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**DIALECT VARIATION ACROSS GENERATIONS IN
BERKANE (NORTH-EASTERN MOROCCO): THE CASE
OF INTERDENTAL FRICATIVES***

**Variación dialectal intergeneracional en Berkane (Noreste de
Marruecos): El caso de las fricativas interdientales**

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Abstract: The aim of the present paper is to investigate intergenerational variation in the realization of interdental fricatives among speakers of Berkani Arabic, a variety spoken in north-eastern Morocco. Our survey is based on data gathered during fieldwork in the city of Berkane in December 2019. It is well known that, unlike mainstream Moroccan dialects, some varieties in the far north-east have retained old interdental fricatives to this day. Yet it seems that these phonemes are slowly fading or have already disappeared in some of the aforementioned vernaculars. This is the case, for instance, in the western division of the Huwwāra tribe and in the city of Oujda, respectively. As regards the city of Berkane, a preliminary analysis of our data indicates an almost complete loss of the voiceless interdental /t̪/ and the voiced interdental /d̪/. Conversely, instances displaying a voiced pharyngealized /ḏ/ are abundant in the speech of our informants, even if this sound is seemingly in free variation with its dental counterpart /d/. Interestingly, this phonetic variation seems to be related to the age of the speaker. Thus, the number of occurrences of /ḏ/ is higher among middle-aged and older individuals. Such a finding could be indicative of the regression of /ḏ/ in the speech of young Berkanis, which may be due to a process of convergence towards the mainstream varieties of Moroccan Arabic. The abandonment of other local features would seem to support this supposition.

Resumen: Este artículo tiene por objetivo investigar la variación intergeneracional que afecta a las fricativas interdientales en el dialecto árabe de Berkane (noreste de Marruecos). Nuestro estudio se basa en datos recopilados en Berkane durante una estancia realizada en

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diciembre de 2019. Es bien sabido que, a diferencia de los principales dialectos marroquíes, algunas variedades habladas en la región nororiental han preservado las fricativas interdental hasta hoy día. No obstante, parece que los fonemas en cuestión se están perdiendo o han desaparecido ya en algunas de estas variedades vernáculas. Este es el caso del dialecto hablado por la fracción occidental de los Huwwāra o el de la ciudad de Oujda. En cuanto a Berkane, el análisis preliminar de nuestros datos apunta a la pérdida total de la interdental sorda /t̪/ y de la interdental sonora /d̪/. En cambio, los ejemplos de la faringalizada sorda /d̪/ son numerosos en el habla de nuestros informantes, alternando a veces con su correspondiente dental /d/. La variación fonética en cuestión parece estar relacionada con la edad del hablante. Es así que /d̪/ es más frecuente en hablantes de mediana edad y en los más mayores. Semejante hallazgo indicaría que la variante /d̪/ se encuentra en regresión en el habla de los jóvenes berkaníes, lo cual se debería a un proceso de convergencia hacia las principales variedades de árabe marroquí. El abandono de otros rasgos del dialecto local vendría a confirmar esta conjetura.

Key words: Berkani Arabic. Moroccan Arabic. Sociolinguistics. Interdental fricatives. Age variable.

Palabras clave: Árabe de Berkane. Árabe marroquí. Sociolingüística. Fricativas interdental. Variable de edad.

1. INTRODUCCIÓN

Along with gender, age can be regarded as one of the most crucial factors to sway linguistic variation within a given speech community¹. Sociolinguists such as Labov and Chambers² have shown how linguistic features are abandoned or maintained along lifespan as speakers change their environment and become exposed to other interlocutors. The main interest of the study of age in relation to language is that it allows us to examine the historical change undergone by a person's speech over his/her lifetime.

In the present study, I intend to look at the correlation between language variation and the age variable within the speaking community of Berkane (North-Eastern Morocco). In order to do so, I chose to focus on a single linguistic variable which is well known in Arabic dialectology for showing a great deal of variation, i.e. interdental fricatives. As will be demonstrated, the treatment of this set of phonemes varies mainly according to the nature of the dialect, but also according to the phonetic environment and the lexical item in which they occur.

Interdental fricatives are merged with their corresponding stops (**t̪* → *t*, **d̪* → *d*, **d̪* → *d̪*) in a significant number of Eastern and Western sedentary Arabic varieties, such as Damascus and Tlemcen (1). Similarly, some Bedouin dialects like the ones spoken across Western Libya and the Mozab region in central Algeria may also follow the same pattern (2).

1. Eckert. "Age as a sociolinguistic variable".

2. Labov. *English in New York city*; Chambers. *Sociolinguistic theory*.

- (1) **taqīl* → *tʔīl* ‘heavy’, **dāba* → *dāb* ‘it melted’, **dalla* → *dall* ‘it remained’ (Damascus)³; **talāta* → *tlāta* ‘three’, **ʔaddana* → *ddən* ‘he called to prayer’, **dill* → *doll* ‘shade’ (Tlemcen)⁴.
 (2) **talāta* → *tlāta* ‘three’, **dahab* → *dhəb* ‘gold’, **dill* → *dull* ‘shade’ (Western Libya)⁵; **taqīl* → *tgīl* ‘heavy’, **dawwāq* → *dawwāg* ‘taster’, **difr* → *dfar* ‘nail’ (Mozab)⁶.

A different phonetic shift can be observed in certain Middle-Eastern varieties, where the segments under study may sometimes surface as sibilants, especially in words borrowed from Classical Arabic. This phenomenon is attested in both sedentary and Bedouin dialects, and is believed to reflect lexical borrowing from Classical Arabic through the intermediary of Turkish, a language in which Arabic loanwords generally exhibit alveolarization of interdental fricatives⁷. Originally, such a pronunciation is likely to be due to the speaker’s misperception of a sound which is absent from his phonological inventory and which they attempt to imitate (3).

- (3) **tānawīyy* → *sānawī* ‘secondary’, **dakiyy* → *zaki* ‘intelligent’, **danna* → *zann* ‘he believed’ (Damascus)⁸, **kaḏālika* → *kizāluḵ* ‘as well’, **dbt* → *ḏbt* → *zabbat* ‘he did a proper job’ (Southern Sinai)⁹.

Conversely, interdental fricatives have been preserved in the overwhelming majority of Bedouin varieties, as well as in some sedentary ones (such as those spoken in Oman) and in what is usually known as North-Mesopotamian Arabic (4).

- (4) **qayḏ* → *gēḏ* ‘summer’ (Nāṣiryah)¹⁰, **danb* → *ḏanb* ‘fault’ (Salt)¹¹, **tamma* → *ṭamm* ‘there is’, **dāhir* > *ḏāhir li* ‘it seems to me’ (Maṣāzīg)¹², **ḡirdān* → *ḡərdōn* ‘rat’ (Mardin)¹³, **dura* → *ḏira* ‘maize’ (Jabal Akhdar)¹⁴.

3. Berlinches Ramos. “Urban Levantine Dialectal Features”, p. 516.

4. Marçais. *Le dialecte arabe parlé à Tlemcen*, pp. 296, 303, 341.

5. Pereira. “Libya”, p. 55.

6. Grand’Henry. *Mzāb*, pp. 12, 122.

7. Cantineau. *Cours de phonétique arabe*, p. 41.

8. Berlinches Ramos. “Urban Levantine dialectal features”, p. 516, note 61.

9. De Jong. “The dialect of the Mzēnih”, p. 61.

10. Ingham. “The dialect of the Euphrates Bedouin”, p. 100.

11. Herin. “Salt”, p. 2.

12. Ritt-Benmimoun. “Dialekt der Maṣāzīg”, p. 276.

13. Grigore. *L’arabe parlé à Mardin*, p. 40.

14. Holes. “Towards a dialect geography of Oman”, p. 460.

However, even in non-merging dialects, one may find that interdentalals are sometimes fronted to labiodentals (**t* → *f*, **d* → *v*, **ḏ* → *ɣ*), a phonetic shift which is said to hint at a certain degree of instability (5)¹⁵.

(5) **talġ* → *falġ* ‘snow’, **miṭla* → *mifla* ‘like’ (Bahrain Shi‘i)¹⁶, **tamma* → *famma* ‘there’, **ḏiʔb* → *vīb* ‘chacal’ (Ammi-Moussa)¹⁷, **tawr* → *fōr* ‘bull’, **ḏubbāna* → *vəbbāne* ‘fly’, **ḏuhr* → *yahor* ‘midday’ (Siirt)¹⁸.

As will be shown later, interdentalals have undergone a phonological merger in Berkani Arabic and the only member of the triad which still can be heard, /*ḏ*/, might also be on the brink of collapse. Thus, my research attempts to answer the following questions:

- a) Is there an age effect on the disappearance of interdental fricatives in Berkani Arabic?
- b) What are the factors that may encourage the abandonment of these sounds in the dialect under study? and what are the factors that may have favoured their maintenance until now?
- c) Are the possible triggers of the stopping of interdentalals in Berkane motivated by pure sociolinguistic aspects or do language internal factors (precarious phonemic contrast) also play an important role?

Before focusing on the issue of interdental fricatives in Berkani Arabic, I shall say a few words on the economy and geographic location of Berkane. The city was built during the French protectorate on the ruins of a little village that developed around the tomb of Sidi Mohand Aberkane, an Islamic jurist and hadith specialist who died in 1464. Berkane is a North-Eastern Moroccan town notable for its singular location in a double border context¹⁹. On one hand, this thriving agricultural centre lies just 23 km west of the border. On the other, it is situated within the Eastern confines of the Rif, that is, on the boundaries of Arabic and Berber speaking areas. Renowned for its oranges²⁰ and for the “foolishness” of its inhabitants²¹, Berkane is home to over 109.000 people (2014 census). Proximity

15. Jansen. *Levelling and diffusion*, p. 114.

16. Holes. “Bahraini dialects”, p. 21.

17. Marçais. *Le dialecte arabe des Ūlād Brāhim de Saïda*, p. 20.

18. Grigore. “L’arabe parlé à Siirt”, p. 228.

19. For a map displaying the geographic situation of Berkane on the Algerian-Moroccan border and at the crossroads between Arabic and Berber, see Behnstedt. “La frontera entre el bereber y el árabe”, p. 12.

20. Berkane lies in one of the nation’s top citrus growing regions, a fact that accounts for the city’s nickname *ṣāsimat l-burtuqāl* “the orange capital [of Morocco]”.

21. In the Moroccan imagination, Berkanis (*bərkāni*, pl. *brākna*) are often depicted as boorish, naive and conservative, and they are the object of jokes mocking of their “foolishness”. The following is an

to the border has historically played a major role in the local economy, with many Berkanis making their living from smuggling goods from Morocco into Algeria and vice versa²².

2. DATA AND METHODOLOGY

My study is based on data gathered during fieldwork conducted in the city of Berkane from 6th to 13th December 2019. This visit was funded by the Spanish research project “Variación dialéctica en las variedades habladas del árabe vernáculo de Marruecos FFI2017-87533-P” (AEI/FEDER, UE) which is coordinated by Montserrat Benítez Fernández. Data was obtained through audio recordings and participant observation. The collected corpus comprises approximately 4 hours of recorded data. My 8 informants are all males who either were born and raised in Berkane or who moved there at an early age²³. Most of them belonged to the working class and had finished secondary school at the time of the survey²⁴. It is worth noting that several informants reported that they could understand but not speak their parents’ mother-tongue, that is to say Berber²⁵. A demographic overview of these speakers is provided in Table 1. As can be seen, the oldest informant was aged 62 at the time of the survey, while the youngest one was 17.

Name	Age	Parents’ first language	Education	Profession
(N)	17	Berber	Secondary school	Student
(O)	25	Arabic	Illiterate	Waiter
(M.D.M)	30	Arabic	Secondary school	Shopkeeper

example of one these jokes: *wāḥad l-barkāni gādi f-əṭ-ṭrīq lqa xamsīn dirham. šāf fiha gāl mša rāsu: šəšrīn dirham l māma, šəšrīn dirham l bāba, šašra drāḥəm l xūya... āna ma yəbqa li wālu! hā! xallīha tamma!* “A Berkani was going on his way when he found 50 dirhams. He looked at the [banknote] and told himself: 20 dirhams will be for my mother, 20 for my father, 10 for my brother... There will be nothing left for me! Let’s leave it here!”.

22. While vegetables, fruit, spirits and hash pour East into Algeria, fuel and food products subsidized by the Algerian government are smuggled into Morocco.

23. I must mention that I failed to gain access to female informants.

24. Only one individual was completely illiterate.

25. Berkane is the historical capital of the Beni Iznasen, a Zenati Berber tribal confederation that occupies the territory lying between the Moulouya and Kiss rivers down to Laayoune Sidi Mellouk. The Berber variety spoken by the Beni Iznasen falls into the category of Eastern Riffian. For a grammatical sketch of this subgroup of Riffian dialects, see Kossmann. *Esquisse grammaticale du rifain oriental*.

(A)	33	Berber	Secondary school	Parking attendant & rapper
(M)	36	Berber	Primary School	Porter in a fruit and vegetable market
(H)	43	Arabic	Primary school	Poulterer
(Y)	55	Berber	Primary school	Unemployed
(J)	62	Berber	Primary school	Retiree

Table 1: Demographic characteristics of the informants.

3. ANALYSIS

In what follows, an analysis of the collected data is laid out. I will first look into the two plain interdentalals, and will then analyse the case of the emphatic one.

3.1. The voiceless interdental */t̪/

As shown by the examples in (6), the realization of the voiceless interdental */t̪/ as a dental stop [t̪] is widespread across the corpus.

(6) *yṣiyydu d-drāri tamma* ‘Boys usually fish there’ (O), *klīna wāḥda wälla tlāta b-əl-qurḍi* ‘We ate one or three each’ (M), *kāna maṭalan ġi ʕīd l-ʕarṣ* ‘For instance, [at that time] there was only the Throne day’ (J), *dāk t-tbag k-ywālli f-əl-axxar b-wāḥad t-taman ġāli* ‘At the end [of the auction], the price of that basket gets very high’ (M).

On the other hand, the data also provides a few instances where */t̪/ surfaces as an actual voiceless interdental [t̪]. This sound was recorded only on four occasions (7). In the first sentence, *stiṭmārāt* ‘investments’ can be seen as a loanword from Modern Standard Arabic²⁶, a fact that could have favoured the occurrence of the interdental in this lexical item since it is usually expected for a speaker to adhere to MSA norms when using this variety²⁷. Nevertheless, it should be recalled that most Moroccan speakers fail to pronounce interdental fricatives when talking in MSA. The second occurrence also consists of a lexical item borrowed from MSA. Yet, unlike *stiṭmārāt*, *maṭalan* ‘for instance’ is a common word used in

26. Henceforth MSA.

27. Al-Wer. “A variationist view of the [d̪] / [d] opposition in modern Arabic dialects”, pp. 26-27.

everyday speech. Furthermore, it occurs in a sentence which does not seem to contain any other formal elements. So, it could be argued that the [t̪] in *maṭalan* reflects a spontaneous realization, not conditioned by the context of communication. The two other words where [t̪] was recorded are much more interesting and, let us say, reliable. One of them is an adverb that is quite common in Morocco, *tamma* ‘there’, and the other is the numeral *tlāta* ‘three’. These two examples may be taken as an evidence that interdental reflexes of */t̪/ still occur in Berkani Arabic, at least marginally.

(7) *kāyan šalla stiṣmārāt* ‘There are lot of investments’ (A), *šāfi. gādi tdir lum d-dfūš dyālum maṭalan tdir lum wāḥad zūž tāš l-ḥwāla* ‘That’s all. You’ll pay them their dowry, for example you can give them two lambs’ (H), *lgāwh b-āš-šahḥ tamma ma kān ḥatta wāḥad* ‘They called him, but no one was there’ (J), *tlāta dyāl duxlāt, d-duktūr l-lūwwəl mənīn dxult gāl l-ḥḥa nta lli mrīd ma-ši hāda* ‘I was admitted to hospital three times. When I saw the first doctor he told my father: it’s you who is sick, not he’ (Y).

3.2. The voiced interdental */d̪/

No instances of the old voiced interdental */d̪/ were recorded. This sound always arises in our data as a dental stop [d], which could indicate that this phoneme has totally faded away in present-day Berkani Arabic (8). Such a finding is in line with what we know so far about the downfall of interdental fricatives in other Arabic dialects, as in that spoken in Oran²⁸, or in Andalusī Arabic²⁹. As a matter of fact, voiced /d̪/ also tends to be the first interdental to show signs of phonological weakening in the latter two varieties.

(8) *hādāk t-ṭbāg k-yātzydu šlīh* ‘They (the friends of the groom) bid for that basket’ (M), *l-fīlūn ntāš š-šārbon k-ykūn ma bīn žbəl w-žbəl [...] k-ybriyye bhāl d-dhāb* ‘The coal seam is located between layers of rock. It usually shines like gold’ (J), *d-drāri dyālna ntāš l-istiqlāl* ‘Our guys from the Istiqlāl party’ (A).

3.3. The emphatic voiced interdental */d̪̣/

Let us turn now to the only interdental which is still alive enough in Berkane to permit a proper sociolinguistic analysis across generations to be conducted³⁰.

28. See Guerrero. “A phonetical sketch”, p. 274.

29. See Corriente. *A grammar of Andalusī Arabic*, p. 22.

30. A linguistic factor that may have helped slow down the demise of /d̪̣/ in Berkani Arabic is the fact that /d̪̣/ was absent from its original phonological inventory. Unlike /t̪̣/ > [t̪̣] and /d̪̣/ > [d̪̣], the shift

Our data reveals an alternation between the emphatic interdental [ɖ] and its dental counterpart [d]. Although the occurrence frequency of the former variant is higher (63%), it seems clear that both phonemes are in free variation. Such an assumption is supported by the fact that variation may occur within one person's speech. In the excerpt in (9), the verb *ɖərɾ* 'to hurt' is pronounced with a dental [d], while it displays an interdental [ɖ] in (10). The same is true for the verb *ɾɖa* 'to be satisfied, to accept' which surfaces both as *nəɾɖa* (11) and *nəɾɖa* (12).

(9) *ɾāh ši hāža ma ʕaʒbətɪ-ʃ w-ɖərɾtɪ ngūla* 'It's something I don't like and it hurts me to say it' (A).

(10) *āna ɖərɾūni ɡi s-snīn ma nəlgā-ʃ ki-ndīr nəglaħħum* 'It's just that my teeth hurt and I couldn't find a way to have them removed' (A).

(11) *ʒbərɪ ʕāwd tāni wāħəd bħāl l-kəlb āna ma nəɾɖā-ʃ* 'Once again, I came across [an employer] who was like a dog, [but] my pride didn't let me [work for him]' (Y).

(12) *w-ʕəndi xūti ma nəɾɖā-ʃ ngūl lum ʕīwɪni* '[I could ask] my brothers [for money, but] I don't humble myself to tell them: give me [some money]!' (Y).

As shown by the following examples, the occurrence of neither of the two variants seems to be constrained by the phonetic environment: *nəɖɖərɪbu-nəɖɖərɪbu* 'we hit', *ɾamaɖān-ɾamaɖān* 'Ramadan', *riyyəɖ-riyyəɖ* 'he rested; stopped', *ħəɖɖər-ħəɖɖər* 'he prepared', *nuɖt-nuɖt* 'I got up'. Furthermore, the variation at hand was also recorded in a loanword such as *manɖa-manɖa* 'wage' (<French *mandat* 'money order').

The /ɖ/-/d/ fusion in Berkane tallies with what Labov³¹ defines as a merger by transfer, that is, a gradual transfer of words from one phonemic category to another. This kind of merger can be evidenced by the fact the phonological change is still in progress.

from /ɖ/ to [d] implies "the introduction of a new phoneme", cf. De Jong. "The dialects of Bedouin tribes in Northwestern Sinai", p. 365.

31. "Merger by transfer is a unidirectional process in which words are transferred gradually from one phonemic category to another", cf. Labov. *Principles of linguistic change*, p. 321.

Old Arabic	Original Berkani Arabic	Present-day Berkani Arabic
Historical */ḏ/	/ḏ/	[ḏ]-[d]
Historical */d/		

Table 2: Merger by transfer affecting /ḏ/ in Berkani Arabic.

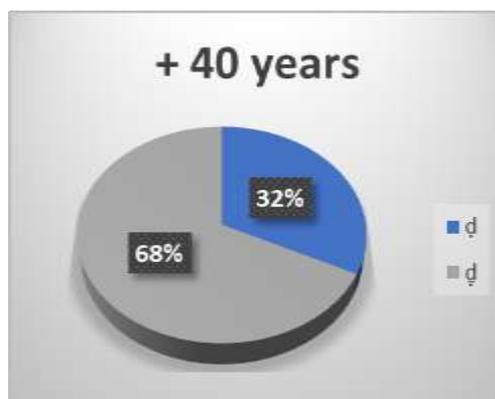
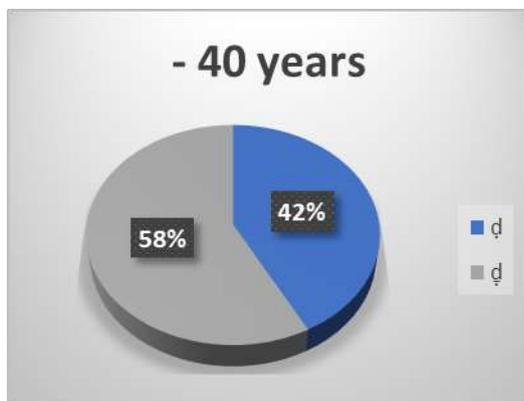
It is worth recalling for the purpose of our study that historical */ḏ/ and */d/ have merged in the overwhelming majority of Arabic dialects, which means that, in dialects lacking interdentalals, [d] usually occurs in words containing an etymological */ḏ/, while in dialects displaying interdentalals it is [ḏ] that stands for an etymological */ḏ/:

	Loss of Interdentalals	Retention of Interdentalals
	Christian Baghdad	Muslim Baghdad ³²
* <i>haḏama</i> ‘he digested’	<i>haḏam</i>	<i>həḏam</i>
* <i>ḏuhr</i> ‘noon’	<i>ḏəhəg</i>	<i>ḏuhur</i>

Table 3: Examples of the merger of */ḏ/ and */d/ in two Arabic dialects.

Returning to the object of our study, my data reveals that the occurrence frequency of the stop [d] in Berkani Arabic is slightly higher among those informants aged under 40.

32. Abu Haidar. *Christian Arabic of Baghdad*, p. 8.



Age	Infor- mant	[d]		[ḍ]	
		Number of occurrences	Frequency %	Number of occurrences	Fre- quency %
- 40	N	1	100	0	0
	O	0	0	10	100
	M.D.M	4	66,6	2	33,4
	A	31	63,2	18	36,8
	M	7	46,6	8	53,4
	H	4	33,3	8	66,7

+	Y	10	41,6	14	58,4
	J	2	22,2	7	77,8

Table 4: Occurrence frequency of [d] and [ɗ] variants in Berkani Arabic.

Such a finding could be interpreted as evidence that the interdental variant [ɗ] is slowly losing ground to its dental counterpart. It is worth noting that the main effect of generation has been observed for some lexical variables such as the use of the terms for ‘go!’, ‘good’ and ‘spoon’. As a matter of fact, speakers under the age of 37 exhibit the use of features that are common to the mainstream dialects of Moroccan Arabic, while older speakers (aged 40 and above) are more prone to employ “typical” North-Western Algerian variants.

Variable	Variant	Occurrence frequency	
		≥ 40 years	< 40 years
go!	<i>sīr</i> (MOR)	0%	34%
	<i>rūḥ</i> (ALG)	100%	66%
good	<i>māzyān</i> (MOR)	0%	16%
	<i>mlīḥ</i> (ALG)	100%	84%
spoon	<i>mṣilqa</i> (MOR)	11%	32%
	<i>mḡarfa</i> (ALG)	89%	68%

Table 5: Lexical variants for “go!”, “good” and “spoon” in Berkani Arabic.

4. How to account for the ongoing trend towards the stopping of Interdental Fricatives in Berkani Arabic?

As might be expected from the available data on other North-Eastern Moroccan dialects and as is usually the case in most Bedouin varieties, interdental sounds partially occur in Berkani Arabic³³. Within a Moroccan context, such a retention may be regarded as an oddity, since, as far as I know, all present-day Moroccan dialects lack interdentals. So, why have North-Eastern Moroccan dialects kept the interdentals, while other Moroccan Bedouin varieties, such as those spoken by the Zaër or the Chaouïa tribes, have lost them? There are two factors that may help us answer this question³⁴:

33. The retention of interdental fricatives is a feature common to several North-Eastern Moroccan dialects, cf. Behnstedt & Benabbou. “Les parlers arabes du Nord-Est marocain”, pp. 17, 41.

34. It should be noted that the majority of the Arabic varieties spoken in North-Eastern Morocco belong to the Hilali-Bedouin type of Maghrebi dialects. It is well known that interdental fricatives were retained in some Moroccan Bedouin dialects till the beginnings of the 20th century. This is the case of the dialect spoken by the rural tribes that lived in the Chaouïa region (surroundings of Casablanca)

a) On one hand, several North-Eastern Moroccan varieties seem to be both genetically and typologically linked to the Bedouin varieties spoken on the Algerian side of the border, which also display interdental fricatives³⁵.

b) On the other, the Berber substratum and adstratum may also have favoured the maintenance of the interdental fricatives in the dialects of this region of Morocco, as these sounds occur as allophones in Eastern Riffian (Beni Iznasen dialect): *tāžalit* ‘queen’, *tāzdat* ‘thin woman’, *tfuyt* ‘sun’, *dar* ‘foot’, *dād* ‘finger’, *lxadmət* ‘work’³⁶.

Strikingly, this trend of preserving the interdental fricatives seems to be being reversed nowadays. So, what are the reasons underlying the stopping of interdental fricatives in this dialect? Among the different constraints that may have encouraged the abandonment of these sounds, we have identified both language-internal and language-external forces.

4.1. Internal factors

4.1.1. Markedness

It has been shown that interdental fricatives are universally marked as compared to other sounds such as stops or sibilants. This markedness is supported by the fact interdental fricatives are rare cross-linguistically³⁷. Furthermore, they tend to be unstable in the languages where they occur, as evidenced by the different phonetic shifts they may undergo. For example, interdental fricatives are sometimes fronted or stopped in some English varieties³⁸.

4.1.2. Precarious phonemic contrast

On the other hand, the number of minimal pairs opposing interdental fricatives and their dental counterparts seems to be extremely meagre in Maghrebi dialects. For instance, in his 1984 description of Tunis Arabic, Singer only reports three mini-

and that of the Zaër, a tribe which settled in the area southwest of Rabat. On this issue, see Aguadé. “El dialecto de Casablanca”, pp. 61-62, and “Le parler des ZSīr”, p. 142.

35. According to Heath (*Jewish and Muslim dialects*, p. 25), “The core dialect of W[u]j[da]-M[uslim] is an extension of Western Algerian dialects, and it is a historical accident that W[u]j[da] is separated by the border from its natural hinterland”. On the genetic affinity between some of the Arabic dialects spoken across North-Eastern Morocco and North-Western Algeria, see Behnsted & Benabbou. “Les parlers arabes du Nord-Est marocain”, pp. 17-18.

36. Spirantization is blocked before /m/, /n/ and /l/, e.g.: *tranimt* ‘reed’. On this issue, see Elkirat. *Spirantization in the Beni Iznasen dialect*. On the role of the Berber substratum/adstratum in the loss of interdental fricatives in Southern Moroccan Bedouin dialects, see Moscoso. “Interdentales”.

37. Brannen. *The perception and production of interdental fricatives*, p. 92; Maddieson. *Patterns of sounds*, p. 45.

38. Cf. Hickey. “The scope of English historical linguistics”, pp. 35-36.

mal pairs for /t̪/ – /t/³⁹, two for /d̪/ – /d/⁴⁰, and none for /d̪/ – /d/⁴¹. Such a precarious phonemic contrast is very likely to have boosted the merger between interdental and stops in certain Maghrebi dialects.

4.2. External factors

Other factors that may be responsible for the phonological change under study have to do with the notion of salience and the linguistic processes that ensue from dialect accommodation⁴².

4.2.1. Dialect convergence

As mentioned previously, the stopping of interdental fricatives is commonplace in Morocco. Only the Ḥassāniyya dialect spoken in the South and some varieties in the far north-east exhibit interdental realizations⁴³. In such a context, it is reasonable to assume a scenario in which Berkani Arabic would be converging towards the mainstream Moroccan varieties (Casablanca, Rabat) which lack interdentals. It is said that in situations of dialect contact the principle of linguistic simplification applies and marked sounds are gradually abandoned in favour of unmarked or less marked ones. This is in line with what has been observed in some recently developed urban centres such as Amman. As a matter of fact, second-generation speakers in the Jordanian capital alternate interdental realizations with their dental counterparts, while third-generation ones show a greater tendency for stopping interdentals⁴⁴. However, the opposite phenomenon is also attested, and we can mention various cases of Arabic dialect contact situations in which the interdentals were maintained. For instance, Ghamdi migrants in the city of Mecca do not accommodate to the local merging dialect and tend to keep the interdentals of their native vernacular⁴⁵. This phonological maintenance could be motivated by the positive social values speakers attribute to their native variety. A similar situation can be observed in Glaymin, a Southern Moroccan town where speakers of Ḥassāniyya tell their children not to stop interdentals as Moroccans do⁴⁶. A further example is to be found in Bahrain, where Shi'i speakers stop in-

39. *t̪ābot* 'firm' – *tābot* 'repentant', *t̪amm* 'eighth' – *tamm* 'finish!', *t̪qul* 'to become heavy' – *tqul* (-*li*) 'you tell me', cf. Singer. *Mundart der Medina von Tunis*, p. 42.

40. *drof* 'ell' – *drof* 'millet', *stād̪ən* 'to ask for permission' – *stādən* 'to invite', cf. Singer. *Mundart der Medina von Tunis*, p. 42.

41. *Idem*, p. 43. It should be recalled that, as is usually the case in the overwhelming majority of non-merging dialects, historical */d/ systematically arises as [d̪] in Tunis Arabic.

42. On the notion of salience, see Trudgill. *Dialects in contact*, pp. 13-14.

43. Heath. *Jewish and Muslim dialects*, pp. 131-132.

44. Al-Wer. "The Amman dialect", pp. 560-561.

45. Alghamdi. "Mecca", p. 42.

46. Taine-Cheikh. "Les hassanophones du Maroc", p. 97.

terdentals when using their communal dialect, but pronounce them when in public situations. Such a variation is believed to be induced by the fact Shi'i speakers perceive their native dialect as having lower prestige⁴⁷.

4.2.2. *Stigma*

Another sociolinguistic factor that may have fostered the gradual collapse of interdental fricatives in Berkani Arabic is related to the high salience of these sounds. Given that interdental realizations are uncommon in Morocco, it is not unrealistic to assume that their gradual regression in Berkani Arabic is due to linguistic stigmatization. Nonetheless, we could not find any example of Arabic dialect in which the set of phonemes under study bears linguistic stigma⁴⁸.

5. CONCLUSIONS

In this paper I have examined the change in the use of the interdental fricatives in relation to age among speakers of Berkani Arabic. The results of my survey suggest that younger speakers tend to stop */ð/ more than older ones. Furthermore, they reveal that plain interdentals have almost totally faded away in Berkani Arabic, while the emphatic one is still relatively frequent and widespread throughout the corpus. The following conclusions may be drawn from the present study:

5.1. Our data on Berkane mimics the situation described for other dialects in the region (Oujda⁴⁹, Huwwāra⁵⁰), that is, there is a sharp decline in the use of interdental fricatives.

5.2. It would be worth considering whether the notion of phonological merger is suitable for explaining the stopping of interdental fricatives in Moroccan vernaculars. Phonemic contrast actually seems to be extremely weak in non-merging Maghrebi dialects, but a more in-depth study is necessary to check whether minimal pairs have existed diachronically.

5.3. As shown by the analysis of other variables, linguistic change in Berkane may be primarily motivated by a process of convergence whereby speakers of peripheral vernaculars gradually adopt features from the dominant central varieties, namely Casablanca-Rabat⁵¹.

47. Holes. *Language variation and change*.

48. Emphatic/ð/ is said to be looked down upon in some Levantine varieties and so it is avoided by some speakers, but the same is not true for plain /t/ and /d/, cf. Al-Wer. "A variationist view of the [ð] / [d] opposition in modern Arabic dialects", p. 25.

49. Benítez Fernández. "Le parler arabe d'Oujda"; Behnstedt & Benabbou. "Les parlers arabes du Nord-Est marocain", p. 5.

50. Behnstedt & Benabbou. "Les parlers arabes du Nord-Est marocain", p. 17.

51. On this issue, see Ech-Charfi. "Dedialectalization".

REFERENCES

- ABU HAIDAR, Farida. *Christian Arabic of Baghdad*. Wiesbaden: Otto Harrassowitz, 1991.
- AGUADÉ, Jordi. “El dialecto de Casablanca a comienzos del siglo XX”. In J. AGUADÉ; Á. VICENTE and L. ABU-SHAMS (eds.). *Sacrum Arabo-semiticum. Homenaje al profesor Federico Corriente en su 65 aniversario*. Zaragoza: Instituto de Estudios Islámicos y del Oriente Próximo, 2005, pp. 55-69.
- . “Un dialecte maŕqilien: le parler des Zŕir au Maroc”. In J. AGUADE; P. CRESSIER, and Á. VICENTE (eds.). *Peuplement et Arabisation au Maghreb Occidental (Dialectologie et Histoire)*. Madrid-Zaragoza: Casa Velázquez-Universidad de Zaragoza, 1998, pp. 141-150.
- ALGHAMDI, Najla. “Variation and change in a contact setting in Mecca”. *US-China Education Review A*, 11, 1 (2021), pp. 40-47.
- AL-WER, Enam. “New-dialect formation: the Amman dialect”. In Ch. LUCAS & S. MANFREDI (eds.). *Arabic and contact-induced change*. Berlin: Language Science Press, 2020, pp. 551-566. <https://langsci-press.org/catalog/view/235/2545/1853-1>. [consultado el 31/07/2022].
- . “Variability reproduced: a variationist view of the [d̥] / [d] opposition in modern Arabic dialects”. In M. HAAK; R. DE JONG & K. VERSTEEGH (eds.). *Approaches to Arabic dialects. A collection of articles presented to Manfred Woidich on the occasion of his sixtieth birthday*. Leiden-Boston: Brill, 2004, pp. 21-31.
- BEHNSTEDT, Peter & BENABBOU, Mostapha. “Données nouvelles sur les parlers arabes du Nord-Est marocain”. *Zeitschrift für Arabische Linguistik*, 44 (2005), pp. 17-70.
- . “La frontera entre el bereber y el árabe en el Rif”. *Estudios de Dialectología Norteafricana y Andalusí*, 6 (2002), pp. 7-18. <https://www.uco.es/ucopress/ojs/index.php/edna/article/download/8301/7777>. [consultado el 31/07/2022].
- BENÍTEZ FERNÁNDEZ, Montserrat. “Variation linguistique dans le parler arabe d’Oujda: nord-est marocain vs. communauté marocaine dans la diaspora”. *Dialectologia*, 18 (2017), pp. 1-18. <https://raco.cat/index.php/Dialectologia/article/view/321769>. [consultado el 31/07/2022].
- BERLINCHES RAMOS, Carmen. “Urban Levantine dialectal features and the Levantine-Mesopotamian dialect continuum in the light of the dialect of Damascus”. *Arabica*, 66 (2019), pp. 506-538.

- BRANNEN, Kathleen J. *The perception and production of interdental fricatives in second language acquisition*. Montréal: Unpublished PhD thesis, McGill University, 2011. https://www.academia.edu/13053107/The_Perception_and_Production_of_Interdental_Fricatives_in_Second_Language_Acquisition. [consultado el 31/07/2022].
- CANTINEAU, Jean. *Cours de phonétique arabe. Suivi de notions générales de phonétique et de phonologie*. Paris: C. Klincksieck, 1960.
- CHAMBERS, Jack K. *Sociolinguistic theory. Linguistic variation and its social significance*. Malden-Oxford: Blackwell, 1995.
- CORRIENTE, Federico. *A descriptive and comparative grammar of Andalusí Arabic*. Leiden-Boston: Brill, 2013.
- DE JONG, Rudolph. "The dialect of the Mzēnih of Southern Sinai". *Estudios de Dialectología Norteafricana y Andalusí*, 8 (2004), pp. 59-79. <https://www.uco.es/ucopress/ojs/index.php/edna/article/download/8276/7752>. [consultado el 31/07/2022].
- . "Examples of levelling and counterreactions in the dialects of Bedouin tribes in Northwestern Sinai". *Égypte/Monde arabe*, 27-28 (1996), pp. 355-382. <https://journals.openedition.org/ema/1955>. [consultado el 31/07/2022].
- ECH-CHARFI, Ahmed. "Dedialectalization of Moroccan Arabic". *Bassamat*, 4 (2009), pp. 49-78. https://www.academia.edu/10830443/Dedialectalization_of_Moroccan_Arabic. [consultado el 31/07/2022].
- ECKERT, Penelope. "Age as a sociolinguistic variable". In F. COULMAS (ed.). *The handbook of sociolinguistics*. Oxford: Blackwell, 1997, pp. 151-167.
- ELKIRAT, Yamina. *Spirantization in the Beni Iznasen dialect. Diachrony and synchrony*. Rabat: DES thesis, Université Mohammed V, 1987.
- GRAND'HENRY, Jacques. *Les parlers arabes de la région du Mzāb (Sahara algérien)*. Leiden: E.J. Brill, 1976.
- GRIGORE, George. "Le système consonantique de l'arabe parlé à Siirt (Turquie)". *Revue Roumaine de Linguistique*, 55, 3 (2010), pp. 223-235.
- . *L'arabe parlé à Mardin: Monographie d'un parler arabe «périphérique»*. Bucharest: Editura Universităţii din Bucureşti, 2007.
- GUERRERO, Jairo. "A phonetical sketch of the Arabic dialect spoken in Oran (North-Western Algeria)". In G. GRIGORE & G. BIȚUNA (eds.). *Arabic varieties: far and wide. Proceedings of the 11th International Conference of AIDA-Bucharest, 2015*. Bucarest: Editura Universitatii din Bucuresti, 2016, pp. 273-280.

- HEATH, Jeffrey. *Jewish and Muslim dialects of Moroccan Arabic*. London-New York: Routledge-Curzon, 2002.
- HERIN, Bruno. "Salt, dialect of". In L. EDZARD & R. DE JONG (eds.). *Encyclopedia of Arabic language and linguistics*, online edition. Leiden: Brill, 2004. https://www.academia.edu/1429283/The_dialect_of_Salt_Jordan_. [consultado el 31/07/2022].
- HICKEY, Raymond. "The scope of English historical linguistics". In L. BRINTON (ed.). *English historical linguistics: approaches and perspectives*. Cambridge: Cambridge University Press, 2017, pp. 12-41.
- HOLDS, Clive. "Towards a dialect geography of Oman". *Bulletin of the School of Oriental and African Studies*, 52, 3 (1989), pp. 446-462.
- . *Language variation and change in a modernising Arab state: The case of Bahrain*. London: Kegan Paul International, 1987.
- . "Bahraini dialects: sectarian differences and the sedentary/nomadic split". *Zeitschrift für Arabische Linguistik*, 10 (1983), pp. 7-38.
- INGHAM, Bruce. "The dialect of the Euphrates Bedouin, a fringe Mesopotamian dialect". In E. AL-WER & R. DE JONG (eds.). *Arabic dialectology. In honour of Clive Holes on the occasion of his sixtieth birthday*. Leiden-Boston: Brill, 2009, pp. 99-108.
- JANSEN, Sandra. *Levelling and diffusion in the Cumbrian city dialect of Carlisle*. Tübingen: Gunter Narr, 2018.
- KOSSMANN, Maarten. *Esquisse grammaticale du rifain oriental*. Paris-Louvain: Éditions Peeters, 2000.
- LABOV, William. *Principles of linguistic change. Internal factors*. Vol. 1. Oxford: Wiley-Blackwell, 1994.
- . *The social stratification of English in New York city*. Washington: Center for Applied Linguistics, 1966.
- MADDIESON, Ian. *Patterns of sounds*. Cambridge: Cambridge University Press, 1984.
- MARÇAIS, William. *Le dialecte arabe des Ūlād Brāhīm de Saïda (Département d'Oran)*. Paris: H. Champion, 1908.
- . *Le dialecte arabe parlé à Tlemcen. Grammaire, textes et glossaire*. Paris: Ernest Leroux, 1902. <https://archive.org/details/LeDialecteArabe>. [consultado el 31/07/2022].

- MOSCOSO, Francisco. “Interdentales y fricativas en los dialectos árabes de Marruecos. Hipótesis sobre la pérdida de interdentales en los dialectos de tipo beduino”. *Al-Andalus Magreb*, 10 (2002-2003), pp. 153-166.
- PEREIRA, Christophe. “Libya”. In K. VERSTEEGH; M. EID; A. ELGIBALI; M. WOIDICH & A. ZABORSKI (eds.). *Encyclopedia of Arabic language and linguistics*. Leiden-Boston: Brill, 2008, t. III, pp. 52-58.
- RITT-BENMIMOUN, Veronika. “Witze und Anekdoten im arabischen Dialekt der Maṛāzīg (Südtunesien)”. *Wiener Zeitschrift für die Kunde des Morgenlandes*, 95 (2005), pp. 259-317.
- SINGER, Hans R. *Grammatik der arabischen Mundart der Medina von Tunis*. Berlin-New York: De Gruyter, 1984.
- TAINÉ-CHEIKH, Catherine. “Les hassanophones du Maroc entre affirmation de soi et auto-reniement”. *Peuples Méditerranéens*, 79, avril-juin 1997 (1999) “Langues et stigmatisations sociales au Maghreb”, pp. 85-102. <https://halshs.archives-ouvertes.fr/halshs-00460907/document>. [consultado el 31/07/2022].
- TRUDGILL, Peter. *Dialects in contact*. Oxford: Blackwell, 1986.