neutralized in 2Sg pronominals	2FeSg pronominals remain distinct from 2MaSg
FePl category is lost in modifying adjectives and participles	FePl category partially preserved in modifying adjectives and participles
Verbs (V) are negated as *ma V-ʃi*	Verbs are negated as *ma:* + verb
Negated copular predication of type *ma-ʃi X* 'he/it is not X'	Negated copular predication of type *ma:-hu X* 'he/it is not X'
Existential participle *kayn* 'exist, be present, there is/are'	Existential particle *xa:ləg* 'exist, be present, there is/are'
Participles *maʃi* 'going' (*-mʃi* 'go') and *maʒi* 'coming' (*-ʒi* 'come')	Participles *maʃi* 'going' (*-mʃi* 'go') and *ʒa:y* 'coming' (*-ʒi* 'come')
Future with *maʃi* 'going' (often reduced to *maʃ*) plus imperfective	Future with *la:hi* plus imperfective
Strong preference for analytic over synthetic expression of possession	Strong preference for synthetic (compound-like) rather than analytic possessives
Strong preference for analytic over synthetic expression of numeral phrases	Strong preference for synthetic numeral phrases
Strong preference for analytic over synthetic expression of adjectival comparatives	Strong preference for synthetic adjectival comparatives (elatives)

Table 4, cont.: Northern-type features and Saharan-type features

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