

# Chapter 1

## Introduction

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This introductory chapter gives an overview of the aims, scope, and approach of the volume, while also providing a thematic bibliography of the most significant previous literature on Arabic and contact-induced change.

### 1 Rationale

With its lengthy written history, wide and well-studied dialectal variation, and involvement in numerous heterogeneous contact situations, the Arabic language has an enormous contribution to make to our understanding of how language contact can lead to change. Until now, however, most of what is known about the diverse outcomes of contacts between Arabic and other languages has remained inaccessible to non-specialists. There are brief summary sketches (Versteegh 2001; 2010; Thomason 2011; Manfredi 2018), as well as a recent collection of articles on a range of issues connected with Arabic and language contact in general (Manfredi & Tosco 2018), but no larger synthesis of the kind that is available, for example, for Amazonian languages (Aikhenvald 2002).

Arabic has thus played little part in work to date on contact-induced change that is crosslinguistic in scope (though see Matras 2009; Trudgill 2011 for partial exceptions). By providing the community of general and historical linguists with the present collaborative synthesis of expertise on Arabic and contact-induced change, we hope to help rectify this situation. The work consists of twenty-nine chapters by leading authorities in their fields, and is divided into three



Parts: overviews of contact-induced change in individual Arabic varieties (Part I); overviews of the outcomes of contact with Arabic in other languages (Part II); and overviews of various types of changes across Arabic varieties, in which contact has played a significant role (Part III). Chapters in each of the three Parts follow the fixed broad outlines detailed below in §5, in order to maximize coherence and ease of reference. All authors have also been encouraged a) to ensure their chapters contain a rich set of (uniformly glossed and transcribed) linguistic data, including original data where appropriate, and b) to provide as much sociohistorical data as possible on the speech communities involved, framed where possible with reference to Van Coetsem's (1988; 2000) distinction between changes due to borrowing (by agents dominant in the recipient language (RL)) and imposition (by agents dominant in the source language (SL); see §4 for further details). These features are aimed at ensuring that the data presented in the volume can be productively drawn upon by scholars and students of linguistics who are not specialists in Arabic linguistics, and especially those working on the mechanisms, typology, outcomes, and theory of contact-induced change cross-linguistically.

The rest of this introductory chapter is structured as follows. We begin by providing a thematic bibliography of existing work on Arabic and contact-induced change in §2. The overall scope of the present volume is then detailed in §3. §3.1 locates and classifies the different varieties of what is called "Arabic" according to Jastrow's (2002) three geographic zones and Labov's (2007) concepts of transmission and diffusion in language change, while §3.2–§3.4 provide an overview of the content of each of the three Parts into which the present volume is divided. In §4 we give details of Van Coetsem's (1988; 2000) framework, and in §5 we outline the common structure and transcription and glossing conventions of the volume. This introductory chapter then finishes with §6, in which we discuss some of the challenges to Van Coetsem's framework posed by the data in this volume, how these challenges can be addressed, and how the data and analyses collected in the present work can be built on by others.

## **2 Previous work**

As noted in §1, there is a reasonably large existing literature focusing on specific aspects of Arabic and contact-induced change. For reviews of much of this literature, readers are referred to the relevant chapters of the present volume. Here we simply list some key works for ease of reference in the following (non-comprehensive) bibliography, organized by linguistic variety.

- Old Arabic and Middle Aramaic: Retsö (2011), Weninger (2011), Owens (2016).
- Arabic and Neo-Aramaic: Arnold & Behnstedt (1993), Arnold (2007), Coghill (2010; 2012; 2015), Jastrow (2015).
- Arabic and Hebrew: Blau (1981), Yoda (2013), Horesh (2015).
- Arabic and (Modern) South Arabian languages: Diem (1979), Lonnet (2011), Zammit (2011), Watson (2018).
- Arabic and Indo-Iranian languages: Tsabolov (1994), Matras (2007), Asbaghi (2011), Gazsi (2011), van der Wal Anonby (2015), Herin (2018).
- Arabic and Turkish: Procházka (2002; 2011), Haig (2014), Taylan (2017), Akkuş & Benmamoun (2018).
- Arabic and Berber: Taine-Cheikh (1997; 2018), Brahimi (2000), Corriente (2002), Lafkioui & Brugnatelli (2008), Kossmann (2009; 2010; 2013), El Aissati (2011), Lafkioui (2013a), Souag (2013), van Putten & Souag (2015).
- Arabic and (sub-)Saharan languages: Owens (2000a; 2015), Lafkioui (2013b), Souag (2016).
- Arabic and Latin/Romance languages: Brunot (1949), Benoliel (1977), Corriente (1978; 1992), Talmoudi (1986), Heath (1989; 2015), Cifoletti (1994), Vicente (2006), Sayahi (2014).
- Contact influences on Classical and Modern Standard Arabic (MSA): Jeffery (2007) [1938], Blau (1969), Hebbo (1984).
- Contact influence in Mesopotamian Arabic: Masliyah (1996; 1997), Matras & Shabibi (2007), El Zarka & Ziagos (2019).
- Contact influence in Central Asian Arabic: Jastrow (2005), Ratcliffe (2005), Ingham (2011).
- Contact influence in Levantine Arabic: Barbot (1961), Neishtadt (2015).
- Contact influence in Cypriot Maronite Arabic: Newton (1964), Tsiapera (1964), Borg (1997; 2004).
- Contact influence in Maltese: Colin (1957), Aquilina (1958), Krier (1976), Mifsud (1995), Brincat (2011), Souag (2018).
- Arabic pidgins and creoles: Owens (1985), Miller (1993), Luffin (2014), Avram (2017), Bizri (2018), Owens (2018).
- Contact between Arabic dialects: Gibson (2002), Miller et al. (2007), Cotter & Horesh (2015), Leddy-Cecere (2018).

### 3 Scope

#### 3.1 Where and what is Arabic?

Arabic is one of the most widely spoken languages in the world, and the first language of around 350 million speakers spread throughout the Middle East and North Africa. There are twenty-five sovereign states in which Arabic is an official language. In addition, Arabic is widely spoken as a *lingua franca* (i.e. vehicular language) for a range of communicative interactions between different linguistic communities in Asia and Africa. Following Jastrow (2002; see also Watson 2011; Manfredi forthcoming), the present-day Arabic-speaking world can be broadly subdivided into three geographic zones (cf. Figure 1): Zone I covers the regions of the Arabian Peninsula where Arabic was spoken before the beginning of the Islamic expansion in the seventh century; Zone II includes the Middle Eastern and North African areas into which Arabic penetrated during the Islamic expansion, and where it is today spoken as a majority language; and Zone III encompasses isolated regions where Arabic is spoken today by minority bilingual communities (see also Owens 2000b). Further to this, following successive waves of mass emigration in recent centuries, Arabic is also spoken as a heritage language by diasporic communities around the world (Rouchdy 1992; Boumans & de Ruiter 2002; D’Anna, this volume). Against the backdrop of this complex geo-historical distribution, the question that arises is what unites all the varieties that fall under the glottonym “Arabic” and, more generally, what should count as Arabic from a linguistic point of view?

After all, the term “Arabic” encompasses a great deal of internal variety, whose origins can be traced back to both internally and externally motivated (i.e. contact-induced) changes. One way of understanding these different patterns of language change is through Labov’s (2007) distinction between TRANSMISSION and DIFFUSION. If transmission refers to change through an unbroken sequence of first-language acquisition (Labov 2007: 346), diffusion rather implies the transfer of features across languages via language/dialect contact (Labov 2007: 347). Change through transmission is said to be regular because it is incremented by young native speakers, whereas diffusion is thought to be more irregular and unpredictable because it is typically produced by adult bilingual speakers. Both mechanisms contribute to long-term language change even though, according to Labov, transmission is the foremost mechanism by which linguistic diversity is produced and maintained. In a recent study, Owens (2018) tests the generality of the Labovian distinction between transmission and diffusion against the complex linguistic and sociohistorical patchwork of Arabic. He concludes that

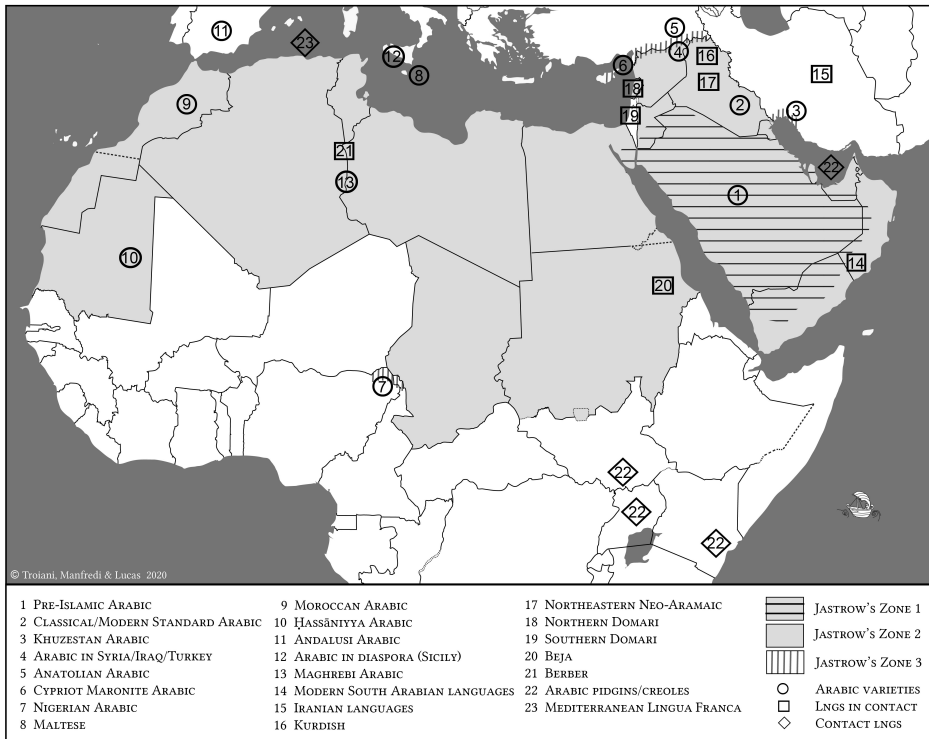


Figure 1: Approximate distribution of languages and Arabic varieties discussed in this volume

change through diffusion cannot be said to be more irregular than change via transmission and that, other than for Arabic-based creoles (see Avram, this volume), there are no clear-cut criteria for distinguishing the two mechanisms of language change. The reason for this is that most of the linguistic varieties that are commonly referred to under the heading of “Arabic” are the result of a longstanding series of multi-causal changes encompassing both internal drift and convergence, as well as contact-induced change via diffusion. What we do not see, however, in any of the varieties usually referred to as Arabic, are the atypical kinds of changes produced by the disruption of language transmission as observed in pidgin and creole languages (but see below). Thus Part I of this volume primarily (but not exclusively) deals with contact-induced change in spoken varieties of Arabic that have gone through an unbroken chain of language transmission, the so-called “Arabic dialects”.

### 3.2 Overview of Part I: Contact-induced change in varieties of Arabic

The survey chapters in Part I of this volume offer an extensive overview of contact-induced change in first Eastern (*mašriqī*) and then Western (*maḡribī*) Arabic dialects (to use the terminology of the traditional geographical classification of modern Arabic dialects; cf. Palva 2009; Benkato, this volume). The majority of chapters dealing with types of Eastern Arabic describe varieties spoken by bilingual minorities affected to different degrees by language shift towards local dominant languages. For instance, the Arabic-speaking Maronite community of Kormakiti is involved in an asymmetric pattern of bilingualism resulting in a gradual and inexorable language shift towards Cypriot Greek (Walter, this volume). In contrast, speakers of Nigerian Arabic (Owens, this volume), despite considerable proficiency in Kanuri and/or Hausa, maintain transmission of their ancestral language to the younger generations. As far as it is possible to tell, a similar situation holds for the Mesopotamian dialects of Anatolia (Akkuş, this volume) and Khuzestan (Leitner, this volume), which are in intense contact with Turkish and Persian respectively (among other languages), but without (yet) showing signs of definitive language shift. Procházka (this volume), on the other hand, describes the effects of contact-induced change in a continuum of Eastern Arabic dialects dispersed across Lebanon, Syria, Iraq, and southern Turkey. In this broader geographical context, Arabic represents the main vernacular language, affected to different degrees by long-term bi- or multilingualism with Aramaic, Kurdish, and Turkish.

As far as Western Arabic dialects are concerned, Benkato (this volume) describes a history of contact-induced change in different Maghrebi dialects from the beginning of the Arabization of North Africa until the colonial period. Four further chapters then take a closer look at contact-induced changes in specific varieties of Western Arabic. Heath (this volume) covers Moroccan, while Taine-Cheikh (this volume) covers Ḥassāniyya – two majority varieties of Arabic historically affected by contact with Berber and Romance languages. Lucas & Čéplö (this volume) then provide an overview of contact-induced change in Maltese – a variety which is no longer usually considered to be a subtype of “Arabic”, but which, as Lucas & Čéplö show, is nevertheless historically part of the Western group of Arabic dialects. Indeed, despite the far-reaching lexical and grammatical effects of contact with Italo-Romance and English, Maltese remains largely a product of transmission in the Labovian sense. We would not therefore classify it as a contact (i.e. mixed) language (cf. Stolz 2003 and see further below). Lastly, D’Anna (this volume) offers a linguistic account of different varieties of Arabic in diasporic settings, with particular focus on the Tunisian community of Mazara

del Vallo in Sicily. Unlike the Western varieties described in the aforementioned chapters, in this latter context Arabic is involved in an unbalanced contact situation, resulting in moderate language shift towards Sicilian and Italian.

As well as the aforementioned spoken varieties of Arabic, Part I of the volume also includes three chapters analysing the outputs of language contact in different varieties of written Arabic. First of all, Al-Jallad (this volume) describes a number of likely instances of contact-induced change in pre-Islamic Arabic documentary sources (primarily inscriptional), and postulates the existence of different patterns of bilingualism between Arabic and Akkadian, Aramaic, Old South Arabian, and Greek (among other languages). Van Putten (this volume) then focuses on contact influences on the later Classical and MSA, examining both early influences from Aramaic, Greek, Persian, Ethio-Semitic and Old South Arabian, as well as later influence from Ottoman Turkish and twentieth-century journalism in European languages. Since these written varieties of Arabic are rather artificial constructs, van Putten also examines the influence of the native Arabic dialects of the authors of texts in Classical Arabic and MSA. The third and final written Arabic variety analysed in this volume is Andalusian Arabic. Attested as a form of Middle Arabic (Lentin 2011) between the tenth and seventeenth centuries, Andalusian Arabic displays significant grammatical and lexical input from both Romance and Berber languages (Vicente, this volume). As evidence for the Arabic varieties described in these three chapters is exclusively written, they cannot be treated in the same manner as spoken varieties which emerged in a context of first language acquisition. They are, however, representative of a long-standing and uninterrupted written tradition that goes back to the pre-Islamic period, and that has always been in a multi-faceted relationship of mutual influence with different varieties of spoken Arabic. In this sense, despite their rather artificial nature, written varieties of Arabic may also be considered the product of language transmission.

In the final chapter of Part I, on the other hand, Avram (this volume) describes a number of Arabic-based pidgins and creoles, which contrast with modern Arabic dialects (including Maltese) in that they have emerged in contact situations where the available language repertoires did not constitute an effective tool for communication (Bakker & Matras 2013: 1). These contact languages are thus the product of partial or full interruption of language transmission, and for this reason they fall outside the range of what is usually considered Arabic (i.e. they are not straightforwardly classifiable as genetically related to it; cf. McMahon 2013). In such contexts, the effects of language diffusion via second language acquisition are obviously more evident. The varieties discussed by Avram include the so-called Sudanic pidgins and creoles (i.e. Juba Arabic, Kinubi, and Turku), which

emerged in Sudan in the nineteenth century and are today scattered across East Africa, as well as a number of contact languages that have recently emerged in the context of labour migration to the Middle East: Gulf Pidgin Arabic, Pidgin Madama, Romanian Pidgin Arabic, and Jordanian Pidgin Arabic. Despite their different sociohistorical and ethnolinguistic backgrounds, the contact languages included in this chapter share many formal features as a result of the strong impact of second language acquisition of Arabic in extreme contact situations.

In sum, Part I of the present volume aims at a comprehensive overview of contact-induced changes in both spoken and written varieties of Arabic, as well as in Arabic-based contact languages (but see §3.5).

### **3.3 Overview of Part II: Language change through contact with Arabic**

Throughout its history, Arabic has not only been subject to contact influence from other languages, but has also itself induced profound changes in the languages with which it has come into contact (see Versteegh 2001 for a general overview). The latter topic is the focus of the chapters included in Part II of the present volume. Let us note in this regard that, thanks to its religious function as the language of Islam, the linguistic influence of (Classical) Arabic has of course travelled well beyond the traditional borders of the Arabic-speaking world, and has affected linguistic communities that have never acquired Arabic as a second language. Such is the case, for example, of Indonesian and Swahili, whose lexica are characterized by a high proportion of Arabic-derived loanwords. In the present volume we largely disregard this kind of influence, however, as our focus is rather on the effects of language contact in communities characterized by a relatively high degree of societal bilingualism in Arabic. These bilingual communities typically fall within Jastrow's Zone II (see §3.1 and Figure 1), and are therefore affected to varying degrees by language shift towards Arabic.

Accordingly, the first two chapters of Part II focus on the structural effects of language contact with Arabic in two Semitic languages of the Middle East. First of all, Bettega & Gasparini (this volume) provide an overview of Arabic influence on the Modern South Arabian languages (i.e. Mehri, Hobyōt, Ḥarsūsi, Baḥari, Šheret/Jibbāli and Soqōtri) of Oman and Yemen. These minority languages are used in an asymmetric pattern of bilingualism with Arabic, and have been strongly affected by contact with the dominant language, both in their lexicon and grammar. A similar situation is described by Coghill (this volume) for North-Eastern Neo-Aramaic (NENA), a group of closely related languages whose speakers are scattered across Iraq, Turkey, Syria, and Iran (as well as in several



diasporic communities around the world). Unlike for the Modern South Arabian languages, however, Arabic has only recently become the dominant language in much of the region where NENA languages are spoken, with Kurdish being the primary historical contact language. Nevertheless, the intensity of this contact, despite its relatively short duration, has been sufficient to result in significant influence on the grammar and lexicon of NENA languages, as Coghill demonstrates. Being closely related to Arabic, NENA and Modern South Arabian languages are incidentally particularly relevant to the question of the role played by language contact (i.e. diffusion) as opposed to internal drift (i.e. transmission) in the reconstruction of the Semitic language family.

The next two chapters in Part II deal with languages that are also genetically related to Arabic, though much more distantly. First of all, Souag (this volume) surveys some of the most prominent examples of the influence of Arabic on the numerous Berber languages spoken across North Africa and the Sahara. Though many Berber-speaking communities are in the process of language shift, different communities present different patterns of bilingualism. Tuareg, for example, has been least affected by contact with spoken Arabic, whereas smaller varieties, such as that of Awjila in Libya, are severely endangered, with language shift to Arabic being rather far advanced (van Putten & Souag 2015). Berber as a whole thus represents a particularly rich source of data for the typology of changes brought about by contact with Arabic (see also Kossmann 2013). Vanhove (this volume), on the other hand, describes the influence of Arabic on Beja, a Northern Cushitic language mainly spoken in eastern Sudan. Probably due to their constituting a large proportion of the population in this region, and in spite of their high degree of bilingualism with Sudanese Arabic, Beja speakers continue robust transmission of their ancestral language to younger generations and are therefore not involved in a process of language shift. Against this background, Beja offers interesting hints for the analysis of the morphological effects of contact with Arabic, especially in relation to the transfer of roots and patterns (see also Vanhove 2012).

Part II of the volume also provides data for the analysis of contact-induced changes that occurred in languages with no genetic link with Arabic. These are all Indo-Iranian languages, spoken in a large area stretching from Iran in the east to Israel in the west. Gazsi (this volume) offers a wide-ranging survey of the mostly lexical influence of Arabic on Iranian languages, with a particular focus on New Persian and Modern Persian dialects spoken in Iran. Öpengin (this volume) then describes the effects of contact with Arabic in Northern and Central Kurdish languages spoken in Turkey, Syria, and Iraq. Due to the longstanding bilingualism with Arabic since the early phases of the Islamic expansion, Kurdish

has been profoundly affected in its phonology and lexicon by contact with both Mesopotamian dialects and Classical Arabic. Lastly, two further chapters assess the changes produced by contact with Arabic in different varieties of Domari, an Indic language spoken by itinerant linguistic minorities in the Middle East. Matras (this volume) analyses the Southern variety of Domari, spoken in Jerusalem, which is reported to be extremely endangered, while Herin (this volume) focuses on the Northern varieties of Domari, spoken in Syria, Lebanon, Jordan, and Turkey, which exhibit different degrees of linguistic vitality. In this overall situation, Domari has been thoroughly affected in all lexical and grammatical domains by contact with Arabic, with dialects of Syria and Turkey showing a lower degree of linguistic interference, while more southerly dialects are on the verge of extinction due to language shift.

In the final chapter of Part II, Nolan (this volume) discusses another contact language with significant input from Arabic: Mediterranean Lingua Franca, a vehicular language spoken from the sixteenth to nineteenth centuries on the North African Barbary coast as an interethnic means of communication between various populations, including pirates and captured slaves. The lexicon and grammar of Mediterranean Lingua Franca were apparently drawn from a wide range of Italo-Romance, Spanish, Portuguese, Franco-Provençal, Turkish, Greek and Arabic varieties. Although the contribution of Arabic to this language was relatively slight, a substantial proportion of its speakers had Arabic as their first language and inevitably therefore transferred Arabic features into this contact language.

### **3.4 Overview of Part III: Domains of contact-induced change across Arabic varieties**

Parts I and II of the present volume offer overviews of contact-induced changes in individual languages and Arabic varieties. Part III, by contrast, presents studies examining contact-induced change in various domains, across a number of relevant languages and Arabic varieties. Some of these chapters focus on the processes producing contact-induced change in Arabic (e.g. dialect contact, contact-induced grammaticalization), while the others describe the outcomes of language contact in specific grammatical domains (e.g. intonation, negation) in a cross-dialect perspective. Taken together, the chapters included in Part III provide a broader framework for understanding the dynamics and results of language contact involving Arabic.

First of all, drawing on the concepts of koinéization and focusing, as defined by Trudgill (2004), Al-Wer (this volume) describes the process of new dialect formation in Amman, resulting from the contact there between Palestinian and

Jordanian dialects. Through examination of a number of morphophonological variants, Al-Wer assesses the relative contributions of different social factors in the formation of the Amman dialect, concluding that gender and style are the major organizing factors, while ethnicity plays only a secondary role.

In the following chapter, Cotter (this volume) addresses the closely related topic of phonetic and phonological changes, affecting both consonant and vowel systems, resulting from contact between Arabic dialects. Cotter's analysis emphasizes the role of large-scale migration within and between Arabic-speaking countries in the emergence of phonological diversity in Arabic, as in the case of the dialect of Gaza City, which presents both Bedouin and sedentary phonological features.

Though far less often considered from a historical linguistic perspective than segmental changes, supra-segmental change also appears to be particularly liable to be caused by language contact. In this vein, Hellmuth (this volume) explores the hypothesis that variation in the intonation systems of Arabic dialects is largely a product of language contact. Describing a series of dialect-specific prosodic features in Tunisian, Moroccan and Egyptian Arabic, Hellmuth proposes different contact scenarios with Berber in the Maghreb and with Greek and Coptic in Egypt as the cause, though without excluding the possibility of purely internal prosodic change.

As evidenced by almost every contribution to the present volume, contact-induced change is certainly not limited to lexicon and phonology, with the impact of language contact clearly felt also in the morphosyntax and semantics of Arabic varieties. Accordingly, Leddy-Cecere (this volume) adopts the theoretical framework of contact-induced grammaticalization proposed by Heine & Kuteva (2003; 2005) for an analysis of the outcome of contact between Arabic dialects in the domain of future tense markers. Though traditionally situated in the context of contact between genetically unrelated languages, this model of contact-induced change proves useful for explaining the development and distribution of a range of morphosyntactic features across Arabic varieties (cf. Leddy-Cecere 2018). In his contribution, Leddy-Cecere identifies five prototypical paths of grammaticalization of future markers whose spread, he argues, is best explained as the outcome of dialect contact.

Manfredi (this volume), for his part, focuses exclusively on the process of calquing, understood as the transfer of semantic and morphosyntactic patterns without accompanying morphophonological matter. He thus analyses several instances of lexical and grammatical calquing in a range of Arabic varieties, and explains their distribution in terms of different degrees of bilingual proficiency. This perspective permits an explanation of why narrow grammatical calquing

tends to be limited to communities with a high degree of bilingual proficiency, whereas lexical calquing can occur also in largely monolingual communities.

In the final contribution to Part III, Lucas (this volume) presents a diachronic overview of the development of different negation patterns in Arabic and a number of its contact languages. While recognizing that conclusive evidence of diffusion as opposed to transmission in this domain is hard to come by, Lucas argues that the geographical distribution of preverbal, bipartite, and postverbal clausal negation in Arabic and its contact languages (i.e. Modern South Arabian, Berber and Domari among others) is a product of transfer, rather than of internal parallel developments (see also Lucas & Lash 2010).

### **3.5 Limitations**

Inevitably with a project of this scale, it has not been possible to cover every aspect of the topic that we would have liked to, and the chapters included necessarily represent a compromise between several different academic and practical considerations (not least the availability of contributors with the relevant expertise). Thus, while we have aimed for blanket coverage of languages and varieties of Arabic that have been significantly affected by contact, a number of omissions should be noted.

For example, Central Asian Arabic (see Seeger 2013), a minority variety strongly affected by contact with Tajik and Uzbek, though it is cited a number of times for comparative purposes by several contributors, is not thoroughly analysed in a dedicated chapter in Part I. Similarly, the influence of Modern Hebrew on Palestinian Arabic in Israel (see Horesh 2015) is not analysed in detail here. Furthermore, with the exception of Nigerian Arabic, the volume has regrettably little to say about the range of vernacular and vehicular varieties of Arabic spoken in sub-Saharan Africa (see Lafkioui 2013b).

Similarly, the languages discussed in Part II are certainly not the only ones to have been affected by direct contact with Arabic. For instance, several Nilo-Saharan languages found in central and eastern Africa have historically been in contact with different varieties of Arabic. This is the case of Nubian, an Eastern Sudanic language spoken on the Egypt–Sudan border (Rouchdy 1980), for example. The same applies to a number of Niger-Kordofanian languages spoken in the Nuba Mountains region of Sudan, and among which we can mention the case of Koalib (Quint 2018). As far as the Middle East is concerned, the influence of Arabic on the Armenian varieties spoken in Lebanon unfortunately remains unstudied, and the same is true for the Turkmen dialects of Iraq and Syria.

There are also several phenomena that can be observed in multiple Arabic varieties and for which explanations in terms of language contact have been made, but on which it was not possible to include a chapter in the present volume. To cite a single example, several works (including Coghill 2014; Döhla 2016; Souag 2017) have investigated the possible role of contact between varieties of Arabic and other languages in the development of differential object marking and clitic doubling (see also Lucas & Čéplö, this volume).

Despite these descriptive gaps, the chapters included in the present volume have the collective merit of discussing a wide range of contact situations involving Arabic (balanced bilingualism, unbalanced bilingualism, pidginization and creolization), covering a broad geographical area and lengthy timespan, and thus giving a near-comprehensive picture of the currently known facts of Arabic and contact-induced change.

## 4 Framework

### 4.1 Overview

The majority of works cited in §2 (like the majority of work generally on contact-induced changes in specific languages) describe a set of linguistic outcomes of language contact, without addressing the cognitive and acquisitional processes that lead speakers to introduce and adopt changes of this kind. In the present volume, we have encouraged authors wherever possible to go beyond mere itemization of contact-induced changes, and to give consideration to the processes which are likely to have brought them about. Specifically, we have asked authors to analyse changes wherever possible in terms of the framework (and terminology) developed by Frans Van Coetsem (1988; 2000).

While there are various models of contact-induced change available (see e.g. Thomason & Kaufman 1988; Johanson 2002; Matras 2009), Van Coetsem's is preferable for our purposes, in that it allows us to distinguish the major types of contact-induced change, based on the cognitive statuses of the source and recipient languages in the minds of the bilingual speakers who are the agents of the changes in question. This model, which has gained greater prominence following Winford's (2005; 2007; 2010) work to popularize it (see also Ross 2013 for a broadly similar approach), makes a fundamental distinction between *BORROWING* and *IMPOSITION* as the two major types of *TRANSFER* (i.e. contact-induced change that has the effect of making the RL more closely resemble the SL in some respect).<sup>1</sup> The distinction between borrowing and imposition boils down

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<sup>1</sup>Note that not all contact-induced changes involve transfer in this sense. See §4.4 for details.

to whether the agents of a particular change (i.e. the bilingual speakers who first introduce it) are cognitively (not sociolinguistically) dominant in the SL or the RL. Lucas (2012; 2015) argues that this notion of dominance (which Van Coetsem himself does not define precisely) can be reduced to nativeness, and is thus not equivalent to temporary accessibility: borrowing (also referred to as change under RL agentivity) is when a speaker for whom the RL is a native language introduces changes to the RL based on an SL model; imposition (also referred to as change under SL agentivity) is when changes of this sort are made by a speaker for whom the RL is not a native language. Imposition occurs essentially because adults, with their impoverished language acquisition abilities relative to young children, consciously or unconsciously draw on the resources of their native language(s) to fill the gaps in their knowledge of the non-native RL. Borrowing, on the other hand, occurs either as a deliberate enrichment of the native language with material drawn from a second language, or otherwise as a result of the “inherent cognitive tendency to minimize the processing effort associated with the use of two (or more) languages” (Lucas 2012: 291). Imposition thus prototypically transfers more abstract structural features (e.g., for German native speakers speaking second-language English, syllable-final devoicing and lack of preposition stranding), whereas borrowing is prototypically associated with transfer of lexical and constructional material.

This approach neatly complements Labov’s distinction between transmission and diffusion. Labov (2007: 349) points out that “transmission is the product of the acquisition of language by young children” whereas “most language contact is largely between and among adults” and that the fundamental differences between child first language and adult second language acquisition (cf. Bley-Vroman 1989; 2009; Meisel 2011) explain the characteristically different types of change associated with transmission versus diffusion. We can go further and say that diffusion changes are of two main types – borrowing versus imposition – and it is similarly because borrowing is carried out by native speakers and imposition by second language learners that these two types of diffusion typically have different results (see §6 for further discussion).

Moreover with this approach we even have a prospect, at least in certain specific cases, of addressing one of the hardest problems in historical linguistics, Weinreich et al.’s (1968) “actuation problem”:

For even when the course of a language change has been fully described and its ability explained, the question always remains as to why the change was not actuated sooner, or why it was not simultaneously actuated wherever identical functional conditions prevailed. (Weinreich et al. 1968: 112)

If the change in question involves diffusion, understood in the above terms, then we have a straightforward answer to this question. Prior to contact with the SL, the change did not occur because the linguistic conditions were such that it could not occur in a normal language transmission scenario. Once the RL comes into contact with the SL, however, the landscape of language acquisition and use is drastically altered, such that the linguistic conditions are now sufficient to trigger the change, which can then, potentially, spread throughout and beyond the bilingual speech community (see Lucas, this volume; Lucas & Lash 2010 for further discussion of this point in the context of the contact-induced spread of bipartite negation in the languages of North Africa and southern Arabia).

To illustrate these concepts, the following subsections give some examples of borrowing and imposition (as well as some problematic cases that do not fit easily into either of these categories), drawn from the contributions to this volume.

## 4.2 Borrowing

As noted above, borrowing most typically and saliently targets lexical items. Every chapter in Parts I and II testifies to the large number of loanwords in the varieties discussed. While borrowing prototypically involves content words, it can also result in transfer of function words, idiomatic structure, and derivational and inflectional morphology. For example, Vanhove (this volume) notes that Beja has borrowed the Arabic conjunction *wa* ‘and’ as an enclitic which coordinates noun phrases and nominalized clauses, as in (1).

- (1) Beja (BEJ\_MV\_NARR\_01\_shelter\_057)<sup>2</sup>  
 bʔaɖaɖ=wa      i=ko:lej=wa      sallam-ja=aj=he:b  
 sword=COORD    DEF.M=stick=COORD    give-PFV.3SG.M=CSL=OBJ.1SG  
 ‘Since he had given me a sword and the stick...’

Leitner (this volume) shows that Khuzestan Arabic has borrowed a phrasal verb constructional frame from Persian, as illustrated in (2), consisting of an Arabic light verb (a calque of the Persian source verb) and a noun borrowed from Persian.

- (2) a. Khuzestan Arabic (Leitner’s field data)  
 kaðð              īrād  
 take.PRF.3SG.M nagging  
 ‘to pick on someone’

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<sup>2</sup>See Vanhove (this volume) for details of the source of this example.

- b. Persian  
īrād gereftan  
nagging take.INF  
'to pick on someone'

As an example of the borrowing of derivational morphology, Benkato (this volume) cites the Moroccan Arabic circumfix *tā-...-t*, borrowed from Berber, as the regular means of deriving nouns of professions and traits, as in *tānāžžārt* 'carpentry' (< *nāžžār* 'carpenter').

Finally, in the domain of verbal inflection, we can point to the contact-induced grammaticalization in NENA of a prospective future marker *zi-*, as in (3), on the model of Arabic *rah-* with the same function, both deriving from elements with the basic meaning of 'going'.

- (3) Christian Telkepe NENA (Coghill's field data)  
zi-napl-ɒ  
PRSP-fall.PRES-3SG.F  
'She's going to fall.'

### 4.3 Imposition

As well as changes due to borrowing, the contributions to this volume cite numerous instances of changes due to imposition, which are typically more abstract and less lexical-constructional than changes due to borrowing.

In the domain of phonology, we can point to the example of conditioned monophthongization found only in the Arabic dialects of coastal Syria and northern Lebanon, almost certainly as a result of imposition from Aramaic, older layers of which shared this feature. As Procházka (this volume) shows, in the dialect of the island of Arwad \*ay and \*aw are preserved only in open syllables. Elsewhere they merge to /ā/, as illustrated in (4).

- (4) Arwad Arabic, western Syria (Procházka 2013: 278)  
\*bayt, \*baytayn > *bāt, baytān* 'house, two houses'  
\*yawm, \*yawmayn > *yām, yawmān* 'day, two days'  
\*bayn al-iθnayn > *bān it-tnān* 'between the two'

In the domain of morphosyntax, van Putten (this volume) cites Wilmsen's (2010) example of imposition in the treatment of direct and indirect pronominal objects in MSA. As Wilmsen shows, native speakers of Egyptian Arabic writing MSA tend to impose their native system, such that the direct object cliticizes to



the verb, as in (5), whereas native speakers of Lebanese Arabic tend to impose their native system, such that it is the indirect object that cliticizes to the verb, as in (6).

- (5) Egyptian-style MSA (Wilmsen 2010: 100)  
 al-ʔawrāq-i llatī **sallamat-hā** la-hu ʔarmalat-u  
 DEF-papers-OBL REL.SG.F give.PRF.3SG.F-3SG.F DAT-3SG.M widow-NOM  
 ʔabdi l-wahhāb  
 PN  
 ‘the papers, which Abdel Wahhab’s widow had **given him**’
- (6) Lebanese-style MSA (Wilmsen 2010: 99)  
 al-ʔawrāq-i llatī **sallamat-hu** ʔiyyā-hā ʔarmalat-u  
 DEF-papers-OBL REL.SG.F give.PRF.3SG.F-3SG.M ACC-3SG.F widow-NOM  
 ʔabdi l-wahhāb  
 PN  
 ‘the papers, which Abdel Wahhab’s widow had **given him**’

Taken together, the above examples give an impression of the nature and variety of changes that are reported on in this volume, and which can be understood as having occurred via either borrowing or imposition.

#### 4.4 Problematic cases

Not all changes due to contact can be classified as either borrowing or imposition in Van Coetsem’s terms, however. First of all, there is the rather frequent case of communities in which the norm is not monolingual native acquisition followed by acquisition of a second language later in life, but the simultaneous acquisition, from early childhood, of two (or more) native languages. While Van Coetsem (2000) acknowledges such cases, the data from studies of bilingual individuals of this type do not bear out his suggestion (2000: 86) that these situations lead to “free transfer” of elements from any linguistic domain between the two languages. Instead, what we see in both the speech of (young) individuals of this kind, as well as communities in which multiple native languages are the norm, is typically little phonological transfer but often considerable syntactic reorganization (Lucas 2009: 96–98; 2012: 279). The traditional term for the process by which languages (typically in so-called “linguistic areas” such as the Balkans) become more similar over time is CONVERGENCE. Lucas (2015) extends the use of this term to specifically those contact-induced changes brought about by individuals who are native speakers of both the RL and the SL.

Language situations described in this volume in which convergence in this sense, rather than borrowing, is the likely mechanism underlying the changes described include the Modern South Arabian languages, especially Baḥari, as described by Bettega & Gasparini (this volume), as well as both Northern and Jerusalem Domari, as described by Herin (this volume) and Matras (this volume). As several authors point out, however, for some historical contact situations we simply do not have enough sociolinguistic information to be able to infer what kind of agentivity must underlie a given change. In such cases we must content ourselves with merely identifying the changes that are (likely) due to contact and, for the time being at least, give up on the goal of actually explaining how and why they were actuated.

Finally, a word is required here on changes, such as reduction or elimination of inflectional distinctions, which are characteristic of the usage of second-language speakers, but which do not necessarily have the effect of making the RL more closely resemble the native language of those speakers, and are not therefore properly classified as instances of transfer. Lucas (2015) gives the label “restructuring” to changes of this kind, which presumably occur in almost any contact situation where imposition is also taking place, though they will usually go undetected, being indistinguishable after the fact from purely internally caused changes. One circumstance where restructuring changes are clearly identifiable, however, concerns pidgins and creoles. Where these show a reduction in morphological complexity relative to the lexifier language that also does not represent transfer from the substrate(s), this can only have been caused by restructuring. See Avram (this volume) for several cases of this kind involving Arabic-based pidgins and creoles.

## **5 Layout of chapters**

### **5.1 Structure**

Chapters in each Part of the present volume follow a fixed basic structure. In Part I chapters, the first section gives sociolinguistic, demographic, and other relevant background information on the current state and/or historical development of the dialect(s) or varieties of Arabic under discussion. The second section then details the languages which the variety under discussion is or was in contact with, and describes the nature of those contacts. The third and main section then provides the data on the most noteworthy contact-induced changes in the variety under discussion. In general, changes described in this third section are ordered: phonology, morphology, syntax, lexicon. All chapters finish with a

concluding section that includes an outline of what we still do not know about contact-induced change the variety in question, as well as the most urgent issues for future research. Part II chapters on language change through contact with Arabic follow the same structure, with the second section focusing on the nature of the contact between Arabic and the language under discussion, as well as any other significant contacts in the case of those languages which have had contact influence from multiple languages. Since Part III focuses on contact-induced changes in specific, rather distinct, linguistic domains, the structure of chapters in this Part is less uniform, but each chapter begins with an introduction to the topic from a general linguistic point of view, followed by an overview of contact-induced changes in the domain in question, and finally a conclusion which again includes discussion of what remains unclear about the topic of the chapter, as well as the most promising avenues for future research.

## 5.2 Transcription and glossing

All chapters in the present volume adhere as far as possible to a single consistent system of transcription and glossing of numbered examples. In this subsection we summarize key elements of these two systems.

Examples from any language which has an official standardized Latin-script orthography (such as English, French, or Maltese) are transcribed in that orthography. Other than Arabic, any languages with no official standardized orthography, or only one which is not based on the Latin script, are transcribed according to a consistent scholarly system of each contributor's choosing. The International Phonetic Alphabet (IPA) is used only when the specific focus of discussion is points of phonological or phonetic detail. All Arabic examples in the volume are transcribed in accordance with the system for consonants laid out in Table 1.

In this table, voiced/voiceless pairs appear with the voiced sound immediately below its voiceless counterpart. Emphatic sounds (i.e. sounds with a secondary pharyngeal/uvular/velar articulation) appear immediately to the right of their plain counterparts, and are distinguished from them with a dot below.<sup>3</sup> This broad phonemic system only distinguishes sounds which express meaningful contrasts (and vowels are transcribed following the same principles). For sub-phonemic contrasts that cannot be captured with the symbols in Table 1, the IPA is used. Gemination is signalled by doubling consonant symbols, vowel length by

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<sup>3</sup>Note that /ħ/ does not, however, represent an emphatic version of /h/. We have chosen to retain the use of the traditional symbol ⟨ħ⟩ (rather than ⟨ḥ⟩) for the voiceless pharyngeal fricative, despite this unwanted implication that it represents an emphatic sound, so as to avoid confusion with the use of the symbol ⟨ḥ⟩ in the Maltese orthography (for details of which, see Lucas & Čěplö, this volume).

Table 1: Transcription system for Arabic consonants

	<i>Labial</i>	<i>Interdental</i>	<i>Dental/Alveolar</i>	<i>Postalveolar</i>	<i>Palatal</i>	<i>Velar</i>	<i>Uvular</i>	<i>Pharyngeal</i>	<i>Glottal</i>
Plosive	p b		t ṭ d ḍ			k g	q		ʔ
Affricate				č ç					
Fricative	f v	θ ð ð̣	s ṣ z ẓ	š ž		ħ (x) <sup>a</sup> ɣ	ħ	ħ	h
Nasal	m		n						
Vibrant			r ṛ						
Lateral			l						
Approximant	w				y				

<sup>a</sup>⟨ħ⟩ represents the voiceless velar fricative phoneme in all Arabic varieties where this contrasts with pharyngeal and glottal fricative phonemes. In Walter's (this volume) chapter on Cypriot Maronite Arabic, however, the symbol ⟨x⟩ is used to represent the single phoneme in that variety that is the outcome of the merger of the voiceless fricatives at all three of these places of articulation.

a macron above the long vowel. Stress is only marked for Arabic (with an acute accent on the nuclear vowel) where it marks a meaningful contrast, or where it is otherwise the focus of discussion in a particular passage.

Glossing of linguistic examples in the volume is handled similarly to transcription. The Leipzig Glossing Rules are followed throughout, with extensions where necessary. Every chapter includes at the end a list of glossing and other abbreviations used in that chapter. Within these parameters authors make their own choices for precisely how they wish to gloss languages other than Arabic. For all Arabic examples in the volume, we have tried to ensure that way they are glossed is completely consistent. Some of the key choices we have made in this regard are as follows.

As is well known, regular verbs in Arabic varieties have two basic conjugations: one in which the person–number affixes are exclusively suffixal, and one in which they are mainly prefixal. The suffix conjugation typically (but not al-

ways) functions to express past tense and/or perfective aspect, while the prefix conjugation typically (but not always) functions to express non-past tense and/or imperfective aspect. Since our aim with all glossing in the volume is to have one consistent gloss per morpheme, regardless of the precise temporal or aspectual functions in context, we have chosen to use the traditional Arabist labels of perfect and imperfect for these two conjugations, as opposed to alternatives such as past/non-past or perfective/imperfective. The abbreviations used are PRF for perfect and IMPF for imperfect.

Related to the issue of how best to label these two conjugations is the question of how best to analyse the distribution of person, number, gender, tense–aspect, and mood features across the verb stem and any affixes. The details need not concern us here, but finding an intuitive way of assigning each of these features to an appropriate morpheme, in a way that is consistent across all cells in the relevant paradigms, is extremely challenging. For this reason, in the present volume we make no attempt at morphological decomposition in the glossing of a word such as MSA *yaktubūna* ‘they (m.) write’. This is glossed simply as: *yaktubūna* ‘write.IMPF.3PL.M’. Accordingly, *sallamat* in (5) is glossed as ‘give.PRF.3SG.F’. It follows from this that the absence of a hyphen in a string of Arabic in a numbered example cannot be taken to imply that that string is monomorphemic. Relatedly, we make no attempt to distinguish between clitics and affixes in the glossing of Arabic examples in the present volume: a morpheme boundary of any sort is signalled by a hyphen.

The overarching principle we have followed in all of these decisions on glossing and transcription is to try to present the relevant linguistic data in as clear, plain, and unambiguous a format as possible.

## 6 Problems and prospects

As discussed in §4, Van Coetsem’s framework, with its basic distinction between borrowing and imposition, has the merit of enabling us not only to coherently categorize many contact-induced changes according to the processes of language acquisition and use that produced them, but also, at least in some cases, to attempt to address Weinreich et al.’s (1968) actuation problem, and so provide a genuinely explanatory account of the genesis of individual contact-induced changes.

This is certainly not to claim, however, that Van Coetsem’s framework, in the way that he himself presents it, is without its weaknesses. We have already discussed in §4.4 some instances of contact-induced change which are not easily accommodated by the neat dichotomy between the two main transfer types: this

is why Lucas (2015) proposes extending Van Coetsem's model to accommodate convergence and restructuring as additional transfer types.

A more fundamental problem is that, for many of the changes discussed in this volume and elsewhere, there is simply not enough sociohistorical information available to be able to infer with confidence what precise mechanisms underlie the changes in question. In such cases Van Coetsem (1988; 2000) and, following him, Winford (2005) suggest that the type of transfer that was operative in a given change can be diagnosed from its results. That is, for example, if a change involves word order, we can assume that it was due to imposition, while loanwords can be assumed to have been introduced via borrowing. Van Coetsem (1988: 25) argues that this is so because "language does not offer the same degree of stability in all its parts, in particular [...] there are differences in stability among language domains, namely among vocabulary, phonology and grammar (morphology and syntax)." He labels this observation the STABILITY GRADIENT, and suggests that it is this supposed fact about language that underlies the observed discrepancies between the types of change characteristically associated with borrowing and imposition respectively. As argued by Lucas (2012; 2015), however, there is no *a priori* or empirical reason to believe that the whole of "grammar" – a term which covers a range of highly heterogeneous phenomena – should necessarily behave similarly in language contact situations, with any contact-induced grammatical changes necessarily being due to imposition. This argument does not of course deny the strong tendency, already pointed out in §4.1, for imposition to be systematic and to target abstract structural features, while borrowing is more sporadic and centred on lexicon. But if the stability gradient only reflects a tendency, not an exceptionless law, then its usefulness as a diagnostic tool is greatly reduced. Indeed, several authors have pointed out that there are clear cases of contact-induced grammatical change for which only RL agentivity is plausible. For example, Kossmann (2013: 430) points out that, though the predictions of the stability gradient tend to be borne out in cases in which phonological and morphological change are mediated through borrowed lexical items, there are however also cases in which elements of Arabic structure (e.g. the syntax of clausal coordination and relativization) have been transferred into Berber under RL agentivity, without obviously being related to lexical transfer.

Further challenges to the idea of the stability gradient are provided by several of the contributions to the present volume. For example, Leitner (this volume) points to the transfer of verb–auxiliary order from Persian to Khuzestan Arabic as an instance of abstract structural transfer (not the transfer of a specific construction) in a context in which only borrowing, not imposition, can be the cause (cf. (2) in §4.2). Similarly, Walter (this volume) points out that in Cypriot

Maronite Arabic there has been systematic abstract phonological (as well as syntactic) transfer from Greek, in a sociolinguistic situation in which RL-dominant individuals must have been the agents of change. In the contribution of Manfredi (this volume), the necessity for a fine-grained approach to how transfer interacts with the different types of agentivity is brought into sharp relief, thanks to Manfredi's distinction between three types of grammatical calquing, two of which involve the calquing of polyfunctionality of lexical or grammatical items with or without syntactic change, while the third is a "narrow" type, producing syntactic change without calquing of the functions of lexical/grammatical items. A simplistic approach that sees lexicon and grammar as wholly distinct, internally homogeneous entities is clearly inadequate for an understanding of the mechanisms underlying changes of this sort.

A final challenge to a straightforward application of Van Coetsem's framework to problems in contact linguistics concerns the emergence of new languages in extreme contact situations. According to Winford (2005: 396; 2008: 128), the processes that create contact languages are the same as those that operate in ordinary cases of contact-induced language change. Thus he identifies three broad categories of contact languages: those that arise through RL agentivity (i.e. borrowing); those that arise primarily through SL agentivity (i.e. imposition); and those that arise through a combination of SL and RL agentivities (see also Manfredi 2018: 414). From the perspective of this classification, Winford points out that creole languages, since they emerge in a context of second language acquisition, are essentially a product of SL agentivity. But if we take a closer look at Arabic-based pidgins and creoles (Avram, this volume), the picture is more complex. For example, a number of phonological features of Juba Arabic (e.g. loss of pharyngeal and pharyngealized consonants; loss of consonant and vowel length) are clearly attributable to imposition from Bari, the main substrate language, during the first phases of its emergence. In the same manner, the lexical and grammatical semantics of Juba Arabic are strongly affected by those of Bari, as shown by several cases of calquing (Manfredi, this volume). However, a number of phonological and morphological innovations (e.g. presence of implosive sounds and integration of nominal prefixes and suffixes) must instead be seen as the result of borrowing enacted by Juba Arabic-dominant speakers latterly exposed to Bari as an adstrate language. What this shows is that creolization, being necessarily multicausal, cannot be straightforwardly reduced to a single type of linguistic transfer. Instead, it is essential that we combine the linguistic dominance approach with fine-grained sociohistorical criteria for typologizing contact languages.

As is evident from our decision to adopt Van Coetsem's model as this volume's basic analytical framework, we believe that its focus on agentivity and dominance must be central to any attempt understand the cognitive factors that actually cause contact-induced change, as opposed to the sociolinguistic factors that promote it. We do not consider, therefore, that the challenges for this framework that we have explored in the current section are insurmountable (see Lucas 2012; 2015 for a detailed defence, revision, and application of the framework). Rather our hope is that the ideas explored in this introduction, together with the wealth of data presented in the following chapters, will serve as a stimulus for the wider community of Arabists and historical linguists to push forward understanding both of the history of the Arabic language, and of the nature of contact-induced change in general.

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## Abbreviations

*	reconstructed form	NENA	North-Eastern Neo-Aramaic
1, 2, 3	1st, 2nd, 3rd person	NOM	nominative
ACC	accusative	OBJ	object
COORD	coordination	OBL	oblique
CSL	causal	PFV	perfective
DAT	dative	PN	personal name
DEF	definite	PRES	NENA Present Base
F	feminine	PRF	perfect
IMPF	imperfect	PRSP	prospective
INF	infinitive	REL	relative
IPA	International Phonetic Alphabet	RL	recipient language
		SG	singular
M/m.	masculine	SL	source language
MSA	Modern Standard Arabic		



## References

- Aikhenvald, Alexandra Y. 2002. *Language contact in Amazonia*. Oxford: Oxford University Press.
- Akkuş, Faruk & Elabbas Benmamoun. 2018. Syntactic outcomes of contact in Sason Arabic. In Stefano Manfredi & Mauro Tosco (eds.), *Arabic in contact*, 38–52. Amsterdam: John Benjamins.
- Aquilina, Joseph. 1958. Maltese as a mixed language. *Journal of Semitic Studies* 3(1). 58–79.
- Arnold, Werner. 2007. Arabic grammatical borrowing in Western Neo-Aramaic. In Yaron Matras & Jeanette Sakel (eds.), *Grammatical borrowing in cross-linguistic perspective*, 185–195. Berlin: Mouton de Gruyter.
- Arnold, Werner & Peter Behnstedt. 1993. *Arabisch-aramäische Sprachbeziehungen im Qalamūn (Syrien)*. Wiesbaden: Harrassowitz.
- Asbaghi, Asya. 2011. Persian loanwords. In Lutz Edzard & Rudolf de Jong (eds.), *Encyclopedia of Arabic language and linguistics*, online edn. Leiden: Brill.
- Avram, Andrei A. 2017. Sources of Gulf Pidgin Arabic features. In Simone Bettega & Fabio Gasparini (eds.), *Linguistic studies in the Arabian Gulf*, 131–151. Turin: Università di Torino.
- Bakker, Peter & Yaron Matras. 2013. Introduction. In Peter Bakker & Yaron Matras (eds.), *The mixed language debate: Theoretical and empirical advances*, 1–14. Berlin: Mouton de Gruyter.
- Barbot, Michel. 1961. Emprunts et phonologie dans les dialectes citadins syro-libanais. *Arabica* 8(2). 174–188.
- Benoliel, José. 1977. *Dialecto judeo-hispano-marroquí o hakitia*. Madrid: Varona.
- Bizri, Fida. 2018. Contemporary Arabic-based pidgins in the Middle East. In Reem Bassiouney & Elabbas Benmamoun (eds.), *The Routledge handbook of Arabic linguistics*, 421–38. London: Routledge.
- Blau, Joshua. 1969. *The renaissance of Modern Hebrew and Modern Standard Arabic: Parallels and differences in the revival of two Semitic languages*. Berkeley: University of California Press.
- Blau, Joshua. 1981. *The emergence and linguistic background of Judaeo-Arabic: A study of the origins of Neo-Arabic and Middle Arabic*. 3rd edn. Jerusalem: Ben-Zvi Institute.
- Bley-Vroman, Robert. 1989. What is the logical problem of foreign language learning? In Susan M. Gass & Jacquelyn Schachter (eds.), *Linguistic perspectives on second language acquisition*, 41–68. Cambridge: Cambridge University Press.
- Bley-Vroman, Robert. 2009. The evolving context of the Fundamental Difference Hypothesis. *Studies in Second Language Acquisition* 31. 175–198.

- Borg, Alexander. 1997. Cypriot Arabic phonology. In Alan S. Kaye (ed.), *Phonologies of Asia and Africa*, 219–244. Winona Lake, IN: Eisenbrauns.
- Borg, Alexander. 2004. *A comparative glossary of Cypriot Maronite Arabic (Arabic–English): With an introductory essay*. Leiden: Brill.
- Boumans, Louis & Jan Jaap de Ruiter. 2002. Moroccan Arabic in the European diaspora. In Aleya Rouchdy (ed.), *Language contact and language conflict in Arabic: Variations on a sociolinguistic theme*, 259–285. London: Routledge.
- Brahimi, Fadila. 2000. Loanwords in Algerian Berber. In Jonathan Owens (ed.), *Arabic as a minority language*, 371–382. Berlin: Mouton de Gruyter.
- Brincat, Joseph M. 2011. *Maltese and other languages: A linguistic history of Malta*. Malta: Midsea Books.
- Brunot, Louis. 1949. Emprunts dialectaux arabes à la langue française depuis 1912. *Hespéris* 36. 347–430.
- Cifoletti, Guido. 1994. Italianismi nel dialetto di Tunisi. In Dominique Caubet & Martine Vanhove (eds.), *Actes des premières journées internationales de dialectologie arabe de Paris*, 451–458. Paris: Langues’O.
- Coghill, Eleanor. 2010. The grammaticalization of prospective aspect in a group of Neo-Aramaic dialects. *Diachronica* 27(3). 359–410.
- Coghill, Eleanor. 2012. Parallels in the grammaticalisation of Neo-Aramaic *zil-* and Arabic *raḥ-* and a possible contact scenario. In Domyenyk Eades (ed.), *Grammaticalization in Semitic*, 127–144. Oxford: Oxford University Press.
- Coghill, Eleanor. 2014. Differential object marking in Neo-Aramaic. *Linguistics* 52(2). 335–364.
- Coghill, Eleanor. 2015. Borrowing of verbal derivational morphology between Semitic languages: The case of Arabic verb derivations in Neo-Aramaic. In Francesco Gardani, Peter Arkadiev & Nino Amiridze (eds.), *Borrowed morphology*, 83–108. Berlin: De Gruyter Mouton.
- Colin, Georges S. 1957. Mots «berbères» dans le dialecte arabe de Malte. In *Mémorial André Basset (1895–1956)*, 7–16. Paris: Adrien Maisonneuve.
- Corriente, Federico. 1978. Los fonemas /p/, /č/ y /g/ en árabe hispánico. *Vox Romanica* 37. 214–218.
- Corriente, Federico. 1992. *Arabe andalusí y lenguas romances*. Madrid: Editorial MAPFRE.
- Corriente, Federico. 2002. The Berber adstratum of Andalusí Arabic. In Otto Jastrow, Werner Arnold & Hartmut Bobzin (eds.), *“Sprich doch mit deinen Knechten aramäisch, wir verstehen es!”: 60 Beiträge zur Semitistik: Festschrift für Otto Jastrow zum 60. Geburtstag*, 105–111. Wiesbaden: Harrassowitz.
- Cotter, William M. & Uri Horesh. 2015. Social integration and dialect divergence in coastal Palestine. *Journal of Sociolinguistics* 19(4). 460–83.

- Diem, Werner. 1979. Studien zur Frage des Substrats im Arabischen. *Der Islam* 56. 12–80.
- Döhla, Hans-Jörg. 2016. The origin of differential object marking in Maltese. In Gilbert Puech & Benjamin Saade (eds.), *Shifts and patterns in Maltese*, 149–174. Berlin: De Gruyter Mouton.
- El Aissati, Abderahman. 2011. Berber loanwords. In Lutz Edzard & Rudolf de Jong (eds.), *Encyclopedia of Arabic language and linguistics*, online edn. Leiden: Brill.
- El Zarka, Dina & Sandra Ziagos. 2019. The beginnings of word order change in the Arabic dialects of southern Iran in contact with Persian: A preliminary study of data from four villages in Bushehr and Hormozgan. *Iranian Studies*. 1–24. DOI:10.1080/00210862.2019.1690433
- Gazsi, Dénes. 2011. Arabic–Persian language contact. In Stefan Weninger, Geoffrey Khan, Michael P. Streck & Janet C. E. Watson (eds.), *The Semitic languages: An international handbook*, 1015–1021. Berlin: De Gruyter Mouton.
- Gibson, Maik. 2002. Dialect levelling in Tunisian Arabic: Towards a new standard. In Aleya Rouchdy (ed.), *Language contact and language conflict in Arabic: Variations on a sociolinguistic theme*, 24–30. London: Routledge.
- Haig, Geoffrey L. J. 2014. East Anatolia as a linguistic area? Conceptual and empirical issues. In Lale Behzadi, Patrick Franke, Geoffrey L. J. Haig, Christoph Herzog, Birgitt Hofmann, Lorenz Korn & Susanne Talabardon (eds.), *Bamberger Orientstudien*, 13–36. Bamberg: University of Bamberg Press.
- Heath, Jeffrey. 1989. *From code-switching to borrowing: A case study of Moroccan Arabic*. London: Kegan Paul.
- Heath, Jeffrey. 2015. D-possessives and the origins of Moroccan Arabic. *Diachronica* 32(1). 1–33.
- Hebbo, Ahmed. 1984. *Die Fremdwörter in der arabischen Prophetenbiographie des Ibn Hischām (gest. 218/834)*. Frankfurt am Main: Peter Lang.
- Heine, Bernd & Tania Kuteva. 2003. On contact-induced grammaticalization. *Studies in Language* 27(3). 529–572.
- Heine, Bernd & Tania Kuteva. 2005. *Language contact and grammatical change*. Cambridge: Cambridge University Press.
- Herin, Bruno. 2018. The Arabic component in Domari. In Stefano Manfredi & Mauro Tosco (eds.), *Arabic in contact*, 19–36. Amsterdam: John Benjamins.
- Horesh, Uri. 2015. Structural change in Urban Palestinian Arabic induced by contact with Modern Hebrew. In Aaron Michael Butts (ed.), *Semitic languages in contact*, 198–233. Leiden: Brill.
- Ingham, Bruce. 2011. Afghanistan Arabic. In Lutz Edzard & Rudolf de Jong (eds.), *Encyclopedia of Arabic language and linguistics*, online edn. Leiden: Brill.

- Jastrow, Otto. 2002. Arabic dialectology: The state of the art. In Shlomo Izre'el (ed.), *Semitic linguistics: The state of the art at the turn of the twenty-first century*, 347–363. Winona Lake, IN: Eisenbrauns.
- Jastrow, Otto. 2005. Uzbekistan Arabic: A language created by Semitic–Iranian–Turkic linguistic convergence. In Éva Ágnes Csató, Bo Isaksson & Carina Jahani (eds.), *Linguistic convergence and areal diffusion: Case studies from Iranian, Semitic and Turkic*, 133–139. London: Routledge.
- Jastrow, Otto. 2015. Language contact as reflected in the consonant system of Turoyo. In Aaron Michael Butts (ed.), *Semitic languages in contact*, 234–250. Leiden: Brill.
- Jeffery, Arthur. 2007. *The foreign vocabulary of the Qur'ān*. Leiden: Brill. Originally published in 1938 by Benoytosh Bhattacharyya.
- Johanson, Lars. 2002. *Structural factors in Turkic language contacts*. Oxford: Curzon Press.
- Kossmann, Maarten. 2009. Loanwords in Tarifiyt. In Martin Haspelmath & Uri Tadmor (eds.), *Loanwords in the world's languages: A comparative handbook*, 191–214. Berlin: De Gruyter.
- Kossmann, Maarten. 2010. Parallel system borrowing: Parallel morphological systems due to the borrowing of paradigms. *Diachronica* 27(3). 459–487.
- Kossmann, Maarten. 2013. *The Arabic influence on Northern Berber*. Leiden: Brill.
- Krier, Fernande. 1976. *Le maltais au contact de l'italien: Etude phonologique, grammaticale et sémantique*. Hamburg: Helmut Buske.
- Labov, William. 2007. Transmission and diffusion. *Language* 83(2). 344–387.
- Lafkioui, Mena. 2013a. Reinventing negation patterns in Moroccan Arabic. In Mena Lafkioui (ed.), *African Arabic: Approaches to dialectology*, 51–93. Berlin: De Gruyter Mouton.
- Lafkioui, Mena (ed.). 2013b. *African Arabic: Approaches to dialectology*. Berlin: De Gruyter Mouton.
- Lafkioui, Mena & Vermondo Brugnatelli (eds.). 2008. *Berber in contact: Linguistic and sociolinguistic perspectives*. Cologne: Rüdiger Köppe.
- Leddy-Cecere, Thomas. 2018. *Contact-induced grammaticalization as an impetus for Arabic dialect development*. Austin: University of Texas. (Doctoral dissertation).
- Lentin, Jérôme. 2011. Middle Arabic. In Lutz Edzard & Rudolf de Jong (eds.), *Encyclopedia of Arabic language and linguistics*, online edn. Leiden: Brill.
- Lonnet, Antoine. 2011. Modern South Arabian. In Lutz Edzard & Rudolf de Jong (eds.), *Encyclopedia of Arabic language and linguistics*, online edn. Leiden: Brill.
- Lucas, Christopher. 2009. *The development of negation in Arabic and Afro-Asiatic*. Cambridge: University of Cambridge. (Doctoral dissertation).

- Lucas, Christopher. 2012. Contact-induced grammatical change: Towards an explicit account. *Diachronica* 29. 275–300.
- Lucas, Christopher. 2015. Contact-induced language change. In Claire Bowerman & Bethwyn Evans (eds.), *The Routledge handbook of historical linguistics*, 519–536. London: Routledge.
- Lucas, Christopher & Elliott Lash. 2010. Contact as catalyst: The case for Coptic influence in the development of Arabic negation. *Journal of Linguistics* 46. 379–413.
- Luffin, Xavier. 2014. The influence of Swahili on Kinubi. *Journal of Pidgin and Creole Languages* 29(2). 299–318.
- Manfredi, Stefano. 2018. Arabic as a contact language. In Reem Bassiouney & Elabbas Benmamoun (eds.), *The Routledge handbook of Arabic linguistics*, 407–20. London: Routledge.
- Manfredi, Stefano. Forthcoming. The Arab world. In Miriam Meyerhoff & Umberto Ansaldi (eds.), *The Routledge handbook of pidgin and creole languages*. London: Routledge.
- Manfredi, Stefano & Mauro Tosco (eds.). 2018. *Arabic in contact*. Amsterdam: John Benjamins.
- Masliyah, Sadok. 1996. Four Turkish suffixes in Iraqi Arabic: *-li*, *-lik*, *-siz* and *-çi*. *Journal of Semitic Studies* 41(2). 291–300.
- Masliyah, Sadok. 1997. The diminutive in spoken Iraqi Arabic. *Zeitschrift für Arabische Linguistik* 33. 68–88.
- Matras, Yaron. 2007. Grammatical borrowing in Domari. In Yaron Matras & Jeanette Sakel (eds.), *Grammatical borrowing in cross-linguistic perspective*, 151–164. Berlin: Mouton de Gruyter.
- Matras, Yaron. 2009. *Language contact*. Cambridge: Cambridge University Press.
- Matras, Yaron & Maryam Shabibi. 2007. Grammatical borrowing in Khuzistani Arabic. In Yaron Matras & Jeanette Sakel (eds.), *Grammatical borrowing in cross-linguistic perspective*, 137–149. Berlin: Mouton de Gruyter.
- McMahon, April. 2013. Issues in the genetic classification of contact languages. In Peter Bakker & Yaron Matras (eds.), *The mixed language debate: Theoretical and empirical advances*, 333–362. Berlin: Mouton de Gruyter.
- Meisel, Jürgen. 2011. *First and second language acquisition: Parallels and differences*. Cambridge: Cambridge University Press.
- Mifsud, Manwel. 1995. *Loan verbs in Maltese: A descriptive and comparative study*. Leiden: Brill.
- Miller, Catherine. 1993. Restructuration morpho-syntaxique en Juba-Arabic et Ki-Nubi: A propos du débat universaux/substrat et superstrat dans les études créoles. *Matériaux Arabes et Sudarabiques (GELLAS)* 5. 137–174.

- Miller, Catherine, Enam Al-Wer, Dominique Caubet & Janet C. E. Watson (eds.). 2007. *Arabic in the city: Issues in dialect contact and language variation*. London: Routledge.
- Neishtadt, Mila. 2015. The lexical component in the Aramaic substrate of Palestinian Arabic. In Aaron Butts (ed.), *Semitic languages in contact*, 280–310. Leiden: Brill.
- Newton, Brian. 1964. An Arabic–Greek dialect. *Word* 20(sup2). 43–52.
- Owens, Jonathan. 1985. The origins of East African Nubi. *Anthropological Linguistics* 27(2). 229–271.
- Owens, Jonathan. 2000a. Loanwords in Nigerian Arabic: A quantitative approach. In Jonathan Owens (ed.), *Arabic as a minority language*, 259–346. Berlin: De Gruyter.
- Owens, Jonathan (ed.). 2000b. *Arabic as a minority language*. Berlin: Mouton de Gruyter.
- Owens, Jonathan. 2015. Idioms, polysemy, context: A model based on Nigerian Arabic. *Anthropological Linguistics* 57(1). 46–98.
- Owens, Jonathan. 2016. Dia-planar diffusion: Reconstructing early Aramaic–Arabic language contact. In Manuel Sartori, Manuela Giolfo & Philippe Cassuto (eds.), *Approaches to the history and dialectology of Arabic in honor of Pierre Larcher*, 77–101. Leiden: Brill.
- Owens, Jonathan. 2018. Why linguistics needs an historically oriented Arabic linguistics. In Stefano Manfredi & Mauro Tosco (eds.), *Arabic in contact*, 207–232. Amsterdam: John Benjamins.
- Palva, Heikki. 2009. From *qaltu* to *gilit*: Diachronic notes on linguistic adaptation in Muslim Baghdad Arabic. In Enam Al-Wer & Rudolf De Jong (eds.), *Arabic dialectology in honour of Clive Holes on the occasion of his sixtieth birthday*, 17–40. Leiden: Brill.
- Procházka, Stephan. 2002. Contact phenomena, code-copying, and code-switching in the Arabic dialects of Adana and Mersin (southern Turkey). In Abderrahim Youssi (ed.), *Aspects of the dialects of Arabic today: Proceedings of the 4th conference of the International Arabic Dialectology Association (AIDA), Marrakesh, April 1-4, 2000. In honour of Professor David Cohen*, 133–139. Rabat: Amapatril.
- Procházka, Stephan. 2011. Turkish loanwords. In Lutz Edzard & Rudolf de Jong (eds.), *Encyclopedia of Arabic language and linguistics*, online edn. Leiden: Brill.
- Procházka, Stephan. 2013. Traditional boatbuilding: Two texts in the Arabic dialect of the island of Arwād (Syria). In Renaud Kutu, Ulrich Seeger & Shabo Talay (eds.), *Nicht nur mit Engelszungen: Beiträge zur semitischen*

- Dialektologie. Festschrift für Werner Arnold zum 60. Geburtstag*, 275–288. Wiesbaden: Harrassowitz.
- Quint, Nicolas. 2018. An assessment of the Arabic lexical contribution to contemporary spoken Koalib. In Stefano Manfredi & Mauro Tosco (eds.), *Arabic in contact*, 189–207. Amsterdam: John Benjamins.
- Ratcliffe, Robert R. 2005. Bukhara Arabic: A metatypized dialect of Arabic in Central Asia. In Éva Ágnes Csató, Bo Isaksson & Carina Jahani (eds.), *Linguistic convergence and areal diffusion: Case studies from Iranian, Semitic and Turkic*, 141–51. London: Routledge.
- Retsö, Jan. 2011. Aramaic/Syriac loanwords. In Lutz Edzard & Rudolf de Jong (eds.), *Encyclopedia of Arabic language and linguistics*, online edn. Leiden: Brill.
- Ross, Malcolm. 2013. Diagnosing contact processes from their outcomes: The importance of life stages. *Journal of Language Contact* 6(1). 5–47.
- Rouchdy, Aleya. 1980. Languages in contact: Arabic-Nubian. *Anthropological Linguistics* 22(8). 334–344.
- Rouchdy, Aleya (ed.). 1992. *The Arabic language in America*. Detroit: Wayne State University Press.
- Sayahi, Lotfi. 2014. *Diglossia and language contact: Language variation and change in North Africa*. Cambridge: Cambridge University Press.
- Seeger, Ulrich. 2013. Zum Verhältnis der zentralasiatischen arabischen Dialekte. In Renaud Kutu, Ulrich Seeger & Shabo Talay (eds.), *Nicht nur mit Engelszungen: Beiträge zur semitischen Dialektologie. Festschrift für Werner Arnold zum 60. Geburtstag*, 313–322. Wiesbaden: Harrassowitz.
- Souag, Lameen. 2013. *Berber and Arabic in Siwa (Egypt): A study in linguistic contact*. Cologne: Rüdiger Köppe.
- Souag, Lameen. 2016. Language contact in the Sahara. In Mark Aronoff (ed.), *Oxford research encyclopedia of linguistics*. Oxford: Oxford University Press.
- Souag, Lameen. 2017. Clitic doubling and language contact in Arabic. *Zeitschrift für Arabische Linguistik* 66. 45–70.
- Souag, Lameen. 2018. Berber etymologies in Maltese. *International Journal of Arabic Linguistics* 4(1). 190–223.
- Stolz, Thomas. 2003. Not quite the right mixture: Chamorro and Malti as candidates for the status of mixed language. In Yaron Matras & Peter Bakker (eds.), *The mixed language debate: Theoretical and empirical advances*, 271–315. Berlin: De Gruyter Mouton.
- Taine-Cheikh, Catherine. 1997. Les emprunts au berbère zénaga: Un sous-système vocalique du ḥassāniyya. *Matériaux Arabes et Sudarabiques (GELLAS)* 8. 93–142.

- Taine-Cheikh, Catherine. 2018. Ḥassāniyya Arabic in contact with Berber: The case of quadriliteral verbs. In Stefano Manfredi & Mauro Tosco (eds.), *Arabic in contact*, 135–159. Amsterdam: John Benjamins.
- Talmoudi, Fathi. 1986. *A morphosemantic study of Romance verbs in the Arabic dialects of Tunis, Sūsa, and Sfax*. Gothenburg: Acta Universitatis Gothoburgensis.
- Taylan, Eser. 2017. Language contact in Anatolia: the case of Sason Arabic. In Ramazan Korkmaz & Doğan Gürkan (eds.), *Endangered languages of the Caucasus and beyond*, 209–225. Leiden: Brill.
- Thomason, Sarah G. 2011. Language contact. In Lutz Edzard & Rudolf de Jong (eds.), *Encyclopedia of Arabic language and linguistics*, online edn. Leiden: Brill.
- Thomason, Sarah G. & Terrence Kaufman. 1988. *Language contact, creolization and genetic linguistics*. Berkeley: University of California Press.
- Trudgill, Peter. 2004. *New-dialect formation: The inevitability of colonial Englishes*. Oxford: Oxford University Press.
- Trudgill, Peter. 2011. *Sociolinguistic typology: Social determinants of linguistic complexity*. Oxford: Oxford University Press.
- Tsabolov, Ruslan. 1994. Notes on the influence of Arabic on Kurdish. *Acta Kurdica* 1. 121–124.
- Tsiapera, Maria. 1964. Greek borrowings in the Arabic dialect of Cyprus. *Journal of the American Oriental Society* 84(2). 124–126.
- Van Coetsem, Frans. 1988. *Loan phonology and the two transfer types in language contact*. Dordrecht: Foris.
- Van Coetsem, Frans. 2000. *A general and unified theory of the transmission process in language contact*. Heidelberg: Winter.
- van der Wal Anonby, Christina. 2015. *A grammar of Kumzari*. Leiden: University of Leiden. (Doctoral dissertation).
- van Putten, Marijn & Lameen Souag. 2015. Attrition and revival in Awjila Berber: Facebook posts as a new data source for an endangered Berber language. *Corpus* (14). 23–58.
- Vanhove, Martine. 2012. Roots and patterns in Beja (Cushitic): The issue of language contact with Arabic. In Martine Vanhove, Thomas Stolz, Hitmoi Otsuka & Aina Urdze (eds.), *Morphologies in contact*, 311–326. Berlin: Akademie Verlag.
- Versteegh, Kees. 2001. Linguistic contact between Arabic and other languages. *Arabica* (48). 470–508.
- Versteegh, Kees. 2010. Contact and the development of Arabic. In Raymond Hickey (ed.), *The handbook of language contact*, 634–651. Oxford: Wiley-Blackwell.



- Vicente, Ángeles. 2006. *El proceso de arabización de Alandalús: Un caso medieval de interacción de lenguas*. Zaragoza: Instituto de Estudios Islámicos y del Oriente Próximo (IEIOP).
- Watson, Janet C. E. 2011. Arabic dialects. In Stefan Weninger, Geoffrey Khan, Michael P. Streck & Janet C. E. Watson (eds.), *The Semitic languages: An international handbook*, 851–896. Berlin: De Gruyter Mouton.
- Watson, Janet C. E. 2018. South Arabian and Arabic dialects. In Clive Holes (ed.), *Arabic historical dialectology: Linguistic and sociolinguistic approaches*, 316–334. Oxford: Oxford University Press.
- Weinreich, Uriel, William Labov & Marvin Herzog. 1968. Empirical foundations for a theory of language change. In Winfred Lehman & Yakov Malkiel (eds.), *Directions for historical linguistics*, 95–195. Austin: University of Texas Press.
- Weninger, Stefan. 2011. Aramaic–Arabic language contact. In Stefan Weninger, Geoffrey Khan, Michael P. Streck & Janet C. E. Watson (eds.), *The Semitic languages: An international handbook*, 747–755. Berlin: De Gruyter Mouton.
- Wilmsen, David. 2010. Dialects of written Arabic: Syntactic differences in the treatment of object pronouns in Egyptian and Levantine newspapers. *Arabica* 57. 99–128.
- Winford, Donald. 2005. Contact-induced change: Classification and processes. *Diachronica* 22(2). 373–427.
- Winford, Donald. 2007. Some issues in the study of language contact. *Journal of Language Contact* 1(1). 22–39.
- Winford, Donald. 2008. Processes of creole formation and related contact-induced language change. *Journal of Language Contact* 2(1). 124–145.
- Winford, Donald. 2010. Contact and borrowing. In Raymond Hickey (ed.), *The handbook of language contact*, 170–187. Oxford: Wiley-Blackwell.
- Yoda, Sumikazu. 2013. Judeo-Arabic, Libya, Hebrew component in. In Geoffrey Khan (ed.), *Encyclopedia of Hebrew language and linguistics*. Leiden: Brill.
- Zammit, Martin R. 2011. South Arabian loanwords. In Lutz Edzard & Rudolf de Jong (eds.), *Encyclopedia of Arabic language and linguistics*, online edn. Leiden: Brill.