Features of Arabic-French code-switching in Morocco

A sociolinguistic case study on intra-sentential code-switching in Morocco

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Abstract

This Master's thesis is a sociolinguistic case study about intra-sentential code-switching, also known as code-mixing, between colloquial Moroccan Arabic and French. The data is collected by arranged interviews with focus groups consisting of university students in Rabat, Morocco, in order to investigate the trends and the extent of the occurrence of French in speech situations where intra-sentential code-switching between colloquial Moroccan Arabic and French is present. The hypotheses are based on findings of previous research conducted on code-switching in North Africa by Bentahila (1983a/b), Bentahila & Davies (1983, 1995), and Sayahi (2011a/b, 2014).

The most important independent variables in the study are gender and field of education through five different focus groups consisting of participants from five different fields of study, including both the fields of humanities and sciences. This study investigates French verbs, whether adapted into colloquial Moroccan Arabic verb morphology patterns or not, the occurrence of numerals, whether used in Arabic or in French, the realisation of the phoneme /r/ in French words, whether French, guttural [ʁ] or alveolar trill [r], the role of code-switching in repetition and rhetorical emphasis, as well as examining whether there is a difference in the frequency and amount of intra-sentential code-switching performed by male and female speakers and the different focus groups.

The analysis provides examples of the examined phenomena, offering an insight to what intra-sentential code-switching in the Moroccan context may look like. The results show that all the features of intra-sentential code-switching mentioned above occur in the data: the usage of French verbs being adapted into colloquial Moroccan Arabic exceeds the amount of cases of code-switching with French verbs; the usage of numerals in Arabic exceeds the usage of numerals in French; the pronunciation of the phoneme /r/ in French words differs between male and female speakers, as the female speakers use more French, guttural [ʁ] while the male speakers use more alveolar trill [r], yet the language of instruction being French for certain participants significantly had an impact on the realisation of the phoneme. Furthermore, the data presents in total 16 cases of repetition reached by code-switching, and the analysis of the independent background variables shows differences between groups regarding both gender and field of education: the male participants used more French verbs than the female participants, whereas female participants provided more cases of French numerals and the French, guttural [ʁ] when pronouncing French words with /r/ in comparison to the male participants. Finally, the field of education certainly is proven to have an impact on the participants' likelihood to use French.

Key words: code-switching, sociolinguistics, Morocco, Arabic, French, focus group interview

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1. Introduction

1.1. Introduction

Code-switching, broadly defined as the "alternate use of two or more languages in the same utterance of conversation" (Fishman 1999, p. 147), is an extensively studied topic that often is a result of bi- or multilingualism. Regarding sociolinguistics in the North African perspective, code-switching is a well-studied, frequently occurring phenomenon known to many, and a significant feature of the local way of speech. It is worth mentioning that the phenomenon is not unique to North Africa alone; code-switching occurs in numerous bi- or multilingual societies where two or more languages or varieties of a language are used simultaneously (Gardner-Chloros 2009, p. 4). Moreover, Gardner-Chloros (2002) suggests that "The study of *why* and *how* people code-switch provides insights about many aspects of language as well as speech." (ibid., p. 4). Due to the chequered history of North Africa, as well as the international contact and natural mobility among people throughout the times, the languages in use in the Maghreb[1] are many. The colonial era has left its traces in the society which has resulted in extensive code-switching between the colloquial Arabic varieties and French, as Sayahi (2011b) suggests: "the continuing presence of French in Tunisia, Algeria, and Morocco have contributed to considerable competence in French that has allowed colloquial Arabic and French to coexist in several domains and, inevitably, often end up being used in the same conversation." (Sayahi 2011b, p. 114). Therefore it should be noted that these two languages have existed side by side for such a long time that code-switching hardly is something new, but on the contrary, has been used for generations, and, as is natural for languages, keeps changing and developing (Ziamari 2007, p. 287). Moreover, contact between domestic and foreign languages, as well as different varieties of Arabic, existed already long before the French protectorate in North Africa (Sayahi 2011b, p. 128).

Bentahila & Davies (1983b) consider this variety of language reached by code-switching as a third 'code', its own form of a language, *un mélange,* between the colloquial Arabic varieties and French (Bentahila & Davies 1983b, p. 303). Therefore, it is not only interesting, but also highly relevant to conduct a sociolinguistic study in the Maghreb in order to see what the tendencies of code-switch-

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[1] Maghreb is a term used to refer to Algeria, Morocco and Tunisia (Sayahi 2014, p. 16). Fishman (1999, p. 382) considers even Mauritania to be a part of the Maghreb countries, at least, linguistically speaking.

ing among a few university students are: it is a representation of the trends of code-switching of a certain time, in a certain space, by certain speakers.

During the three months of conducting the study in Rabat, Morocco, extensive code-switching could be heard and seen in various contexts in the local society: public transportation, local markets, interaction with people, lectures, seminars and even doctoral dissertations etc. are just examples of the many settings where both intra- and inter-sentential[2] code-switching could be heard. Plenty of the features of Arabic-French code-switching described in previous studies (see chapter 1.4.) were found to be realised in practice.

1.2. Aim of research

Based on previous research conducted on North-African sociolinguistics and code-switching one can expect to find various types of intra-sentential Arabic-French code-switching and even predict its frequency of use to vary between the participants in this study, both regarding gender and field of study. The aim of this study is to examine how and to what extent certain features of intra-sentential code-switching between colloquial Moroccan Arabic and French occur among university students at Mohammed V University of Rabat, Morocco. The analysis focuses on intra-sentential code-switching, also known as code-mixing. The study also investigates whether any specific factors can be observed to affect the distribution of intra-sentential code-switching, as well as how and when the phenomenon takes place, and whether the gender and field of study impact the likelihood of its occurrence. Based on previous research, as will be presented below in chapter 1.4., one can await to find intra-sentential code-switching regarding French verbs; the usage of numerals both in Arabic and in French and emphasis and confirmation reached by code-switching. Moreover one can expect to find a difference in the occurrence of intra-sentential code-switching between male and female speakers, as well as between students from different fields of study. The present study of the male-female distinction regarding intra-sentential code-switching also pays attention to the realisation of the phoneme /r/ in French words, regarded as a factor distinguishing male vs. female speech by e.g. Sayahi (2011b), Ziamari (2007) and Walters (2011), and whether a hypothesis which has been suggested by the previously mentioned scholars regarding the pronunciation of /r/ in French words is applicable. Apart from investigating whether the main variables, i.e. gender and field of study, have

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[2] For the difference between intra- and inter-sentential code-switching, see chapter 2.1.

an impact on the nature and occurrence of intra-sentential code-switching, the focus is on French verbs, whether adapted into Moroccan Arabic or not, usage of both ordinal and cardinal numbers, as well as on emphasis and rhetorical confirmation reached by repetition through code-switching. The research questions were therefore formulated according to the findings and results of previous studies regarding code-switching between colloquial North-African Arabic varieties and French. The aim of this study was hence to examine whether the features described above occur in the recorded material or not, and if yes, to what extent.

This study also aims to provide information about the occurrence of features of intra-sentential Arabic-French code-switching. The data (i.e. audio files, see chapter 3.1 Method) analysed comprises to roughly 9 hours in total, yet not all parts of speech contain intra-sentential code-switching and consequently do not provide information of the phenomena that is relevant for the study.

1.3. Limitation of research

This study focuses on a number of features of intra-sentential code-switching, as will be presented in this chapter. The analysed material only presents the occurrence of each phenomenon as they occur in sentences where both Arabic and French are used. The study investigates intra-sentential code-switching between colloquial Moroccan Arabic and French only, even though code-switching between languages other than Arabic and French appear in the recorded data. Neither does the study focus on diglossic code-switching, intra- or inter-sentential, between different varieties of Arabic. Phonetical differences e.g. due to the dialectal varieties in the region, such as the realisation of a prestigiously considered /q/ as a slightly more rural /g/, are also irrelevant for the aim of this study. Words that imply the existence of lexical borrowing rather than reflecting the occurrence of intra-sentential code-switching are also excluded, with the exception of French verbs that are adapted into Moroccan Arabic.[3] Nor will this study focus on the motivations of code-switching.

It is also necessary to mention that it was not possible to reach the specific informants desired in order to serve the purpose of the study in an ideal way, i.e. to be a representation of intra-sentential code-switching among Moroccan university students (see chapter 3.1) – yet the study shall be regarded as a representation of intra-sentential code-switching among university students in Morocco.

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[3] See chapter 3.3. limitations of the chosen method.

Finally, it shall be highlighted that the current data only serves as a case study conducted among certain university students at Mohammed V University of Rabat, and the results of this study shall therefore not be generalised as commonly occurring features of intra-sentential Arabic-French code-switching in Morocco, yet may speak for a possible tendency of the patterns of intra-sentential Arabic-French code-switching.

1.4. Previous studies

Code-switching and diglossia are phenomena that have been extensively studied for several decades around the world in different bi- or multilingual communities, whether the case of groups of immigrants forming their own in-group marking code or the case of countries with colonial history. For validating the aims of this research it is worth taking a look at some of the previous studies on Arabic-French code-switching in the North African context, and mentioning what the results and conclusions of the studies are.

Previous studies, e.g. Bentahila (1983a, 1983b), Bentahila & Davies (1983, 1995), Sayahi (2011a/b, 2014), Daoud (2010), Gabsi (2011), Walters (2011), and Myers-Scotton (2002) show that both intra- and inter-sentential code-switching occur between colloquial North African Arabic varieties and French. Whereas Bentahila (1983b) and Bentahila & Davies (1983, 1995) focus on code-switching and its occurrence in Morocco, Sayahi (2011a/b), Daoud (2010) and Gabsi (2011) write about the situation in Tunisia, and Benrabah (2004) in Algeria. Referring to other countries in the Maghreb is not as far-fetched as one might think; culturally, historically and sociolinguistically the three Maghreb countries share a lot of similarities[4] (cf. Daoud 2010, Gabsi 2011, Sayahi 2011a/b), Benrabah (2004). Sayahi (2014) suggests that the three Maghreb countries due to historical reasons all share a very similar sociolinguistic profile, mentioning that even their language policies are very much comparable (Sayahi 2014, p. 16). Moreover, the diglossic situation and code-switching in the three Maghreb countries have been extensively studied[5], and therefore, in this context, previous research conducted on code-switching in the whole Maghreb is regarded as highly valuable data for this study. The studies (see previous footnote) show that there is a variety of active factors – genera-

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[4] For further reading about the linguistic situation in the Maghreb, see appendix.

[5] E.g. Bentahila (1983a, 1983b), Bentahila & Davies (1983, 1995), Sayahi (2011a/b, 2014), Daoud (2010), Gabsi (2011), Walters (2011), Benrabah (2004).

tion, gender and the field of study, the latter due to the language of instruction – that all have an impact on the likelihood whether an individual tends to code-switch or not, as well as how much, where and in which situations.

French has throughout the modern times been seen as a more prestigious, civilised, modern and liberated language than Arabic, that on the contrary was seen as the language for preserving Arabic identity, nationalism, cultural heritage and traditions (Bentahila 1983a, p. 31). Bentahila (1983a) writes: "Such contrasting attitudes are in fact typical of the kind of diglossic situation which exists in Morocco, in which such qualities as beauty and richness are associated with the high variety [Classical Arabic] but not the low one [Moroccan Arabic]…" (ibid., p. 31). The study even reveals that French was seen as both scientifically richer and more practical than Moroccan Arabic (ibid., p. 32). As the differences between the official and the colloquial Arabic varieties are rather vast, Wardhaugh (2010) claims that "Speakers of Arabic in particular gain prestige from being able to allude to classical sources." (Wardhaugh 2010, p. 85), i.e. for benefitting from the prestige that Classical Arabic carries compared to the 'vulgar' colloquial forms, which corresponds to what El Kirat El Allame et al. (2010) have mentioned about local languages in Morocco: together with Amazigh, the indigenous language of North Africa, colloquial Moroccan Arabic is seen as rather useless in the eyes of many Moroccans, who would rather prefer the more prestigious and useful French instead of the local languages that El Kirat El Allame *et al.* claim to be losing value (El Kirat El Allame, Hajjam & Blila 2010, p. 334). According to the Bentahila (1983a) study, colloquial Moroccan Arabic was seen as a practical language to know since it is the language that one can use in order to communicate with everyone, and therefore an important language for the community.

Bentahila's (1983b, pp. 233-243) study shows that the distribution of intra- and inter-sentential code-switching is not as arbitrary as one first might expect, and therefore provides several examples of the situations in which intra- and inter-sentential code-switching were used. The results show that both types of code-switching can be used to serve various functions that all are important for a bilingual individual to express him- or herself. He suggests that even though some may be perfectly capable of expressing their thoughts in either language, one of the languages is still slightly more readily available for a certain topic; certain terms can be culturally more related to one language over the other, and in such cases one is more likely to borrow the item from the language that the phenomenon referred to is more commonly known, or more often talked about. If French mostly dominates the speech situation, a religious topic would imply switching to Arabic. Likewise, a sub-

ject that could be considered a taboo in the Moroccan society is also highly possible to be addressed to in French. This theory is also supported by Sayahi (2011b, p. 116), who concludes that especially talking about so-called taboo subjects and scientific terminology, as the speaker, who is more likely to be exposed to a certain topic in a certain language, and therefore finds it easier to refer to it in the language that is more familiar and more often used.

Bentahila's (1983b) data reveals that a strong tendency of referring to numerals – whether it be about numbers as such, time or date – in French can be seen (Bentahila 1983b, p. 234). His data also reveals that Arabic 'fillers' are used in order to avoid an unwanted pause in an otherwise French speech situation (ibid., p. 235). Also Sayahi (2011b) presents that there are certain phrases and constructions, such as fillers, interjections and idiomatic expressions, that most often are expressed in French in an otherwise Arabic utterance – Arabic seems to be nearly exclusively the base language in his study. He also writes that talking about matters related to higher education and work allows more code-switching, as speakers may be more used to refer to a certain topic in French, the Arabic colloquial being less readily for a certain concept (Sayahi 2011b, p. 124). A large number of French adverbs, both derived ones, such as 'vraiment', *really*, 'exactement', *exactly*, 'normalement', *normally*, as well as underived ones like 'déjà', *already*, 'enfin', *finally* and 'surtout', *especially* exist in the data analysed in his study (ibid., p. 122). Also code-switched impersonal constructions including the verb 'être', *to be*, e.g. 'c'est impossible', *it is impossible*, and 'c'est vrai', *it is true*, among others, exist to a high extent. Code-switched items akin, according to Sayahi (2011b), could even be classified as a separate category.

Bentahila's (1983b) findings also suggest that code-switching can be used to serve a certain rhetorical function; there are cases when a speaker expresses an utterance first in one language and then repeats the same message, or a part of it, in another (see paragraph below). Emphatically switching between languages was even used to express disagreement with what was said earlier by another participant in a discussion. Switching to another language may also be used to reach a certain sense of drama in a narrative or description (Bentahila 1983b, pp. 233-242).

Bentahila & Davies (1983) focused on the syntax of intra-sentential code-switching and mention that different domains require usage of different languages, e.g. Arabic in a domestic setting and French in a scientific one. Their results show that the occurrence and the features of intra-sentential code-switching are rather free with relatively few limitations (Bentahila & Davies 1983, p. 329).

They also mention that "In French, a pronoun subject is obligatory in sentences containing no other overt subject constituent (with the exception of imperatives). The subject pronouns cliticise to the verb and can never be used apart from it." (ibid., p. 312), noting that Arabic due to the fact that the verbs also contain information about who the one conducting an action is, does not require it (ibid., p. 312). What this means in practice is that Arabic allows the usage of 'ana + VERB', e.g. 'ana klīt', *I ate*, as well as just 'klīt', *I ate*, whereas French requires a personal pronoun, i.e. 'pronoun + VERB', e.g. 'je suis', *I am*. They remark that while code-switching is present in a situation, and in the case of Arabic, "The pronoun subject is usually included only where some special emphasis is required; so the Arabic pronouns are structurally and functionally parallel to the French disjunctive pronouns (*moi, toi,* etc.) rather than to the clitics (*je, tu,* etc.)." (ibid., p. 312); therefore they claim compositions constructed with French personal pronoun + Arabic verb, e.g. 'je nkteb', *I write*, as well as Arabic personal pronoun + French verb, e.g. 'ana pense', *I think*, unacceptable. In order to put emphasis on the desired message, allowed constructions are for example 'ana, je pense', *me, I think*, or 'moi, klit', *me, I ate* (ibid., pp. 312-313).

As mentioned, French has a high status in the Maghreb countries and can be either the language predominantly used for all communication between certain socioeconomic classes, or used in the form of code-switching. Bentahila & Davies (1995) focused on finding out whether the trends regarding code-switching vary between different generations. The results show that all kinds of switches, i.e. all categories of switches that occurred in the analysed material, were present in groups consisting of informants from different generations. It is worth mentioning that the amount of different types of switches vary between generations, yet occur in both, as the researchers conclude: "no switch type is unique to one generation or the other." (Bentahila & Davies 1995, p. 80). The major differences regarding code-switching seemed to be related to their general proficiency in French, as the older generation had achieved the level of balanced bilingualism (as the researchers in question call it), and, due to this, the switches contained longer utterances, or even sentences in French, resulting even in switching to French only, whereas the younger generation switched mostly regarding noun phrases (ibid. pp. 82-83). Daoud (2010) argues that the younger generations tend to use more Arabic (and therefore less French) due to reasons as simple as lower proficiency in French (Daoud 2010, p. 22), and even Sayahi's (2011b) study focusing on the younger generation shows that the dominant type of code-switching among the youth is the intra-sentential one, and that the code-switched elements most often are single nouns as well as noun phrases, with fewer cases of inter-sentential code-switching. Bentahila & Davies's (1995) study revealed that the generation

even has an impact on the likelihood of using French verb stems that are adapted into the colloquial Moroccan Arabic verb morphology patterns (see next paragraph).

Bentahila & Davies (1983) present occasions of French verb stems adapted into the colloquial Moroccan Arabic verb morphology patterns, and conclude in Bentahila & Davies (1995) that the young generations have a "strong tendency to take French verb stems and attach Arabic grammatical morphemes (markers of tense, person and number) to them." (Bentahila & Davies 1995. p. 84). The latter study shows that the verbs constructed this way are in many cases related to technical terminology that – possibly due to French being the language of instruction in the field of science – is easier for a speaker to reach. On the contrary, the older generation seemed to prefer using regular French verbs according to French structure in case usage of technical terminology was required (ibid. p. 85). Whereas Bentahila & Davies (1983, 1995) seem to treat such verbs as items of code-switching, other researchers, such as Poplack & Meechan (1995) consider these as loanwords (see chapter 2.1. Code-switching and chapter 2.2. Lexical borrowing).

Regarding code-switching and gender, a finding that is described in Sayahi (2011b) is that women seem to have a tendency to code-switch more than men when inserting French in their Arabic, which supports a former theory of "franco-arabe masculin et franco-arabe féminin" (Sayahi 2011b, p. 117). However, there seem to be other differences in the linguistic behaviour between the two genders as well: Sayahi (2011b, 2014) claims that the pronunciation of French among Maghrebi speakers seems to vary between male and female speakers; women seem to have the tendency to produce more French-like uvular /r/ than male speakers (Sayahi 2014, p. 45), accompanied by Ziamari (2007), claiming that Moroccan male speakers "express their masculinity by rolling their /r/ in French" (Ziamari 2007, p. 285) as well as to "mark the gender difference" (ibid., p. 286). Ziamari (2007) writes that male speech usually contains a lot of regional influence whereas female speakers tend to try to achieve as standard French pronunciation as possible (ibid., p. 285). She claims the speech of Moroccan male speakers in general to be more likely to be influenced by their local colloquials, whereas female speakers, depending on their background, tend to neutralise their speech, unless in specific cases such as speaking a dialect that is considered somewhat prestigious (ibid., p. 278). Gendering the usage of French in Tunisia has been extensively studied by Walters (2011).

Moreover, Sayahi's (2011b) study focused on the differences in the occurrence of code-switching between different educational groups, proving that individuals that perceived higher education had

higher competence in French, yet noting that "education seems to play a role in differentiating the participants not as much with regard to the degree of complexity of their code-switched utterances but rather in the overall frequency of code-switching." (Sayahi 2011b, p. 126). His study also presents that especially in a school environment topics related to education and administration play a major role in allowing code-switching due to the topics more often, if not predominantly, been talked about in French (ibid. p. 124). Also individual factors, e.g. a person's background and exposure to one language over the other, play a major role in a person's competence in French (ibid. p. 127), which naturally is applicable for Arabic as well.

Myers-Scotton (2002) mentions that in Arabic-French code-switching, Arabic being the so-called base language, also known as Matrix Language[6], there is a grammatical harmony between masculine and feminine as well as number regarding the articles and so called determiners and demonstratives (Myers-Scotton 2002, pp. 113-114). What this means in practice is that if an Arabic article or a determiner is followed by a noun in French, the article and the determiner agree with the gender of the French noun. She also writes that the 'typical' structure of a phrase including a determiner "consists of two elements, the demonstrative and a determiner (e.g. *dak l-* + N [noun])." (ibid., p. 114), e.g. 'dak l-prof', *that professor*. Bassiouney (2009) concludes that when code-switching between Arabic and European languages occurs, there are certain patterns that seem to be often repeated, e.g. gender agreement between the foreign nouns and the Arabic modifier adjectives (Bassiouney 2009, p. 35-36). The French nouns are often "inserted together with the French definite article, like *l'anemie*." (Bassiouney 2009, p. 35), a phenomenon that occurs in Moroccan, Algerian and Tunisian Arabic varieties, yet with a twist, so to say: the fact that the French definite article (*le*, *la*, especially before a vowel when used as *l'*) and the North African colloquial Arabic definite article (*l-*) are very similar makes it rather difficult to distinguish whether the article (*l'* or *l-*) implies the usage of French or Arabic. Bassiouney (2009) even exhibits the existence of "English head nouns and Arabic modifier adjectives where the adjective shows gender agreement with the Arabic equivalent of the noun" (ibid., p. 36), providing examples such as "*at-temperature munxafiḍa[7]*" (ibid., p. 36), which in this case is in English but perfectly applicable in French too.

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[6] For further reading, see Myers-Scotton, Carol (2002). *Contact linguistics: bilingual encounters and grammatical outcomes*. Oxford: Oxford University Press

[7] The 'x' here stands for 'خ', in this study transliterated as 'ḫ'.

1.5. Problem definition

1.5.1. Hypothesis

After presenting the results of previous studies it should be evident that one can expect to find intra-sentential code-switching among university students at Muhammed V University of Rabat. Throughout the whole study one can predict to find differences in the occurrence of the analysed phenomena between male and female speakers, as female speakers are suggested to code-switch more than male speakers. Likewise, phonetical differences regarding the realisation of the phoneme /r/, whether guttural [ʁ] or alveolar trill [r], when pronouncing French words are most likely to be found, with the assumption that female speakers produce more cases of French [ʁ] while male speakers produce more cases of [r]. One can also expect the results to vary between different focus groups due to the impact of the language of instruction, as the students in the field of humanities due to the language of instruction being Arabic are more exposed to Arabic and therefore more likely to use more Arabic, whereas their peers, students in the field of science, are expected to use higher amounts of French due to scientific subjects being taught in French. Finally, one can expect to find usage of both cardinal and ordinal numbers in French and in Arabic, with a previously recorded tendency to refer to time and date in French in an otherwise Arabic speech situation, French verb stems into which a speaker attaches Moroccan Arabic morphemes, as well as usage of repetition and rhetorical confirmation or emphasis reached by code-switching.

The study was conducted with the aim of testing the hypotheses that were formed according to previously recorded features of intra-sentential Arabic-French code-switching[8].

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[8] For the difference between intra- and inter-sentential code-switching, see chapter 2 below.

2. Theory

2.1. Code-switching

Before going through the concept of code-switching it is worth clarifying what is meant with the term *code*. Speaking of variations of a language, Wardhaugh (2010) encourages using the term *code* due to its neutrality, since "Terms like *dialect*, *vernacular*, *language*, *style*, *standard language*, *pidgin*, and *creole* are inclined to arouse emotions" (Wardhaugh 2010, p. 84), whereas *code*, being a more neutral term, "can be used to refer to any kind of system that two or more people employ for communication." (ibid., p. 84). Therefore the term can be "understood as a neutral umbrella term for languages, dialects, styles/registers etc." (Gardner-Chloros 2009, p. 11). Thus, code-switching can be understood as switching, not only regarding a verbal code, but any form of communication between people. Fishman (1971) considers the term *variety* to be a neutral term when referring to "a kind of language" (Fishman 1971, pp. 21-22), which also is applied in this study, when talking about different varieties of Arabic.

Let us remark that even though code-switching usually is referred to when talking about bilingual individuals and communities, the phenomenon may as well be present and used by monolinguals; in those cases the switches happen "between dialects, registers, levels of formality, intonations etc." (Gardner-Chloros 2009, p. 4). It is also worth noting that code-switching is the outcome of extensive language contact resulting in bilingualism and accordingly a highly urban phenomenon (Ziamari 2007, p. 276). Being aware of the history of North Africa, the focus of this study is on Arabic-French code-switching as a result of language contact. Likewise it may be worth highlighting that this study focuses on bilingual, i.e. Arabic-French, code-switching.

Code-switching can be broadly defined as the "alternate use of two or more languages in the same utterance of conversation." (Fishman 1999, p. 147). Poplack & Meechan (1995) define code-switching as "the juxtaposition of sentences or sentence fragments, each of which is internally consistent with the morphological and syntactic (and optionally, phonological) rules of its lexifier language (Poplack & Meechan 1995, p. 200). Wardhaugh's (2010) definition of code-switching is that "Code-switching (also called code-mixing) can occur in conversation between speakers' turns or within a single speaker's turn. In the latter case it can occur between sentences (inter-sententially) or within a single sentence (intra-sententially)." (Wardhaugh 2010, p. 98). Muysken (2001) finds it

valuable to differentiate between these two different types and therefore prefers to use the term code-switching for inter-sentential switches and code-mixing for intra-sentential switches (Muysken 2001, p. 3-4). In order to separate code-switching from code-mixing he defines the latter as "to refer to all cases where lexical items and grammatical features from two languages appear in one sentence." (Muysken 2001, p. 1), whereas he defines code-switching as "rapid succession of several languages in a single speech event" (Muysken 2001, p. 1). Code-switching, therefore, according to him shall be used to describe the alternation *between* utterances or sentences, not *within* them. It shall be specified that the features analysed in the current study represent intra-sentential code-switching and variation between languages, or *codes*, achieved by it. Therefore it is worth noting that the current study only focuses on intra-sentential code-switching, i.e. code-mixing, as defined by Muysken (2001).

Wardhaugh (2010), Bentahila (1983b, 2008) Bentahila & Davies (1983, 1995), Sayahi (2011b) and Bullock & Toribio (2009) use the term code-switching in order to refer to both inter-sentential and intra-sentential code-switching. Indeed, it occurs that several names for the phenomenon have been used without necessarily differentiating between the inter- or intra-sentential nature of the switch. All in all the main characteristic seems to be that it is the phenomenon of using more than one language in a speech situation, possibly among bilingual speakers, in which several factors such as environment, other participants, choice of topic etc. may have an impact on which language the speaker uses in order to convey the desired message – even other terms that have been used are e.g. code-shifting and code-changing (Bentahila & Davies 1983, p. 301).

Bentahila (1983b), Bentahila & Davies (1983, 1995) and Wardhaugh (2010), have been questioning the motivations to this linguistic phenomenon, as Bentahila and Davies (1995) pose three questions; whether the extent of code-switching used by a speaker or a community correlates with certain kinds of situations with language contact; whether there is a difference in the patterns of code-switching in different communities caused by a different language contact situation; and why some people code-switch extensively while others do not (Bentahila & Davies 1995, p. 76). The researchers also mention that using French is a tool for the educated population to distinguish themselves from the less educated (ibid. p. 84). What makes it interesting for research is the vast occurrence of code-switching in various cases depending on the situation and the topic discussed, as well as *who* the speaker is and *what* the speaker wants to express, or in certain cases, what is emphasised. What causes the switch to happen and why some bilinguals seem to use it more than others

are topics that raise questions, as seen above. Motivations for using more than one language in a speech situation vary from speaker to speaker, but, as has been studied by many researchers, the patterns of code-switching and the occurrence of it are hardly arbitrary. Moreover, there are various variables that play an important role in the speech situation, forming a speaker's linguistic performance in the situation: domain and the values and rules included and required; situation; type of relationship among the participants; speaker's role in the conversation; time and setting; type of interaction; as well as what other participants say (Fishman (1971, p. 55) – indeed, a great amount of different factors play a role in determining the characteristics of the speech situation (Fishman 1999, p. 147).

2.2. Lexical borrowing

Briefly defined, Heath (1989) writes that the morphological adaptation of a word, e.g. a verb into the colloquial Moroccan Arabic patterns works as a way to differ between cases of code-switching and lexical borrowing, as the adaptation of a word into a language reflects lexical borrowing (Heath 1989, p. 24), not code-switching. Also Bentahila & Davies (1983) argue that lexical borrowing is the case of borrowing linguistic items from one language and adapting them into another. One should be aware of the fact that foreign, especially French words have become frequently used lexical items in the colloquial varieties of Arabic used in North Africa, and therefore a lot of the French vocabulary has become a regular part of the everyday competence of even a monolingual speaker of Arabic (Bentahila & Davies 1983, p. 302). Manfredi, Simeone-Senelle and Tosco (2015) consider lexical borrowing and loanwords to be synonyms, concluding that loanwords indeed have become a part of the language that has adopted the item (Manfredi, Simeone-Senelle & Tosco 2015, p. 2), also mentioning that lexical borrowing can be the result of even a minimal amount of contact with another language, which barely could be regarded as bilingualism (ibid., p. 5).

Heath (1989), Poplack & Meechan (1995) and Bentahila & Davies (1983) mention that determining whether a foreign item is a result of lexical borrowing or code-switching can be rather problematic and somewhat controversial (Heath 1989, pp. 23-24), (Poplack & Meechan 1995, p. 200), (Bentahila & Davies 1983, pp. 302-303), especially due to speakers of Moroccan Arabic having adopted an amount of various French words that therefore belong to the everyday competence of a speaker of the local colloquial (Heath 1989, p. 24). How to know, then, whether a lexical item is being bor-

rowed from another language or whether it is the case of code-switching? As an example, Bentahila & Davies (1983) mention that the phonological adaptation of a word at times can serve as a way to distinguish between borrowed items from code-switching; e.g. "the French word *épicerie* /episəri/ has been borrowed into Moroccan Arabic and adapted to the phonological system of Arabic to become /bisri/; it will therefore be clear from a bilingual's pronunciation whether he is using the borrowed word or switching to use the French one." (Bentahila & Davies 1983, pp. 302-303).

Bentahila & Davies (1983) also consider lexical borrowing as a distinct phenomenon from code-switching, because code-switching for a bilingual speaker occurs for other reasons than lexical borrowing for a monolingual speaker (ibid. p. 302), also mentioning that whereas code-switching typically is related to bilingualism, lexical borrowing may be used by monolinguals (ibid., p. 302). Lexical borrowing may also occur in cases of a language lacking a term, and borrowing therefore becomes necessary – at times a speaker may not know or does not find the right term in one language, and borrowing a lexical item from another language offers the solution (ibid. p. 302). To conclude, they mention that the difference between code-switching and lexical borrowing may also lie in the length of the utterance; whether it is the case of a single-word insertion / borrowing or a longer chain of words; then the latter is most likely code-switching, whereas the former borrowing (ibid., p. 303), but naturally, not necessarily. Also Sayahi (2011b) claims that topics related to work or studies often require usage of a certain language in case a specific code, i.e. the colloquial Arabic variety, lacks a term, or if a concept is easier to be found and used in another code, e.g. French, especially applicable for scientific topics (Sayahi 2011b, p. 124). He also mentions that the case is notably applicable when talking about educational and administrative matters as well as grading system (ibid. p. 124).

For avoiding a possibly imprecise uncertainty between the definitions of code-switching and lexical borrowing, also Poplack & Meechan (1998) consider them as two different phenomena (Poplack & Meechan 1998, p. 132), by claiming that since code-switching "implies *alternation* between two (or more) language systems, (single-word) codeswitches should show little or no integration into another language." (ibid., p. 129), whereas lexical borrowing according to them is the "incorporation of a lexical item from one language into another, with only the recipient system operative." (ibid., p. 129). Therefore, according to Poplack & Meechan (1998), one shall understand code-switching as a phenomenon that does not include any morphological or syntactic adaptation whatsoever but, on the contrary, directly uses the grammatical patterns, syntax, morphology and phonology of the language

from which an item is taken, whereas adoption of loanwords requires morphological and syntactic adaptation of the grammar of the recipient language (ibid., p. 132), (Poplack & Meechan 1995, p. 200).

Poplack & Meechan also conclude results of several previous studies, arguing that "major-class content words such as nouns, verbs and adjectives are the most likely to be borrowed." (ibid., p. 127). They also mention that in code-switched speech the grammar of one language has a stronger impact on the outcome of the material than the other (ibid. p. 127), and point out the importance of the analysed material to be specifically a spoken variety of a language or two (or more) languages due to it being a representation of "structural variability." (ibid., p. 129). Therefore, as a conclusion, one can say that they consider lexical borrowing having being integrated into another language, whereas code-switched items are conditioned by the grammar rules between the languages in question (ibid., p. 127).

Sayahi (2014) argues that lexical borrowing "without a doubt, is the most common linguistic outcome of language contact." (Sayahi 2014, p. 123), and continues that the existence of loanwords is a reflection of the history of a certain language and a nation speaking it, as well as proves the language contact and linguistic progression that took place in the past (ibid., p. 123). Lexical borrowing serves a similar function as code-switching for a more competent speaker; using vocabulary from a more prestigious language in order to show higher social status, especially in developing countries (ibid. p. 125).

As the study focuses on French verbs that are grammatically adapted into colloquial Moroccan Arabic it shall be noted that I consider the verbs akin to be loanwords. Despite the difficulties of categorising such verbs, this study intends to differentiate between French verbs as loanwords and French verbs that imply the occurrence of intra-sentential code-switching. Motivations for inserting French verbs into Moroccan Arabic patterns, as motivations for code-switching in general, may vary, as Bentahila & Davies (1995) argue, claiming that their usage does not seem to reflect a direct ease of communication, but rather the usage of "French building bricks to erect what is clearly marked as an Arabic structure." (Bentahila & Davies 1995, p. 84).

2.3. Gender

Among other factors that play an important role in a person's linguistic performance, gender seems to be regarded as one of the most important variables in sociolinguistics (Gardner-Chloros 2009, p. 82).[9] Previous studies, e.g. Ziamari (2007), Sayahi (2011b), Walters (2011) (see chapter 1.4.) show that gender is an important factor in the field of sociolinguistic studies and equally important regarding language usage and code-switching in the case of Arabic-French code-switching in North Africa, as presented in previous studies (chapter 1.4.). Therefore systematically throughout the whole study, the data from the participants of the two different genders are analysed separately in order to achieve a clear distinction, as one of the aims of this study is to test the hypothesis regarding the suggestion that there is a difference in the linguistic performance between male and female speakers.

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[9] For further reading about women's language usage in Morocco, see Sadiqi, Fatima (2003). Women, gender and language in Morocco. Leiden: Brill.
For a more general source on gender and language, see e.g. Eckert, Penelope & McConnell-Ginet, Sally (2013). Language and gender. 2. ed. Cambridge: Cambridge University Press.

3. Method

3.1. Data collection

In order to guarantee authentic data that reflects the natural language usage of Moroccan individuals as much as possible, the chosen method for carrying out the study was focus group discussion. The approach was both qualitative and quantitative; the focus is to qualitatively observe what kind of linguistic trends in intra-sentential code-switching occur in the language usage among university students in Morocco, as well as to provide quantitative information about the range of the lexical items involved in intra-sentential code-switching used by the informants. The study is therefore a case study, and no generalisations shall be drawn from it.

According to Bullock and Toribio (2009) sociolinguistic interviews and peer group discussions are a way to record naturalistic data (Bullock & Toribio 2009, p. 23). According to them this kind of a setting is a so-called on-line technique, where authentic, natural-like data can be collected and recorded due to the natural way of conversation since "the time course of language processing itself is at stake" (ibid., p. 26), meaning that due to the nature of the situation the need to express one's opinion in time or in the speaker's turn is more important than what language is used. Natural speech over a given topic provides the most authentic data, assuming that the informants themselves 'decide' whether to code-switch or not, and if so, how and when. In this case the switches are "internally generated and constitute true CS [code-switching]." (Bullock & Toribio 2009, p. 34). Therefore the method is considered to be a suitable one to collect as authentic data as possible. The focus group discussions – eight in total – were recorded for further analysis in order to make it possible to go back to the data for creating a corpus and for further analysis. Due to the length of each recording and the amount of work required to carefully go through the analysis for each group, six of the eight recordings were analysed to be used in this study.

Each focus group consists of a number of university students from different fields of study at Mohammed V University of Rabat, Morocco, and the focus groups were formed with the help of a local professor/co-supervisor for the study, as well as her colleagues and other faculty members.[10] The

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[10] Co-supervisors Professor Yamina El Kirat and Laila Mounir together with their colleagues, as well as the faculty of letters at Mohammed V University of Rabat, Morocco.

participants were students from different fields of study and came from different faculties, such as humanities, natural sciences and social sciences, and from different levels of study, i.e. Bachelor, Master and Ph.D. levels. The groups were targeted to include students from either Bachelor or Master levels, but in certain cases the different levels were mixed and a doctoral student joined the discussion as well.[11] The thought behind having participants from the fields of humanities and sciences was that the language of instruction, usually Arabic for humanities and French for science subjects, has an impact on the languages spoken by the students, which therefore would correlate with the amount and the type of code-switching used by the participants. The participants were selected by local professors and teachers who asked their students to contribute with their presence and opinions for a study that a foreign researcher was conducting. The table below provides information about the division of the genders in the groups as well as the average age in each group. Of the original amount of 46 participants, 25 were males and 21 females. As will be presented in chapter 3.3. (Limitations of the chosen method), one of the focus groups, i.e. focus group 5 had to be disregarded from the study. Also a foreign-born male participant in focus group 6 was excluded from the analysis; therefore, the participants analysed in the study are 39: 20 males, 19 females.

Focus Group	Men	Women	Age / average age
1. BA in Italian	3	5	22 - 27 / 24
2. MA in Literature and Comparative Criticism	4	3	25 - 30 / 27
3. MA in Gender Studies	5	3	25 - 52 / 32
4. MS in Renewable Energy	5	4	21 - 29 / 24
5. MS in Finance	4	2	24 - 30 / 27
6. MA in Islamic Studies	3	4	23 - 52 / 33

Table 1: Focus group participants

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[11] In focus group 1 there was a participant who already had finished her MA studies, and one of the participants in focus group 4 was a doctoral student.

As presented earlier, gender is considered an important factor among sociolinguistics, and the aim was therefore to have both male and female informants in each group. The informants were aged between 21 and 52. The desired goal was to form focus groups including only Moroccan individuals which due to the large amount of work required in order to gather eight focus groups, as well as the fact that it was out of the hands of the researcher himself, was not possible. Therefore two of the eight focus groups include a foreign-born participant: in the case of focus group 5 there was a participant from Chad, whereas in focus group 6 a participant of Mauritanian origin, which may or may not have affected the linguistic behaviour of the two groups in question. It is yet worth mentioning that both Arabic and French are widely used in both of the countries of the two foreign-born participants, who also adapted linguistically into the two groups in question as the dominant language in focus group 5 was French and in focus group 6 Arabic; this due to the field of study, language of instruction and therefore exposure to one language over the other. Therefore the foreign background of a participant in the two focus groups did not seem to have a major impact on the linguistic behaviour of the two groups in question, yet being absolutely sure about it is unfortunately impossible. Finally, the linguistic behaviour of these two foreign-born participants did not contain intra-sentential code-switching, which already excludes them from the study: as mentioned, focus group 5 was excluded from the study completely and the foreign-born male participant in focus group 6 as well; this in order to make the research a valid study of Moroccan-French code-switching. The rest of the participants were from different parts of Morocco and Western Sahara.

The focus group discussions and recordings were arranged at the Faculty of Letters at Mohammed V University of Rabat, Morocco. The topics chosen for discussion were currently present in the Moroccan society at that time[12] and were designed according to what was assumed to raise opinions among the participants; therefore the topics involved matters regarding language policies, politics, education, future possibilities and social media. By covering a broad area of topics it was expected that the participants were more likely to actively participate in the discussion, as well as contribute with different kind of language usage depending on the topic[13]. Since the setting of an arranged interview already can be found somewhat artificial it was important to minimise the effect of observ-

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[12] The focus group discussions were recorded in January and February 2015.

[13] Even though the possibility exists, this study does not investigate the influence of the topic discussed and its relation to the occurrence of intra-sentential code-switching.

er's paradox for a more reliable study – therefore the discussions were controlled by a local modera-tor[14] who was in charge of posing questions and making sure all the topics were covered as well as activating each participant so that everyone would actively engage in the discussion and be heard. In order to reduce the impact of a researcher around, the research notes were taken discretely in the background while observing the discussion without participating. The topics chosen for discussion were:

1. The role of colloquial Moroccan Arabic in education
2. Useful foreign languages in order to pursue a career in Morocco
3. Opinions on the new reform in higher education institutes in Morocco
4. Fields of study that have lower opportunities for the future in Morocco
5. Using technology and social media among students in Morocco

Apart from the researcher not participating in the setting, another way for gathering more reliable data the focus groups were not informed about the goal of the study, as being aware of that the participants might either consciously or unconsciously act in a certain way to serve the purpose of the research. Bentahila & Davies (1983) refer to a study in which the participants were informed that the researcher was interested in code-switching, and criticise the approach by saying: "We feel that this approach is undesirable because it may encourage artificiality; through self- consciousness or a desire to please, the speakers may adopt special styles of speech in which the amount, distribution and nature of their code-switches is not representative of that which occurs in their natural everyday speech." (Bentahila & Davies 1983, p. 307). On the contrary, in order to take the focus out of the actual, linguistic aim of the research, the participants were told that the researcher is interested in the informants' opinion on the given topics. If and when they asked, the informants were told to feel free to express their ideas and thoughts in whatever language they felt most comfortable with[15].

Each focus group discussion was targeted to be 90 minutes long, yet due to the nature of discussions and the fact that the situation cannot be fully controlled, some of the recordings were shorter while others were longer: the shortest recording used in this study was 1 hour and 29 minutes long,

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[14] Here I would like to thank my moderator, fellow researcher & Doctoral student Souhaila Khamlichi, who was of great help while doing the recordings.

[15] There were occasions when the participants hesitated with finding a suitable language for the discussion, and at times they struggled with French and asked which language they were supposed to use.

and the longest 1 hour and 48 minutes long; the rest of the recordings vary in between those two limits. The total duration of the recordings is eleven hours, of which roughly nine hours are analysed in this study. The parts of data containing intra-sentential code-switching were transliterated for further analysis (see chapter below).

3.2. Method used in data analysis

As mentioned above, the study also provides quantitative information about the range of linguistic features regarding intra-sentential code-switching between colloquial Moroccan Arabic and French. Therefore it is practical to benefit from a corpus method since it contains a lot of vital key rules for this study, e.g. how people really use language, and provides quantitative information on the distribution of linguistic features.

After recording the data for further analysis, the material was transliterated[16]. Since the purpose of the study is to investigate features occurring in parts of speech where intra-sentential code-switching is present, it was not relevant to transliterate all the recorded material as it would have be even more time-consuming and unnecessary. Nevertheless, all the recordings were carefully gone through while marking and noting where the switches between languages occurred. The parts of discussion in which intra-sentential code-switching is present were transliterated in order to make further analysis possible according to the different research questions. As the focus groups were formed according to a specific field of study, the analysis is done separately for each group. A contrast between male and female speakers is made in each group throughout the study. From the calculations made separately for each group one can proceed to see whether any general features or trends can be observed, as well as if and how their occurrence correlates with the variables. As the study does not focus on pronunciation and phonetical differences apart from the realisation of the phoneme /r/ in French words, but rather on the lexemes in use, transliteration of the material (instead of phonetic transcription) serves the purpose.

The analysis was done by examining the transliterated text carefully and marking where the different kinds of phenomena analysed in this study occur. The remarks and notes were transferred into charts and diagrams presenting the occurrence of each item in order to demonstrate the results of

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[16] Mehdi, Taha, Ismail and Mohamed.

each participant, dividing the different groups as well as male and female speakers into different charts. Thereafter examples regarding the extent of the trends of intra-sentential code-switching are provided, making a clear separation between the male and female participants, as well as between the different groups[17].

Regarding the usage of verbs, the data presents the relation between French verbs, whether adapted into Moroccan Arabic or used as regular French verbs. In order to achieve truthful, comparable results between code-mixed, regular French verbs and French verbs adapted into Moroccan Arabic, even the latter were singled out from the interviews for comparable statistics, even though they do not reflect the existence of intra-sentential code-switching but lexical borrowing. Regarding the usage of numerals, the division is done between ordinal and cardinal numbers used in Arabic when being used as a direct reference to a numeral, and numerals, both ordinal and cardinal, in French. The item 'wāḥəd' as a reference to a random person or as a colloquial indefinite article marker[18] is excluded from the study. The occurrence of repetition and rhetorical confirmation/emphasis reached by code-switching is also presented distinguishing between male and female participants and the different groups, in order to investigate the occurrence and types of the phenomenon.

It shall be mentioned that the amount of male and female participants altogether in the study makes the final results not directly comparable, as the final number of male participants in the analysis is 20 while the total number of female participants is 19. Therefore, in order to present the results in a way that is as close to comparable as possible, each phenomenon analysed in the summary of groups (chapter 5.5.) is divided between the participants, differentiating between male and female participants, in order to provide an average amount of the division of each phenomenon. Some participants provided a lot of code-switches whereas others do not, but for comparable overall image of the occurrence of each phenomenon the average range of the features shall be done – individual cases showing higher or lower amounts of code-switching are provided when presenting the data of the different phenomena analysed in chapters 5.1., 5.2., 5.3., and 5.4..

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[17] Since the analysis provides examples of the features of intra-sentential code-switching occurring in the analysed data, as much respect as possible has been paid to the Moroccan Arabic phonology in the transliterations.

[18] See chapter 4.

Defining the important variables in sociolinguistic research might not always be clear, as Bassiouney (2009) demonstrates; to define community, social class, the difference between code-switching and lexical borrowing, as well as the fine line between the numerous diglossic varieties of Arabic are not necessarily obvious concepts for one to comprehend, and moreover, to define (Bassiouney 2009, p. 5). In this study the distinction between lexical borrowing and intra-sentential code-switching has been somewhat simple, as one can rather easily distinguish a regular, code-mixed French verb from the cases of French verb stems that are adapted in to Moroccan Arabic verb morphology patterns. Phonetics, together with Moroccan Arabic verb morphology prefixes and suffixes were therefore an important factor when distinguishing between the two phenomena, as presented in chapter 2.2.. Other than that, since this study only focuses on university students, the amount of variables was somewhat under control. Therefore the 'hardship' was manageable.

3.3. Limitations of the chosen method

The motivations and active factors that play a role in a situation whether a person is likely to code-switch or not are numerous and may vary between individuals, as presented in chapter 1.4. (Previous research) as well as by Fishman (1971) in chapter 2.1. (Code-switching). Therefore the possibility to draw conclusions is limited, as the amount of individuals basically could be thought to correlate with the amount of motivations whether to code-switch or not, and if so, when, how, why and so on. Moreover, the information that the participants provided of themselves is too limited to generalise the results; the conclusions are more likely to be assumptions facilitated by the tools provided, i.e. the variables among the focus groups as well as arbitrary information that the speakers provided of themselves during the discussions, yet it shall be mentioned that since not all speakers were willing to share their personal background, and in order to treat the participants equally, this study aims to pay attention only to those variables regarding which comparable data from all informants is provided[19]. It shall also be noted that, as the duration of the discussions is not the same, the results between the groups may vary. Moreover, due to the fact that the choice of topic was not a fully controllable variable, as well as too little amount of suitable information being provided by the participants, the impact of the choice of topic on the occurrence of code-switching is not investigat-

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[19] Certain participants talked a lot about their educational background and personal life, whereas most participants did not; to use such information provided by a few speakers only would not give an equal overall image of the participants involved.

ed in this study. Neither will the study focus on the role of the setting, relationships, roles and other important variables in sociolinguistic studies (as presented by Fishman 1971, see chapter 1.1.), as determining their significance was not the aim of this study.

As mentioned in chapter 1.3. (Limitation of Research), the foreign origin of two participants in two different focus groups may also have had an effect regarding the linguistic choices made by the Moroccan-born participants. French verbs that are adverbial constructions or fixed phrases, as presented by Sayahi (2011b) in chapter 1.4., are excluded from the analysis of verbs due to the fact that they can be seen as a separate category and the likelihood of arabicising such constructions is questionable. Likewise, as one of the aims of the study is to investigate the occurrence of French verbs, whether they are used as regular French verbs or as adapted into colloquial Moroccan Arabic verb morphology patterns, including verbs such as 'c'est', *it is*, 'c'est pas', *it is not*, etc. is not applicable as the verb 'être', *to be*, in the present tense usually does not exist in Arabic; including such verbs could lead to false statistics regarding the occurrence and usage of regular French verbs in relation to French verbs that are adapted into Moroccan Arabic. Also other, previously documented features found in Arabic-French code-switching, such as fillers, interjections, idiomatic expressions, as well as determiners and demonstratives, are not the focus in this study. Extensive usage of French also caused a focus group to be disregarded from the study: focus group 5 was significantly dominant in French and the occasional switches, yet several, were in numerous cases and for certain participants switches from French to Arabic, not the opposite. Due to the aim of this study being code-switching from Arabic to French, and the fact that the recorded data from focus group 5 rather represents code-switching from French to Arabic, caused the focus group in question to finally be excluded from the study.

As mentioned, for providing comparable numbers for the results of the phenomena analysed in this study, the results are finally operated from the authentic, individually varying numbers to an average of each phenomenon in order to present an overall number of the features analysed between the male vs. female speakers in total. In this way the individual tendencies are disregarded, which may not give a truthful image of the range of features of intra-sentential code-switching – nevertheless the method shall be used in order to provide comparable numbers for a close-to-reality representation of the features analysed when comparing between two groups (i.e. male and female participants) that are not equally large. Likewise, it must be mentioned that the average amounts of each phenomenon are not tested by using the chi-square (χ^2) test due to the amount of the participants in

the groups being too low to in any case provide relevant results that could be generalised. Therefore one cannot make concrete conclusions based on the average of the phenomena analysed in the study. Finally, it is important to highlight that the analysis only provides data regarding the phenomena analysed in parts of speech (i.e. sentences) where intra-sentential code-switching between Moroccan Arabic and French occur; therefore e.g. French numerals and verbs are not investigated in parts of speech where the whole speech situation takes place in French, and likewise Arabic is numerals are not analysed in parts of speech that only consist of Arabic.

3.4. Ethics

The students who participated in the focus group discussions were aware of their participation in a study conducted by a foreign researcher. The students were asked to participate by their teachers or professors who were contacted by the local supervisors for the study. The participants were informed that the discussions were going to be recorded as well as observed by a researcher. Moreover, the participation was not forced by any means; the professors and teachers of the participants encouraged the students to participate in the study in order to experience being in a study that uses focus group discussion as a method. If and when asked how the collected data was going to be used for the research, they were – after the recordings – told that the aim of the research actually was Arabic-French code-switching and that their opinions eventually only serve as examples of the occurrence and trends of certain linguistic features.

3.5. The transliteration system used in the study[20]

ṭ	ط	ʾ	أ, ء
ḍ	ظ	b	ب
ʿ	ع	t	ت
gh	غ	th	ث
f	ف	j	ج
q	ق	ḥ	ح
k	ك	ḫ	خ
l	ل	d	د
m	م	d	ذ
n	ن	j	ر
h	ه	z	ز
w, ū	و	s	س
y, i, ī	ي	š	ش
ā	ا, ى	ṣ	ص
		ḍ	ض

Table 2: Transliteration system used in the study
(Isaksson 2010)

- Usually there is no distinction between د and ذ in Moroccan Arabic; both are pronounced as 'd'. The same applies to ض and ظ that both are pronounced as 'ḍ', as well as ت and ث that both are pronounced as 't', yet dialectal differences exist.

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[20] Bo Isaksson (2010), *Transcription of Arabic.* In most cases I have followed the system Isaksson recommends to be used in literature, but š and ḫ are from the 'linguistics' list.

3.6. Focus groups in the study

Finally, before presenting the results of the current study it may be found to be worth presenting some basic information about the different focus groups in the study.

Focus group 1, BA students in Italian, consisted of in total eight participants of which three were male and five female; yet one of the female participants had already finished her MA studies in Italian. The average age among the group was 24, and the language of instruction for the group in question was Arabic. Focus group 2, MA students in Literature and Comparative Criticism, was a group consisting of seven participants of which four were male and three female. The language of instruction for this group was Arabic, and the average age among the group members was 27. Focus group 3, MA students in Gender Studies, consisted in total of eight participants of which five were male and three female. The language of instruction for the group in question was French, and the average age among the group 32. Focus group 4, MS students in Renewable Energy, consisted of nine participants of which five were male and four female. One of the male participants in the group was a doctoral student. The language of instruction for the group in question was French, and the average age among the group 24. Focus group 5, MS students in Finance, originally consisted of seven participants, of which five male and two female; yet a foreign-born male participant was excluded from the study due to his foreign background. The language of instruction for the group in question was French, and the average age among the group was 27. Finally, the whole group was excluded from the study due to extensive usage of French, as the material provided did not serve as an example of Arabic-French code-switching, but rather the opposite. Focus group 6, MA students in Islamic Studies, originally consisted of eight participants of which four were male and four female; yet a foreign-born male speaker was excluded from the study. Therefore the total amount of participants analysed in the group was seven, of which three male and four female. The language of instruction for the group in question was Arabic, and the average age among the group was 33.

After excluding focus group 5 and one participant from focus group 6, the total amount of participants in the study was 39 of which 20 were male and 19 female. Students of three groups, i.e. focus groups 1, 2 and 6, had Arabic as language of instruction, whereas students in focus groups 3 and 4 had French as language of instruction. The average age of participants altogether was 28.

4. Background to the linguistic situation in Morocco

After Islam and Arabic were introduced in North Africa year 467, Arabic became the official language, which through occasional changes has been the case until today. France established its first protectorate in the Maghreb in 1830, Algeria being the country that was colonised by France the longest, from 1830 until 1962, Tunisia was under French rule between 1881 and 1956, and Morocco between 1912 and 1956 (Sayahi 2014, pp. 38-39). During the colonial era the French language had a high position in the society, but its prestigious status remained up until today (Daoud 2010, p. 11), yet the independence of the Arab countries[21] led to "the ethnic revival and the revitalization of the Arabic language and Islamic culture." (Fishman 1999, p. 384).

4.1. Moroccan Arabic

Moroccan Arabic, also known as Darija, is the colloquial variety of Arabic that is commonly used in communication in the Moroccan society and, in the case of Arabic speakers in Morocco, is the language that one acquires first (Bentahila 1983a, p. 4), (El Kirat El Allame et al. 2010, p. 335). A large number of loanwords from French and Spanish have been introduced into Moroccan Arabic which is one of the features that distinguish the colloquial from Classical Arabic on the lexical level, although even structural influences may have been borrowed (Bentahila 1983a, p. 4)[22]. Due to the period of colonisation and intense contact with France and the French, the Maghrebi dialects contain a great amount of French loanwords (ibid., p. 4). Moreover, the prestigious status French enjoys in the Maghrebi societies has led to extensive code-switching to be an often occurring phenomenon in the region (ibid., p. 4).

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[21] This applies to a number of Arab countries as a great amount of them were colonised by European powers (Fishman 1999, pp. 383-384).

[22] For more information about Moroccan Arabic as well as the the broad linguistic situation in the Maghreb, see appendix.

In order to better understand some of the features analysed in this study it is valuable to present certain patterns of colloquial Moroccan Arabic. In the data anlysed for this study there is a recognisable amount of French verb stems that are adapted into the colloquial Moroccan Arabic verb morphology patterns, e.g. 'yivalidaw' (Fr. valider), *validate*, 'ghatchanger' (Fr. changer), *change*, 'kaymetriziw' (Fr. maître) *master*, and 'yiexposé' (Fr. exposer), *present*, to name a few, and as one of the aims of this study is to investigate such verbs it is worth presenting the basic structure of the verb morphology of colloquial Moroccan Arabic. Ziamari (2007) argues that it is especially the case of quadriliteral verbs, both in the perfect and imperfect tenses, that French stems are adapted into, adding that other morphemes may be added in order to express features such as passive, reflectiveness and reciprocity (Ziamari 2007, p. 280). The tables below present the verbal structure in Moroccan Arabic, according to Caubet (2007).[23]

Perfect tense:

	singular	plural
3rd masc.	*ktəb*	*kətbu*
3rd fem.	*kətbət*	
2nd masc./fem.	*ktəbti*	*ktəbtu* (pre-Hilālī *-tīw*)
1st	*ktəbt*	*ktəbna*

Table 3: Perfect tense in Moroccan Arabic according to Caubet (2007)

[23] Caubet, Dominique (2007), 'Moroccan Arabic' In: Veerstegh, Kees *Encyclopedia of Arabic Language & Linguistics, Volume III*. Leiden: Brill. pp. 273-287.

Imperfect tense:

	singular	plural
3rd masc.	*yəktəb*	*ykətbu*
3rd fem.	*təktəb*	
2nd masc.	*təktəb*	*tkətbu*
2nd fem.	*tktəbi*	
1st	*nəktəb*	*nkətbu*

Table 4: Imperfect tense in Moroccan Arabic according to Caubet (2007)

Caubet (2007): "The prefixes *ka-* and/or *ta-* express for all persons habit, repetition, concomitance, generality: *ka-yəktəb* 'he is writing, writes, usually or habitually'" (Caubet 2007, pp. 281-282).

	singular	plural
3rd masc.	*ka-yəktəb*	*ka-ykətbu*
3rd fem.	*ka-təktəb*	
2nd masc.	*ka-təktəb*	*ka-tkətbu*
2nd fem.	*ka-tktəbi*	
1st	*ka-nəktəb*	*ka-nkətbu*

Table 5: Present continuous structure in Moroccan Arabic according to Caubet (2007)

Caubet (2007) writes that the future tense is constructed by adding a prefix *ġādi*[24], sometimes shortened as *ġa*, before the verb, e.g. 'ġādi yəktəb', *he will write*, whereas negation of verbs is constructed according to the pattern ma - VERB - š (ši/šay), e.g. 'ma ġa-yəktəb-š', *he will not write* (ibid., p. 285).

As mentioned, many of the arabicised French verbs are adapted into Moroccan Arabic according to the morphological patterns regarding quadriliteral verbs. Therefore, as an example of what this means in practice, below is a paradigm[25] presenting one of the several French verbs occurring in the analysed data, in present continuous form:

	singular	plural
1st	ka-nvalidi	ka-nvalidaw
2nd masc.	ka-tvalidi	ka-tvalidaw
2nd fem.	ka-tvalidi	ka-tvalidaw
3rd masc.	ka-yvalidi	ka-yvalidaw
3rd sing.	ka-tvalidi	ka-yvalidaw

Table 6: Present continuous verbs with French
verbs adapted into Moroccan Arabic

In Moroccan Arabic the words 'wāḥəd' and 'ši/šay' are used to express the indefinite article (ibid. p. 285), as will be seen in the examples provided in the data analysis. As the analysis will focus on numerals, it is important to differentiate between the usage of the word 'wāḥəd' as a number and as an indefinite article marker – often the term is also used when referring to a person. The construc-

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[24] Note that here 'ġ' stands for غ, in usually in the study transliterated as 'gh'; Caubet herself uses 'ġ' in the examples provided.

[25] The paradigm is constructed according to the data that occurs in the study as well as with the help of a native Moroccan Arabic speaker.

tions composed accordingly, even found in the analysed data, are for example 'wāḥəd l-ḥāja', *a thing*, or 'wāḥəd t-taghyīr', *a change*. A high number of similar constructions created with a Moroccan Arabic indefinite article marker together with a French noun are found also in this study, e.g. 'wāḥəd le debat', *a debate*, 'wāḥəd la communication', *some communication*, and 'wāḥəd la matière', *a subject*.

4.2. French

During the years of the French Protectorate in North Africa, from 1830 until 1962 (Sayahi 2014, pp. 38-39), French was nearly exclusively used as the language for all educational and administrative purposes (Bentahila & Davies 1995, p. 79), (El Kirat El Allame 2010, p. 27). Heath (1989) argues that the stigma and other negative attitudes towards the French language as a remain of a former coloniser in the area have later been replaced by French becoming the language of liberation and socioeconomic advancement (Heath 1989, p. 12).

Sayahi (2014) claims that even after the native French-speaking population that previously was settled in the Maghreb returned to Europe after the Maghreb countries became independent, French maintained its high social value and remained prestigious, spreading both faster and further than during the time of the colonisation (Sayahi 2014, pp. 41-42). Even after the fall of the French protectorate, French has maintained its high value in the society, regardless numerous arabisation programmes that partly have managed to change the language policies to favouring of Arabic in certain domains (Bentahila & Davies 1995, p. 79). As French is widely used in administration, especially in private sector institutes, as well as in higher education in the scientific and technological fields, knowing French is often required for being able to succeed in employment (El Kirat El Allame, Hajjam & Blila 2010, p. 336). Sayahi (2014) argues that "The higher a speaker's educational level, the better their competence in French is, which correlates negatively with competence in MSA [Modern Standard Arabic]." (Sayahi 2014, p. 75), and continues that "As French continues to be the dominating language in science, technology, engineering, and medicine, the educated population that belongs to these fields is the one that has higher competence in French and, most often, is better positioned socioeconomically." (Sayahi 2014, p. 75).

As several languages are used in Morocco, one could assume that French has the role of a lingua franca and therefore brings people from different backgrounds closer to each other over linguistic barriers. That is not the case, though; since not all Moroccans know French it does not have a unifying function for the society (Bentahila 1983a, p. 21) – on the contrary, it seems to create gaps between different social classes. These altogether support the argument that French certainly is the language of the social elite. Having that said, it should be evident that French still has a significant role in the Moroccan society overall.

In order to connect the historical events with the situation today we shall briefly look at Arabic-French code-switching. Daoud (2010) claims French to be extensively used by middle and upper class citizens, and that might be either the language predominantly used for all communication or used by code-switching between the colloquial varieties of Arabic and French (Daoud 2010, p. 22). Among certain groups a person at least is accepted to code-switch, but very often, even expected to do so due to the social benefits of using French (Sayahi 2014, p. 95). According to Sayahi (2014) this applies especially to the situation of the upper-class population educated in the fields of science and technology, as they often are "presumed to have an advanced knowledge of French that allows for high-frequency code-switching." (ibid., p. 95).

The extended sense of diglossia, as presented by Fishman (1971, p. 74), serving as a term for both different varieties of one *code*, (different varieties of Arabic) as well as adding another (French), is highly relevant to the situation in Morocco where one code with a lower status (i.e. Moroccan Arabic) is being used to refer to phenomena in a certain domain, while another code with a higher status (i.e. French) is the language for another domain. Therefore, as presented by Fishman (1971), the variety with a lower status is the one used in domains such as in everyday communication and in a domestic setting, whereas the code with a higher status is the one used for science, education and religion (ibid., p. 74). As several varieties of the two different codes are used simultaneously, a possible result of the situation is code-switching between all the varieties.

5. Analysis

The following chapter presents the findings of this study. The analysis will be done separately for each focus group, distinguishing between male and female speakers. A personal 'code' for the participants will be given, which in practice means that 1A means speaker A in focus group 1, speaker 2B speaker B in focus group 2 and so on. It is worth mentioning that some of the participants maintained speaking either only Arabic or French, or did not perform switches that are investigated here. Therefore some participants did not provide suitable material to match the aims of this study, yet the nonexistence of a result already itself is a significant finding. The participants may have performed other types of intra-sentential code-switching, possibly relevant for other purposes. As specified in chapter 3.3. (limitations of the chosen method), the analysis only focuses on the occurrence of each phenomenon as they occur in sentences where intra-sentential code-switching occur; therefore e.g. French verbs in speech situations that take place only in French, or numerals expressed in utterances in Arabic or French only, are not relevant for the purpose of the study on intra-sentential code-switching.

Chapter 5.1. focuses on presenting the observed relation between French verbs and French verb stems that are adapted into colloquial Moroccan Arabic verb morphology patterns. Chapter 5.2. will present the usage of both ordinal and cardinal numbers in Arabic and in French (excluding the usage of the colloquial Moroccan Arabic indefinite article marker 'wāḥəd'). Chapter 5.3. will present the spread of the pronunciation of the phoneme /r/, whether pronounced with French, guttural [ʁ] or with alveolar trill [r]. Finally, chapter 5.4. will demonstrate the occurrence of rhetorical emphasis and confirmation reached by repetition by switching from one language to another.

5.1. Verbs

The following chapter presents the amount of French verb stems adapted into colloquial Moroccan Arabic verb morphology patterns, hereafter called arabicised French verbs, in relation to French verbs that are not adapted into Moroccan Arabic, hereafter called regular French verbs. Note that the study does not investigate the relation between French verbs and Arabic verbs, and therefore the

numbers below do not represent the whole extent of all verbs occurring in the recorded speech – as Arabic serves as a base language for most of the participants, a clear majority of the verbs were used in Arabic. Moreover, as this part of the study investigates the division between French verbs, whether arabicised or not, calculating Arabic verbs is found to be less relevant for answering the research question. Therefore verbs that are not even possible to be arabicised, e.g. 'c'est', are excluded. Neither does the analysis treat French adverbial constructions as French verbs. Together with the results, examples of the verbs used will also be provided. A differentiation between arabicised French verbs, considered as lexical borrowing (see Poplack & Meechan 1998) and regular French verbs, considered as code-switching, will be made. Abbreviations in use are AF, *arabicised French verb*, and F, *regular French verb*. The French elements are underlined, and the arabicised French verbs written in italics.

5.1.1. Focus group 1: BA students in Italian - Female speakers

Speaker 1A: 5 cases of AF, 5 cases of F

Speaker 1B: 0 cases of AF, 1 case of F

Speaker 1C: 3 cases of AF, 0 cases of F

Speaker 1D: 2 cases of AF, 0 cases of F

Speaker 1E: 1 case of AF, 2 cases of F

Among the five female participants in focus group 1 the total occurrence of French verbs was 19 cases, of which 11 were adapted into Moroccan Arabic verb morphology patterns and eight were used as regular French verbs. Regarding arabicised French verbs, speaker 1A expressed five; speaker 1C three; speaker 1D two; and speaker 1E two. French verbs were used five times by speaker 1A; once by speaker 1B; and twice by speaker 1E.

The data above shows that French verbs which were used were more often adapted into the Moroccan Arabic verb morphology patterns than used as regular French verbs. Speaker 1A also expressed the highest amount of both arabicised French verbs (five cases) and French verbs (five cases), whereas the other female participants used arabicised French verbs fewer times. The arabicised French verbs that occurred in the speech of the participants were highly related to the academia, therefore a

high number of the French verbs had to do with 'publishing' (as in example 2), 'dividing' (as in example 3) and 'compensating' (i.e. 'passing' in this case, as in example 4), and 'passing' (as in example 5), which may speak for the need to use foreign, i.e. non-Arabic terminology when speaking of topics that are based on systems that in many cases are talked about in French, as the higher education in certain Moroccan institutes is.

Below examples of the French verbs used in the discussion. The French items are underlined, and the arabicised French verbs written in italics.

(1) Speaker 1A: bḥālū bḥāl ṣḥābū yaʿnī ghayqder yetʿāml mʿa – *yitcommunica* mʿa ṣḥābū w dākši

   (like him, like his friends, I mean he will be able to deal with – *interact* with his friends and so)

(2) Speaker 1A: oui ʾana kanshūf que bḥāl facebook bḥāl tiʿāwn parce que mni kunna kanəqraw kunna bḥāl hakka šī ḥad… kān *publiyw* zeʿma ila šī ḥad ḫaṣṣu šī ḥāja, šī maʿlūma šī dars šī ḥāja

   (yes I reckon that like Facebook like helps because when we were studying we were like this, someone… has *published* like if there was someone who needs a thing, some information, a class or something)[26]

(3) Speaker 1A: kunna ḥāllīn wāḥəd le groupe b smiyya dyāl l-département dyālna w kānū hakka kibqaw *kyipartagiw* durūs *kyipartagiw* maʿlūmāt yaʿnī kunna kantwaṣṣlū baʿdiyatna

 (we have opened a group in the name of our department and this way they kept on *sharing* lessons, *sharing* information, I mean we were communicating with each other)

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[26] Might be either dialectal or linguistic confusion in the speech situation.

(4) Speaker 1C: ʿalāš dāba ila jəbti sttāš f l-āḫor māt-*compensiš*[27]

(why now if you got sixteen in the other you will not *compensate*)

(5) Speaker 1D: ṣāfī, *kaytvalida* lih l-<u>module</u> dāba, lla, dāba lawma *validitiš* hādāk l-<u>module</u> bqīti ta l-ʿām l-āḫar

(that's it, now the part *would get passed* for him [= he would pass the part], no, now if you did not *pass* that <u>part</u> you will stay for the other year)

5.1.2. Focus group 1: BA students in Italian - Male speakers

Speaker 1F: 7 cases of AF, 0 cases of F

Speaker 1G: 2 cases of AF, 0 cases of F

Speaker 1H: 1 case of AF, 0 cases of F

Among the three male participants in focus group 1 the total occurrence of French verbs was 10 cases, of which all were adapted into Moroccan Arabic verb morphology patterns. Speaker 1F expressed seven cases of arabicised French verbs; speaker 1G two cases; and speaker 1H one. None of the male speakers in focus group 1 used verbs in French without arabicising them.

The data above presents that the French verbs used are adapted into the colloquial, i.e. loanwords, as the three male speakers in focus group 1 used in total 10 arabicised French verbs and no regular French verbs – in some cases the arabicised French verb was the only French element in the sentence. Nine of the ten arabicised French verbs were about passing courses (as seen in examples 6 and 7) which confirms the usage of foreign terminology when speaking about academic matters.

(6) Speaker 1F: wāḫḫa tkūn matalan <u>chaque matiere</u> *tvalidi* matalan b l <u>autre matiere</u> wāḫḫa l-<u>prof</u> šādda mʿak ḍedd[28], ghatḥaṭṭ lik <u>note eliminatoire</u> ghatḥaṭṭ lik rabʿa dīma ma ʿəmrek *ghatvalidi*

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[27] *'mā ghādi tcompensiš'*

[28] A Moroccan proverb.

(even if for example you *pass* <u>each course,</u> <u>another course</u>, okey, if <u>the teacher</u> is against you, she will give you a <u>failing grade</u>, she will always give you four, you will never *pass*)

(7) Speaker 1H: maymkənlihumš *yivalidiw* l-hād ṭ-ṭālib hāda

(it is not possible for them to let this student *pass*)

5.1.3. Focus group 2: MA students in Literature and Comparative Criticism - Female speakers

Speaker 2A: 4 cases of AF, 0 cases of F
Speaker 2B: 0 cases of AF, 0 cases of F
Speaker 2C: 0 cases of AF, 0 cases of F

Among the three female participants in focus group 2 the occurrence of French verbs was four cases, of which all were adapted into Moroccan Arabic verb morphology patterns and none was used as a regular French verb. The arabicised French verbs were expressed four times by speaker 2A, whereas speakers 2B and 2C did not use any French verbs, neither regular nor arabicised. The French verbs adapted into Moroccan Arabic were in all four cases verbs about 'passing' (as seen in examples 8 and 9).

(8) Speaker 2A: n-nās lli ma *validawš* mawād mn l-ʿām l-ewwel matalan, f l-ʿām l-ewwel *validit* ḫamsa w bqaw liyya tlāta

(the people who did not *pass* courses from the first year for example, in the first year I *passed* five and I had three left)

(9) Speaker 2A: kifāš ghādī ydīrū lihum, ghayḥaydū lihum dāk l-mawād lli mā *validawš* wəlla yʿāwdu yqarriwhum

(how will they do to them, they will take away the courses that they did not *pass* or they will teach them again)

5.1.4. Focus group 2: MA students in Literature and Comparative Criticism - Male speakers

Speaker 2D: 4 cases of AF, 0 cases of F
Speaker 2E: 4 cases of AF, 0 cases of F
Speaker 2F: 0 cases of AF, 0 cases of F
Speaker 2G: 0 cases of AF, 0 cases of F

Among the male participants in focus group 2 the total occurrence of French verbs was eight cases, all adapted into Moroccan Arabic verb morphology patterns. Speaker 2D expressed four of the arabicised French verbs and the other four were expressed by speaker 2E, as speakers 2F and 2G did not contribute with any French verbs, neither arabicised nor regular French verbs. The arabicised French verbs belonged to academic vocabulary, i.e. 'passing' (as seen in example 10) in seven of the eight cases, and in one case used to refer to 'connecting' (as seen in example 11).

(10) Speaker 2C: lli mā *validawš* humma lli mā bqawš

(the ones who *were not approved* [are the] ones who did not stay)

(11) Speaker 2C: rajʿū ghi l-šmaʿ w l-ktūba w smītu w qraw… w ttanjḥu, dīk sāʿa w *ntconnectaw*

(they just returned to candles and books and whatever it is and read and you succeed, that time we *get online*)

5.1.5. Focus group 3: MA students in Gender Studies - Female speakers

Speaker 3A: 6 cases of AF, 1 cases of F

Speaker 3B: 0 cases of AF, 0 cases of F

Speaker 3C: 2 cases of AF, 0 cases of F

Among the three female participants in focus group 3 the total occurrence of French verbs was nine cases, of which eight were adapted into Moroccan Arabic verb morphology patterns, and one was used as a regular French verb. Speaker 3A expressed six cases of arabicised French verbs; speaker 3B none; and speaker 3C two. One regular French verb was expressed by speaker 3A.

The data presented shows that the female participants in the group used both arabicised and regular French verbs, yet the occurrence of regular French verbs was only one case. Among the speakers in question the verbs used were not about academic vocabulary, but included terms such as 'reinforcing/strengthening' (as seen in example 12), 'integrating' (example 13), 'accompanying' (example 15), and 'being detached' and 'focusing' (example 14).

(12) Speaker 3A: ʿalāš fkkarna f dārija w ma fkkarnāš f *nronforciw* la language francaise w l'anglais … ʿalāš ma *nrenforciwš* l-logha l-faransiyya hiya w l-logha l-injliziyya

    (why did we think about Darija but did not think about *strengthening* the French language and
        English… why do we not *strengthen* the French language and the English language)

(13) Speaker 3A: mʿa banāt wlād zumalā dyāli f les formations, les séminaires kifāš twāṣlū, kifāš *integraw*

 (with girls, boys and my colleagues in the trainings, seminars, how did they communicate, how did
        they integrate)

(14) Speaker 3A: kayilqaw ṣuʿūba bāš *yidettashaw* min Facebook *concentraw* ʿala l-<u>preparation</u>

(they face difficulty to *detach* from Facebook, to *focus* on the <u>preparation</u> [for the exams])

(15) Speaker 3C: dāʾiman ḫaṣṣna nṭerḫū ʾasʾila jdīda, yaʿnī māši <u>pour anticipait</u> ghīr bāš *naccom-pagniw* <u>le debat</u> fīn ghādī, wāš ṭarīqa lli taytemm biha tadrīs yaʿnī loghāt muhimmīn f l-maṣār dyāl ṭālib

(we always have to pose new questions, I mean it is not only <u>for anticipating</u> but in order to *take part* in the <u>discussion,</u> where does it go, what is the way they teach, I mean languages are important in the path of the student)

5.1.6. Focus group 3: MA students in Gender Studies - Male speakers

Speaker 3D: 1 case of AF, 4 cases of F

Speaker 3E: 2 cases of AF, 1 cases of F

Speaker 3F: 4 cases of AF, 16 cases of F

Speaker 3G: 0 cases of AF, 0 cases of F

Speaker 3H: 0 cases of AF, 0 cases of F

Among the male participants in focus group 3 the total occurrence of French verbs was 28 cases, of which seven were adapted into Moroccan Arabic verb morphology patterns and the remaining 21 were used as regular French verbs. Of the arabicised French verbs speaker 3D expressed one; speaker 3E two; and speaker 3F four cases. Of the total 21 cases of regular French verbs speaker 3D expressed four cases; speaker 3E one; and speaker 3F 16 – speakers 3G and 3H did not use any French verbs, neither arabicised nor regular.

The data shows that three of the five male participants in the focus group rather used French verbs without adapting them into Moroccan Arabic. The arabicised French verbs shared within this group contained verbs other than the previously seen vocabulary related to studies – French verbs oc-

curred adapted into Moroccan Arabic when talking about concepts such as 'mastering' (example 16) and 'progressing' (as seen in example 17, *ghayevoliuw*).

(16) Speaker 3D: gəlt lih waḥəd ṭalab²⁹ lli yaʿnī muʿaqqad yaʿnī makāynš ʿendū f l-menue, donc huwa gāl liyya māši muškil dāk ši llī bghīti ʾana nsuwbūh lik, mən bəʿd yaʿnī huma zūj, nta taʿrif yaʿnī š-šamāliyyīn, donc yaʿnī *kaymetriziw* l-espagnol, donc mən bəʿd bdaw kayheḍrū b l-espagnol, ʾana ma hḍartš, huwa šnū gāl lih tout simplement yaʿnī bda tihḍer mʿāh gāl lih šḥāl nḥsəb lih hāda w l-āḫor taygullih la hāda, la hāda, la hāda, w ʾana ḫallīthum ḥtta salaw, ma ḥarakt ṭīzī, w glt lih tout simplement yaʿnī 'hāšnū gəlti w hāšnū gəlti w hāšnū gəlti'

(I told him 'an order that is like complicated' I mean they did not have it in the menu, so he told me 'no problem, that thing you want, I will make it for you', after I mean they are two, you know the people from the North, so they *master* Spanish, so after they started talking in Spanish, I did not speak, what did he say to him, simply he started to talk to him 'how much do I charge for this' and the other says to him 'not this, not this, not this' and I left them [talking] until they finished, I did not move my butt, and I told him simply like 'this is what you told, this is what you told, this is what you told')

(17) Speaker 3E: le constat huwa annahu ḍarūrī t-taṭawwur dyāl l-mujtamaʿ l-hād l'evolution hādi, kāyn ši ḥwāyj lli *ghayevoliuw*

(the conclusion is that the development of the society is necessary for this progress, there are things that *will evolve*)

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²⁹ According to Moroccan Arabic grammar the word 'order' should be in definite form, i.e. 'waḥəd ṭ-ṭalab'. It might be, though, that the sounds 'd' and 'ṭ' are assimilated and it therefore is difficult to determine from the recording whether the speaker makes a grammatical mistake or not.

5.1.7. Focus group 4: MS students in Renewable Energy - Female speakers

Speaker 4A: 1 case of AF, 0 cases of F

Speaker 4B: 1 case of AF, 10 cases of F

Speaker 4C: 2 cases of AF, 0 cases of F

Speaker 4D: 0 cases of AF, 2 cases of F

Among the four female speakers in focus group 4 the total occurrence of French verbs was 16 cases, of which four were adapted into Moroccan Arabic verb morphology patterns and the remaining 12 were used as regular French verbs. Speaker 4A expressed one case of arabicised French verbs; speaker 4B one; and speaker 4C two. Regular French verbs were used 10 times by speaker 4B and twice by speaker 4D.

The data reveals that one of the participants among the female speakers in focus group 4, namely speaker 4B, seems to have a stronger tendency to refer to verbs directly in French than the peers in among the group. The usage of arabicised French verbs occurred four times during the discussion and was used when expressing vocabulary such as 'develop' (as seen in examples 18 and 19) as well as 'sharing' (example 19).

(18) Speaker 4A: šḥāl min ḥissa f səmāna tkūn šī ḥissa wəlla jūj yaʿnī makāfyāš ʾanna bāš wāḥəd zəʿma *yidevelope* les conaissances dyālū

(how many classes in a week, a class or two I mean it is not enough for one to like *develop* ones knowledge)

(19) Speaker 4C: au méme temps yaʿnī kān ʿandna ḥāl wāḥəd huwa annana nətlaqaw f face w kān *partagiw* šnū l-jadīd ʿand kulla wāḥəd w kanḥāwlū *dévelopiw* le projet dyālna

(at the same time I mean we had a situation, we used to meet in Facebook and shared what is new with everyone, and we tried to develop our project)

5.1.8. Focus group 4: MS students in Renewable Energy - Male speakers

Speaker 4E: 11 cases of AF, 6 cases of F

Speaker 4F: 11 cases of AF, 2 cases of F

Speaker 4G: 1 case of AF, 1 cases of F

Speaker 4H: 3 cases of AF, 0 cases of F

Speaker 4I: 11 cases of AF, 12 cases of F

Among the male participants in focus group 4 the total occurrence of French verbs was 61 cases, of which 40 were adapted into Moroccan Arabic verb morphology patterns and the remaining 21 used as regular French verbs. Speaker 4E expressed 11 cases of arabicised French verbs; speaker 4F 11 cases as well; speaker 4G two; and speaker 4H 12. Regular French verbs were used six times by speaker 4E; twice by speaker 4F; once by speaker 4G; and 12 times by speaker 4I.

As presented above, the male participants in focus group 4 used a large amount of both regular and arabicised French verbs. The French verbs that were arabicised to a high extent represent technical terminology used in technology and social media, as well as communication and finance, as seen in the examples below. Words like 'apply' and 'present' (as seen in example 20), 'link' and 'block' (example 21), 'apply' (example 23) are just examples of the arabicised French verbs that occurred in the speech of the group in question, and imply a high competence in the usage of French whether adapted into Moroccan Arabic or not.

(20) Speaker 4E: kimma qāl l-ʾaḫ dyāli šuʿaib biʾanna fikra ḫāṭeʾa matalan dāba d-dārija dāba nqǝddū *n'applikwha* f matalan f <u>domain</u> dyāl l-ʾādāb wlla šī ḥāja nǝqdrū naqraw biha, walāyinnī matalan ila ḥḍarna ʿla mawād <u>scientifique</u> matalan dāba katgūl liyya nqraw b d-dārija f l-<u>maths</u> wlla nǝqraw <u>nucleaire</u> b d-dārija maymkǝnš šī ḥāja zaʿma lli <u>francais</u> w tanlqaw mashākil, ana māšī kanqra b d-dārija w nǝmšī nǝbqa nǝqra l-ʾalmāniyya wǝlla <u>l'anglais</u> bāš *n'exposeršī* wlla šī ḥāja <u>donc</u> fikra maghlūṭa w mamttafqš mʿāha batātan

(as my brother Shouaib said, it is a misconception, for example Darija now, we can *apply* it in the <u>domain</u> of literature or something like that, we can read in it, but for example if we talked about <u>sci-entific</u> topics, you tell me now we study mathematics in Darija, or <u>nuclear</u> [science] in Darija, it is not possible like in French, and you will face problems, ok I study in Darija and go study German

or English in order to *present* it or something, <u>therefore</u> it is a false idea and I do not agree with it at all)

(21) Speaker 4F: ʾana kənt dewwəzt wāḥəd <u>le stage</u> f wāḥəd šarika, fāš *tanlier* l-PC dyālī b l-<u>con-nexion</u> mən təmma mən <u>source</u> b <u>câble réseau</u> ta nəbghi nədḫəl hakka l-<u>site</u> dyāl <u>de chat</u> wəlla <u>les vidéos</u> wəlla bḥāl hakka, *tayttbloka* liyya, s-<u>serveur</u> *tayblokih*, ʿalāš ma tkūnš hād l-qaḍiyya <u>partout</u>

(I did <u>an internship</u> in a company, and when I plug my PC to the <u>connection</u>, from there, from the <u>source</u> from <u>a network cable</u> I like to enter like that a website for chatting or videos or something like that, it got blocked on me, the <u>server</u> blocks it, why is it not this case <u>all over</u>)

(22) Speaker 4G: hiya lli tanhḍarū biha, kanimšī l ḍ-ḍār ma tanəḥḍerš mʿa l-wālida b l-logha l-fuṣḥa wəlla… l-muhimm *tanemployer* <u>les termes</u> b l-<u>français</u>, <u>anglais</u>

([the language] in which we speak, [when] I go home I do not speak with my mother in Classical Arabic or… the important thing is that I *apply* <u>the terms</u> in <u>French</u> and in <u>English</u>)

(23) kanšūf anna d-duwla hiya lli ḫaṣṣha *tinvisti* kima *katinvisti* f <u>des domaines</u> ʾoḫrīn, *tinvisti* f hād al-masʾil hādih

(I think that the country is the one that has to *invest* as it *invests* in other <u>domains</u>, it should *invest* in this thing)

5.1.9. Focus group 6: MA students in Islamic Studies - Female speakers

Speaker 6A: 0 cases of AF, 0 cases of F

Speaker 6B: 0 cases of AF, 0 cases of F

Speaker 6C: 0 cases of AF, 0 cases of F

Speaker 6E: 0 cases of AF, 0 cases of F

There were no French verbs, neither arabicised nor regular, used by the female participants in focus group 6.

5.1.10. Focus group 6: MA students in Islamic Studies - Male speakers

Speaker 6F: 0 cases of AF, 0 cases of F

Speaker 6G: 0 cases of AF, 0 cases of F

Speaker 6H: 0 cases of AF, 0 cases of F

There were no French verbs, neither arabicised nor regular, used by the male participants in focus group 6.

5.1.11. Summary of groups - verbs

Female participants:

Focus group 1: 11 AF, 8 F
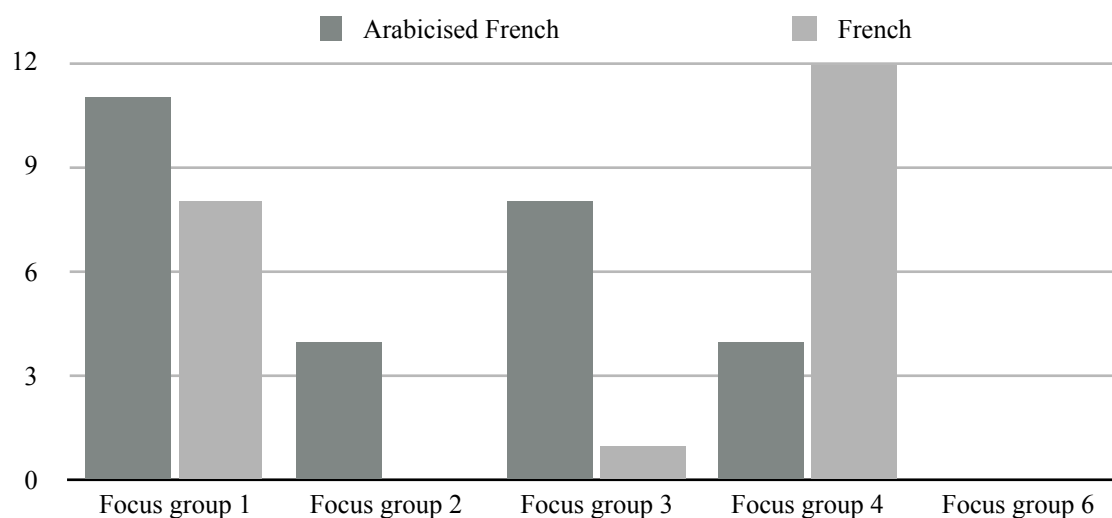
Focus group 2: 4 AF, 0 F

Focus group 3: 8 AF, 1 F

Focus group 4: 4 AF, 12 F

Focus group 6: 0 AF, 0 F

In total: 27 AF, 21 F

Figure 1: Verbs
- female participants -

As the data and table 7 present, the female participants expressed in total 48 French verbs of which 27 were adapted into Moroccan Arabic verb morphology patterns, and the remaining 21 were used as regular French verbs. Therefore 56 % of the French verbs used were arabicised French verbs, while 44 % were regular French verbs; accordingly, the data speaks for higher usage of cases of lexical borrowing, i.e. arabicised French verbs, that have been adapted into Moroccan Arabic than French verbs used when code-mixing. As the chart above presents, the division varies between the groups. The female participants in focus group 1 expressed in total 19 French verbs of which 11 were arabicised and eight used as regular French verbs; focus group 2 in total four French verbs of

which all were arabicised; focus group 3 in total nine French verbs of which eight were arabicised and one used as a regular French verb; focus group 4 in total 16 French verbs of which four were arabicised and 12 used as regular French verbs; and in focus group 6 none. In average each female participant contributed with 1.4 arabicised French verbs and 1.1 regular French verbs. To conclude, regarding verbs among the female speakers using French verbs by lexically borrowing the item and adapting it into Moroccan Arabic occurred more often than code-mixing with French verbs.

Male participants:

Focus group 1: 10 AF, 0 F
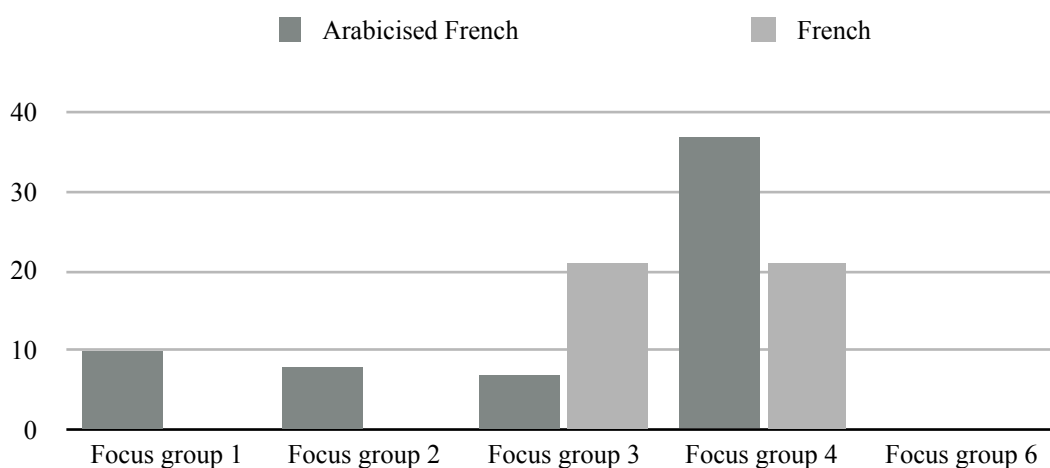
Focus group 2: 8 AF, 0 F

Focus group 3: 7 AF, 21 F

Focus group 4: 37 AF, 21 F

Focus group 6: 0 AF, 0 F

In total: 62 AF, 42 F

Figure 2: Verbs
- male participants -

As the data together with table 8 presents, the male participants expressed in total 107 French verbs of which 62 were adapted into Moroccan Arabic verb morphology patterns, and the remaining 42

were regular French verbs. Therefore 60 % of the French verbs used were arabicised French verbs, while 40 % were regular French verbs. As the chart above presents the division varies between the groups, the male participants in focus group 1 expressed in total 10 French verbs of which all were arabicised; focus group 2 in total eight French verbs of which all were arabicised; focus group 3 in total 26 French verbs of which seven were arabicised and 21 used as regular French verbs; focus group 4 in total 58 French verbs of which 37 were arabicised and 21 used as regular French verbs; and focus group 6 none. In average each male participant contributed with 3.1 arabicised French verbs and 2.1 regular French verbs. To conclude, when using French verbs the male participants used more cases of lexical borrowing, i.e. arabicised French verbs, than code-mixing with French verbs.

Participants altogether:

The data presented shows that the usage of French verbs, whether when adapted into Moroccan Arabic or not, varies between the different focus groups and between male and female participants. The total occurrence of French verbs recorded was 152, of which 89 imply the adaptation of the French verb into colloquial Moroccan Arabic, i.e. arabicised French verbs, and 63 were regular French verbs. The female participants, with the total occurrence of 27 arabicised French verbs and 21 regular French verbs, provide fewer cases of French verbs than the male participants, with the occurrence of 62 arabicised and 42 regular French verbs. It shall be underlined that whether or not an individual tends to code-mix with French verbs does not necessarily correlate with the overall competence of the speaker – instead of code-switching and shifting between languages a speaker may remain speaking one language, yet being perfectly capable of using the other language as well.

The hypothesis suggests that female speakers in the Maghreb tend to use more French in their speech as well as code-switch more, and therefore one could assume the numbers to be higher even regarding the usage of code-mixing with French verbs. Only in focus group 1 female speakers provided more code-mixing and cases of lexical borrowing with French verbs, whereas in the rest of the groups (with the exception of focus group 6 where no French verbs were used at all) male speakers quantitatively contributed with more cases of both French verbs when code-mixing and when borrowing. The findings should not be mistaken to imply that male speakers speak more French – one shall bear in mind that the analysed sections focus on the parts of speech where intra-

sentential code-switching is present, at times the arabicised or regular French verb being the code-mixed item. Moreover, is shall be mentioned, that in certain cases the male participants in general spoke more than the female participants.

It is also worth noting that many participants, 14 to be precise, did neither contribute with any code-mixing regarding French verbs nor with cases of lexical borrowing regarding verbs. An especially significant difference can be seen in focus group 6, MA students in Islamic Studies, where no usage of French verbs was present among the seven participants of the focus group. Other speakers who did not use French verbs at all were in six cases students in the field of humanities (focus groups 2 and 3). Among the participants who did use French verbs the total occurrence of French verbs varied between a few cases to numerous. In many cases the participants who contributed with French verbs indeed contributed with a high amount of them, whereas others less, or, as presented, none. In many cases the overall occurrence of regular French verbs correlates with a higher amount of arabicised French verbs as well; therefore one could assume the two phenomena in question to go somewhat hand in hand – a person who uses a lot of intra-sentential code-switching regarding French verbs in his or her speech is also more likely to use a greater amount and selection of arabicised French verbs as well.

Regarding the type of French verbs in use, focus groups 1 and 2 provided numerous occasions of derivations of 'passing' as both arabicised and regular French verbs, and a few cases of 'compensating' that in these cases also means 'passing'. Referring to the educational system in general, as well as matters related to it, seem to require French, which could speak for French being the language of academia even in the fields of study that are taught in Arabic. Groups that have Arabic as the language of instruction seemed to provide different types of French verbs compared to the groups that have French as the language of instruction. Another interesting finding is that focus group 6 in Islamic Studies did not contribute with any verbs in French, neither arabicised nor regular French verbs. On the contrary, focus groups 3 and 4 offered more variety in their usage of French verbs, introducing even a high amount of arabicised French verbs in the field of technical terminology, as well as verbs directly in French. Therefore it can be clearly seen that the usage of regular French verbs also may be linked to higher probability of using a greater selection and quantity of cases of lexical borrowing when using French verbs – in many cases the arabicised French verbs were used to refer to terminology other than everyday matters. The findings might suggest that a person's competence in French correlates with the amount, quality and diversity of using both regular and

arabicised French verbs. It must be noted that at times even a large amount of French adverbial constructions such as 'c'est vrai', *it is true,* were used, as described by Sayahi (2011b) in previous research conducted on Arabic-French code-switching (see chapter 1.4.) – yet, as mentioned, adverbs are disregarded from the analysis. In many cases the French verb, whether arabicised or not, was the only French item in speech situations that otherwise were dominated by Arabic, and therefore indeed the element of code-mixing or alternatively an item that reflects the usage of lexical borrowing.

Percentually the role of arabicised French verbs used were 52 % of the French verbs, whereas the remaining 48 % were cases of code-mixing. An average occurrence of arabicised French verbs in relation to regular French verbs among the participants altogether was 2.3 arabicised French verbs and 2.1 regular French verbs. The female participants used in average 1.4 arabicised French verbs and 1.1 regular French verbs, which implies that using French verbs more often took place when inserting the French verb stems into Moroccan Arabic verb morphology patterns. Among male participants in average each male participant used 3.1 arabicised French verbs and 2.1 regular French verbs, which again shows that French verbs more often are used with inserting the French verb stems into Moroccan Arabic verb morphology patterns, than code-mixing with them. Therefore one can see that the cases of using lexical borrowing and adaptation of the verb stems into colloquial Moroccan Arabic took place more often than the cases of code-mixing with regular French verbs among both female and male participants. In certain cases the male participants simply spoke more than the female participants, which naturally also has an impact on the results. To conclude the participants in total seemed to adapt French verb stems into colloquial Moroccan Arabic patterns more often than code-mixing with them; therefore, in this case, lexical borrowing and the insertion of French verb stems into Moroccan Arabic patterns can be seen to be a slightly more often used tool to refer to certain cases that for one reason or another are referred to in French, whereas using regular French verbs, i.e. code-mixing, comes second.

5.2. Numerals

The following chapter will present the relation between numerals in Arabic and in French in the parts of speech where intra-sentential code-switching is present. A differentiation between numerals in Arabic and numerals in French is made. As presented in chapter 4., the item 'wāḥəd' can be used as the colloquial Moroccan Arabic indefinite marker or as a reference to a random person – yet, as it is not a representation of a number in the sense that the study focuses on, it is not treated as one, even if it occurs to a high extent. Likewise, the French indefinite articles *un* and *une* are disregarded if they are used only as an indefinite article, yet noted when intended to emphasise the meaning *one*.

5.2.1. Focus group 1: BA students in Italian - Female speakers:

Speaker 1A: 29 in Arabic, 28 in French

Speaker 1B: 5 in Arabic, 6 in French

Speaker 1C: 1 in Arabic, 0 in French

Speaker 1D: 4 in Arabic, 0 in French

Speaker 1E: 2 in Arabic, 8 in French

Among the five female participants in focus group 1 the occurrence of numerals in Arabic in total was 41 cases. Numerals occurring in French were in total 42. Speaker 1A expressed 28 Arabic numerals; speaker 1B five; speaker 1C one; speaker 1D four; and speaker 1E two. French numerals were used 29 times by speaker 1A; six times by speaker 1B; and eight times by speaker 1E.

Speaker 1A used a high amount of numerals in both Arabic and French. Referring to numerals differs between individuals even in a group that shares a similar educational background regarding their major and studies at the university level. It is worth mentioning that likely due to the fact that the higher education system in Morocco is based on the French system, speaking of classes, levels and semesters by the participants are almost exclusively referred to in French, e.g. CE1 (CE un), CE2 (CE deux), S4 (quatre) and semesters, as 'deux semestres', *two semesters*. Other recurring types of references to numbers among the group in French were 'un / deux / trois / quatre / … module(s)', *one / two / three / four /... modules*, as well as 'une / deux / trois / … matière(s)', o*ne / two / three / … subject(s)*.

5.2.2. Focus group 1: BA students in Italian - Male speakers

Speaker 1F: 9 in Arabic, 1 in French

Speaker 1G: 7 in Arabic, 0 in French

Speaker 1H: 5 in Arabic, 3 in French

Among the three male participants in focus group 1 the total occurrence of numerals in Arabic was 29 cases, while numerals expressed in French were four. Speaker 1F expressed nine numerals in Arabic; speaker 1G seven; and speaker 1H five. Numerals in French were used once by speaker 1F and three times by speaker 1H.

The male speakers in focus group 1 show a higher tendency to refer to numbers in Arabic than in French, with the total of 29 cases of Arabic and only four in French. The spread of the usage of numbers is rather even among the speakers in question. The French was represented by items such as 'deux ans', *two years*, 'première année', *first year*, and 'deuxième année', *second year*.

5.2.3. Focus group 2: MA students in Literature and Comparative Criticism - Female speakers

Speaker 2A: 16 in Arabic, 3 in French

Speaker 2B: 0 in Arabic, 0 in French

Speaker 2C: 0 in Arabic, 0 in French

Among the three female participants in focus group 2 the total occurrence of numerals in Arabic was 16 cases, while numerals expressed in French were three. Arabic numerals occurred 16 times and French numerals three times only in the speech of speaker 2A, as speakers 2B and 2C did not use numerals in their speech in situations where intra-sentential code-switching was present.

The female participants, i.e. speaker 2A in focus group 2 tends to refer to numbers more in Arabic than in French when code-mixing, with the total occurrence of 16 numerals in Arabic and three in French. French numerals were mostly used when talking about the education system: 'première année', *first year*, and 'deuxième année', *second year.*

5.2.4. Focus group 2: MA students in Literature and Comparative Criticism - Male speakers

Speaker 2D: 24 in Arabic, 5 in French

Speaker 2E: 5 in Arabic, 1 in French

Speaker 2F: 12 in Arabic, 1 in French

Speaker 2G: 0 in Arabic, 0 in French

Speaker 2H: 0 in Arabic, 0 in French

Among the five male speakers in focus group 2 the occurrence of numerals in Arabic in total was 41 cases, while numerals in French were used seven times. Speaker 2D expressed 24 numerals in Arabic; speaker 2E five; and speaker 2F 12. French numerals were used five times by speaker 2D; once by speaker 2E; and once by speaker 2F. Speakers 2G and 2H did not use numerals, neither in Arabic nor in French, in speech situations where intra-sentential code-switching was present.

The male speakers in focus group 2 show a tendency to use more Arabic than French when using numerals during speech where intra-sentential code-switching is present. French numerals seemed to be mostly used when talking about academic matters such as 'première année', *first year*, 'deuxième année', *second year*, 'semestre un w semestre deux', *semester one and semester two*, as well as 'un term', *a word*, emphasising the number.

5.2.5. Focus group 3: MA students in Gender Studies - Female speakers

Speaker 3A: 3 in Arabic, 3 in French

Speaker 3B: 0 in Arabic, 0 in French

Speaker 3C: 5 in Arabic, 1 in French

Among the three female speakers in focus group 3 the total occurrence of numerals in Arabic was 11, while numerals used in French were 4. Speaker 3A expressed three numerals in Arabic; and speaker 3C five. French numerals were used three times by speaker 3A; and once by speaker 3C. Speaker 3B did not use neither French nor Arabic numerals in her speech when intra-sentential code-switching was present.

The female participants in focus group 3 expressed more references to numbers in French than in Arabic. It is worth mentioning that the references to numbers in French were only twice about academic matters such as 'quatrième année', *fourth year*, and 'sixième année', *sixth year*, in the parts of speech where intra-sentential code-switching was present, yet an occurrence of 'ana nule f l-math', *I am a zero in mathematics*, was recorded. Apart from the examples mentioned, usage of an article, yet emphasising that it is one specific aspect, occurred: 'c'est un aspect', *it is an aspect.*

5.2.6. Focus group 3: MA students in Gender Studies - Male speakers

Speaker 3D: 6 in Arabic, 0 in French

Speaker 3E: 12 in Arabic, 1 in French

Speaker 3F: 0 in Arabic, 4 in French

Speaker 3G: 5 in Arabic, 1 in French

Speaker 3H: 2 in Arabic, 0 in French

Among the five male participants in focus group 3 the occurrence of numbers used in Arabic in total was 28, while numbers used in French were six in total. Arabic numerals were used six times by speaker 3D; 12 times by speaker 3E; five times by speaker 3G; and twice by speaker 3H. French numerals were used once by speaker 3E; four times by speaker 3F; and once by speaker 3G.

The male speakers in focus group 3 seem to have the tendency to use numbers rather in Arabic than in French in the parts of speech where intra-sentential code-switching is present. Speaker 3F shows a strong tendency of referring to years and prices in French only, such as 'au dix-huit ans', *eighteen years*, 'vingt-cinq dirham', *twenty-five dirhams*, 'vingt-quatre ans', *twenty-four years*. Other cases of numerals in French were in the style of 'deux volumes', *two volumes*, and 'troisième categorie', *third category.*

5.2.7. Focus group 4: MS students in Renewable Energy - Female speakers

Speaker 4A: 26 in Arabic, 4 in French

Speaker 4B: 6 in Arabic, 3 in French

Speaker 4C: 5 in Arabic, 1 in French

Speaker 4D: 1 in Arabic, 1 in French

Among the four female speakers in focus group 4 the total occurrence of numerals used in Arabic was 38, while numerals used in French were nine. Speaker 4A expressed 26 numerals in Arabic; speaker 4B six; speaker 4C five; and speaker 4D one. French numerals were used four times by speaker 4A; three times by speaker 4B; once by speaker 4C; and once by speaker 4D.

The female participants in focus group 4 seem to have a stronger tendency to use numerals in Arabic than in French. Numerals in French represent the type of references to academic matters with semesters and years, such as 'première', *first*, 'cinquième', *fitfth*, and 'sixième', *sixth*, as well as S3 (*S trois*) and S4 (*S quatre*).

5.2.8. Focus group 4: MS students in Renewable Energy - Male speakers

Speaker 4E: 15 in Arabic, 0 in French

Speaker 4F: 1 in Arabic, 1 in French

Speaker 4G: 1 in Arabic, 0 in French

Speaker 4H: 1 in Arabic, 2 in French

Speaker 4I: 10 in Arabic, 9 in French

Among the five male speakers in focus group 4 the total occurrence of Arabic numerals was 28 cases, while the total amount of French numerals was 12. Speaker 4E expressed 15 numerals in Arabic; speaker 4F one; speaker 4G one; speaker 4H one; and speaker 4I ten. French numerals were used once by speaker 4F; twice by speaker 4H; and nine times by speaker 4I.

The male speakers in focus group 4 show a stronger tendency to use numerals in French than in Arabic. Even though the level and the occurrence of French in the group in question was high,

French was (apart from indefinite articles) used to refer to the education system, 'A1' (*A un*), 'MBC2' (*MBC deux*), 'première année', *first year*, 'trois ans', *three years*, and when talking about age, 'dix-huit ans', *eighteen years*, and larger numbers 'quatre cent, six cent', *four hundred, six hundred*.

5.2.9. Focus group 6: MA students in Islamic Studies - Female speakers

Speaker 6A: 1 in Arabic, 1 in French
Speaker 6B: 1 in Arabic, 0 in French
Speaker 6C: 0 in Arabic, 0 in French
Speaker 6D: 0 in Arabic, 0 in French

Among the four female participants in focus group 6 the total occurrence of Arabic numerals was two cases, while the occurrence of French numerals was one. Arabic numerals were used once by speaker 6A; and once by speaker 6B. French numerals occurred once in the speech of speaker 6A. Speakers 6C and 6D did neither use numerals in Arabic nor in French when intra-sentential code-switching was present.

The speech of the group in question was mostly dominated by Arabic and switches to French occurred rarely. Therefore the amount of parts of speech containing intra-sentential code-switching is rather low. The types of numerals expressed were 'sixième année', *sixth year*, and ordinary numbers, i.e. 'ḫəmsa', *five* and 'sətta', *six*.

5.2.10. Focus group 6: MA students in Islamic Studies - Male speakers

Speaker 6E: 8 in Arabic, 1 French
Speaker 6F: 3 in Arabic, 0 in French
Speaker 6G: 0 in Arabic, 0 in French
Speaker 6H: 0 in Arabic, 0 in French

Among the male participants in focus group 6 the total occurrence of Arabic numerals was 11 cases, while the occurrence of French numerals was one. Speaker 6E expressed eight numerals in Arabic; and speaker 6F three. French numerals were expressed once by speaker 6E. Speakers 6G and 6H did not use numerals when intra-sentential code-switching was present.

The amount of switches to French is not high, as the group was dominant in Arabic and only seldom used words in French. The parts of speech containing intra-sentential code-switching still provide a few numerals both in Arabic, i.e. 11 cases of ordinal numbers, and one numeral in French, 'trois', *three*.

5.2.11. Summary of groups - numerals

Female participants:

Focus group 1: 41 in Arabic, 42 in French
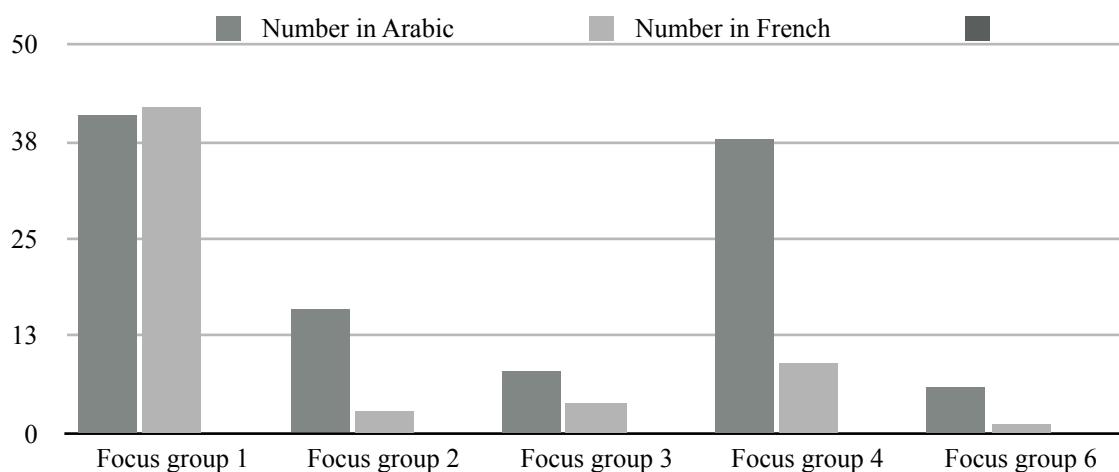Focus group 2: 16 in Arabic, 3 in French
Focus group 3: 8 in Arabic, 4 in French
Focus group 4: 38 in Arabic, 9 in French
Focus group 6: 6 in Arabic, 1 in French
In total: 109 in Arabic, 59 in French

Figure 3: Numerals
- female participants -

Altogether the female speakers used 168 numerals, of which 109 in Arabic and the remaining 59 in French, i.e. 65 % of the numerals were used in Arabic and the remaining 35 % in French. The female participants in focus group 1 expressed in total 83 numerals of which 41 in Arabic and 42 in French; in focus group 2 in total 19 numerals of which 16 in Arabic and three in French; in focus group 3 in total 12 numerals of which eight in Arabic and four in French; in focus group 4 in total 47 numerals of which 38 in Arabic and nine in French; and in focus group 6 in total seven numerals of which six in Arabic and one in French. In average each female participant contributed with 5,74 numerals in Arabic and 3,11 numerals in French.

Male participants:

Focus group 1: 21 in Arabic, 4 in French

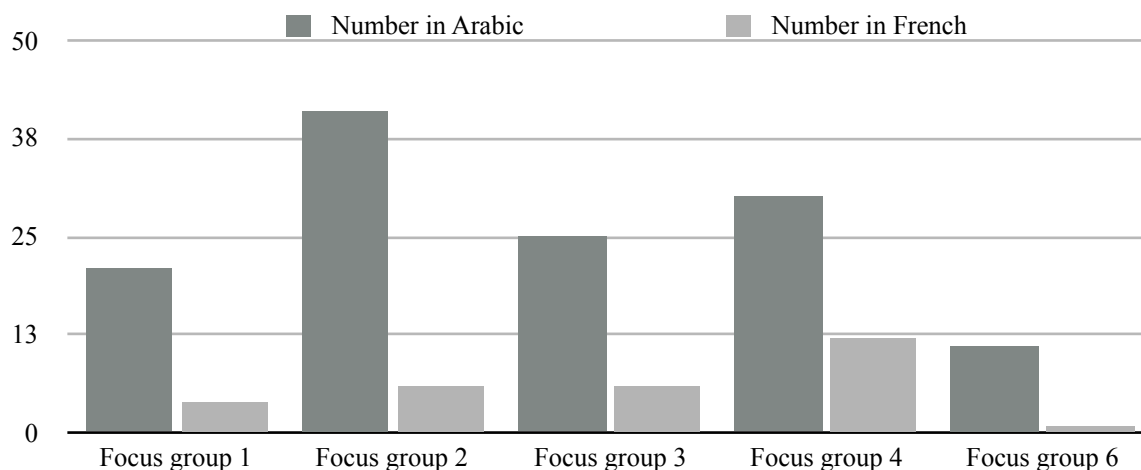Focus group 2: 41 in Arabic, 6 in French

Focus group 3: 25 in Arabic, 6 in French

Focus group 4: 30 in Arabic, 12 in French

Focus group 6: 11 in Arabic, 1 in French

In total: 128 in Arabic, 29 in French

Figure 4: Numerals
- male participants -

Altogether the male participants used 157 numerals of which 128 in Arabic and the remaining 29 in French, i.e. 82 % of the numerals were used in Arabic and the remaining 18 % in French. The male participants in focus group 1 expressed in total 25 numerals of which 21 in Arabic and four in French; in focus group 2 in total 47 numerals of which 41 in Arabic and six in French; in focus group 3 in total 31 numerals of which 25 in Arabic and six in French; in focus group 4 in total 42 numerals of which 30 in Arabic and 12 in French; and in focus group 6 in total 12 numerals of which 11 in Arabic and one in French. In average each male participant contributed with 6,40 numerals in Arabic and 1,45 in French.

Participants altogether:

As the data presents, using numerals varies between the different focus groups as well as male and female speakers. Naturally, as presented, indefinite articles in Moroccan Arabic or in French do not represent numerals in the way this study focuses on them and are therefore disregarded in this study. A high usage of both ordinal and cardinal numbers was documented in both Arabic and French. Therefore structures regarding ordinal numbers such as 'première semestre' vs. 'l-faṣl l-ʾawwal', *first semester*, occurred often, as well as cardinal numbers, as simply as 'trois' vs. 'tlāta', both meaning the exactly same thing, *three*. In total ten participants did not contribute with usage of numerals.

Among the female participants the usage of numerals, whether in French or in Arabic, seemed to be rather equally divided among the focus groups – there is no case of only using numbers in Arabic or in French. Focus group 1 ended up in a rather equally divided situation regarding the occurrence of French and Arabic numerals. Individual features among speakers can be noticed, e.g. speaker 1A who unlike the rest of the participants in the group used a high amount of French numerals, whereas the other speakers preferred to use numerals in Arabic. Individual tendencies alike could be seen in other groups as well: of female speakers only focus group 1 used more French numerals than Arabic. Otherwise Arabic certainly seems to be the language that is preferred to be used when using numerals, as it even served as the base language for speech for the majority of the groups in the study. The field of study did not seem to play a big role in whether the numerals were used in French or Arabic, yet did seem to have an impact on the likelihood to code-mix with numerals.

Certain participants did not contribute with numerals in speech situations where intra-sentential code-switching was present. In most cases this is due to the participants exclusively speaking in Arabic with only a few – if any – switches to French, which is especially visible in focus group 6, MA students in Islamic Studies, but also occurring in other groups, and correlates with the overall occurrence of intra-sentential code-switching among the group. Four of the eight participants in focus group 2 did not provide code-mixing with numerals at all, as well as one participant in focus group 3, and three of seven participants in focus group 6. The data shows that the participants who did not code-mix with numerals were mostly in the field of humanities, as in total eight participants in the field of humanities did not code-mix with numerals.

In average the occurrence of the usage of numerals among the female participants altogether was 5,74 numerals in Arabic expressed by each female speaker, and 3,11 numerals expressed in French by each female speaker, implying that in average the usage of numerals in Arabic occurred more often than usage of numerals in French. 65 % of the numerals expressed by the female participants were in Arabic, whereas the remaining 35 % were in French. Female speakers in average expressed 5,74 Arabic numerals and 3,11 French numerals, which implies that in Arabic was used more often among female speakers. Female speakers also used more French numerals than the male speakers.

Among the male participants Arabic seems to be the dominant language when using numerals in all five groups. The male speakers used clearly higher amounts of numerals in Arabic than in French, as 82 % of the numerals expressed by the male participants were in Arabic, whereas the remaining 18 % were in French. Field of study did not seem to play a big role in whether numerals were used in French or Arabic, as the results from each group are rather similar. The average occurrence regarding numerals among the male participants altogether was 6,40 Arabic numerals expressed by each male participant and 1,45 French numerals, which implies that Arabic was used significantly more often than French when using numerals.

5.3. Pronunciation of the phoneme /r/

The following chapter presents the spread of the pronunciation of the phoneme /r/ in French words. The differentiation will be made between the French, guttural [ʁ] and alveolar trill [r] as in Arabic.

5.3.1. Focus group 1 - BA students in Italian - Female speakers

Speaker 1A: 90 words pronounced with French [ʁ], 1 with Arabic [r]

Speaker 1B: 6 words pronounced with French [ʁ], 0 with Arabic [r]

Speaker 1C: 1 word pronounced with French [ʁ], 6 with Arabic [r]

Speaker 1D: 6 words pronounced with French [ʁ], 1 with Arabic [r]

Speaker 1E: 23 words pronounced with French [ʁ], 5 with Arabic [r]

Of the total 139 French words containing the phoneme /r/ expressed by the female participants in focus group 1, 126 cases were pronounced with the French, guttural [ʁ] and the remaining 13 with alveolar trill [r]. Speaker 1A pronounced 90 words with [ʁ] and one word with [r]; speaker 1B six words with with [ʁ] and none with [r]; speaker 1C one word with [ʁ] and six with [r]; speaker 1D six words with [ʁ] and one with [r]; and speaker 1E 23 words with [ʁ] and five with [r].

It shall be noted that speaker 1A expressed most of the cases with French [ʁ], as her speech contained a lot of French. Speaker 1A also expressed two arabicised French verbs containing /r/ that she pronounced with [ʁ]. The results reveal that apart from speaker 1C the female participants in focus group 1 pronounced French words containing /r/ more often with [ʁ] than with [r]; speaker 1C used mostly [r] in her speech, yet [ʁ] occurred once.

5.3.2. Focus group 1: BA students in Italian - Male speakers

Speaker 1F: 16 words pronounced with French [ʁ], 15 with Arabic [r]

Speaker 1G: 6 words pronounced with French [ʁ], 5 with Arabic [r]

Speaker 1H: 4 words pronounced with French [ʁ], 13 with Arabic [r]

Of the total 59 French words containing the phoneme /r/ expressed by the male participants in focus group 1, 26 cases were pronounced with the French, guttural [ʁ] and the remaining 33 with alveolar trill [r]. Speaker 1F pronounced 16 words with [ʁ] and 15 with [r]; speaker 1G six words with [ʁ] and 5 with [r]; and speaker 1H four words with [ʁ] and 13 with [r].

The spread of the guttural /r/ differs significantly between the male participants of the same focus group, as the occurrence of [ʁ] is 26 cases, whereas the usage of alveolar trill [r] was somewhat similar to the amount of the female participants, 33 cases. Therefore most of the French words containing /r/ were pronounced with [r], yet the difference is not as big as between the female participants in the same focus group.

5.3.3. Focus group 2: MA students in Literature and Comparative Criticism - Female speakers

Speaker 2A: 4 words pronounced with French [ʁ], 6 with Arabic [r]

Speaker 2B: 2 words pronounced with French [ʁ], 0 with Arabic [r]

Speaker 2C: 0 words pronounced with French [ʁ], 0 with Arabic [r]

Of the total 12 French words containing the phoneme /r/ expressed by the female participants in focus group 2, six cases were pronounced with the French, guttural [ʁ] and the remaining six with alveolar trill [r]. Speaker 2A pronounced four words with [ʁ] and six with [r]; and speaker 2B two words with [ʁ] and none with [r]. Even though speaker 2A used both [ʁ] and [r], and speaker 2B only [ʁ], the amount of the occurrence of the French words containing in the data is rather small in order to make generalisations. Speaker 2C did not speak any French during the discussion and therefore, naturally, did not contribute with French words with the phoneme /r/.

5.3.4. Focus group 2: MA students in Literature and Comparative Criticism - Male speakers

Speaker 2D: 3 words pronounced with French [ʁ], 12 with Arabic [r]

Speaker 2E: 0 words pronounced with French [ʁ], 5 with Arabic [r]

Speaker 2F: 0 words pronounced with French [ʁ], 3 with Arabic [r]

Speaker 2G: 2 words pronounced with French [ʁ], 2 with Arabic [r]

Of the total 27 French words containing the phoneme /r/ expressed by the male speakers in focus group 2, five cases were pronounced with the French, guttural [ʁ] and the remaining 22 with alveolar trill [r]. Speaker 2D pronounced three words with [ʁ] and 12 with [r]; speaker 2E none with [ʁ] and five with [r]; speaker 2F none with [ʁ] and three with [r]; and speaker 2G two words with [ʁ] and two with [r].

The results among the male participants in the same focus group show a stronger tendency to pronounce French words with alveolar trill [r] than with the guttural [ʁ]. Therefore the results support the theory that male speakers more often pronounce French words with [r]. The level of competence in French and exposure to it in education might play a role in the results, as the language of instruction in the field of humanities is not French; therefore the group was dominant in Arabic, yet switches to French were made.

5.3.5. Focus group 3: MA students in Gender Studies - Female speakers

Speaker 3A: 33 words pronounced with French [ʁ], 9 with Arabic [r]

Speaker 3B: 2 words pronounced with French [ʁ], 0 with Arabic [r]

Speaker 3C: 46 words pronounced with French [ʁ], 3 with Arabic [r]

Of the total 93 French words containing the phoneme /r/ expressed by the female participants in focus group 3, 81 cases were pronounced with the French, guttural [ʁ] and the remaining 12 with alveolar trill [r]. Speaker 3A pronounced 33 words with [ʁ] and nine with [r]; speaker 3B two words with [ʁ] and none with [r]; and speaker 3C 46 words with [ʁ] and three with [r].

As the data presents, the amount of French words containing /r/ pronounced with the guttural [ʁ] was significantly higher than the French words pronounced with [r]. Speakers 3A and 3C provided a great amount of intra-sentential code-switching and therefore material for this study. It shall be noted that speaker 3B, expressing only two French words pronounced with [ʁ], spoke in most cases either Arabic or French without mixing them, which could support the theory of somewhat older generations[30] rather switching completely to one language over the other due to having reached the level of balanced bilingualism, whereas the younger generations seem to perform more noun phrase switches (see part 1.4. Previous studies). Therefore one shall not be mistaken to think that speaker 3B did not express herself in French due to low competence in French; on the contrary, her competence in both Arabic and French allowed her to stick to one language without mixing them more than just in a few cases. Speaker 3A expressed in total four arabicised French verbs containing the phoneme /r/, of which three were pronounced with [ʁ] and one with [r].

5.3.6. Focus group 3: MA students in Gender Studies - Male speakers

Speaker 3D: 29 words pronounced with French [ʁ], 4 with Arabic [r]

Speaker 3E: 50 words pronounced with French [ʁ], 3 with Arabic [r]

Speaker 3F: 25 words pronounced with French [ʁ], 18 with Arabic [r]

Speaker 3G: 5 words pronounced with French [ʁ], 3 with Arabic [r]

Speaker 3H: 0 words pronounced with French [ʁ], 1 with Arabic [r]

Of the total 138 French words containing the phoneme /r/ expressed by the male participants in focus group 3, 109 cases were pronounced with the French, guttural [ʁ] and the remaining 29 with alveolar trill [r]. Speaker 3D pronounced 29 words with [ʁ] and four with [r]; speaker 3E 50 words with [ʁ] and three with [r]; speaker 3F 25 words with [ʁ] and 18 with [r]; speaker 3G five words with [ʁ] and three with [r]; and speaker 3H none with [ʁ] and one with [r].

The male participants in focus group 3 provided results with a clearly stronger tendency to pronounce French words containing /r/ rather with guttural [ʁ] than alveolar trill [r]. Apart from speaker 3H all the male participants in the focus group in question showed, at times significantly,

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[30] The speaker in question, speaker 3B, was born year 1968, whereas the majority of the participants in the group were born between 1985 - 1990.

stronger tendency to achieve the 'correct', guttural pronunciation of /r/, yet it shall be noted that speaker 3H did not provide more than one case of a French word including /r/ that was pronounced with [r]. Speaker 3D expressed one arabicised French verb containing the phoneme /r/, and speaker 3F two, all pronounced with [r], which could imply the adoption of a French verb stem into colloquial Moroccan Arabic and therefore suggest the preference to pronounce it with [r], which even therefore supports the idea that arabicised French verbs indeed are cases of lexical borrowing – in other cases regarding words containing /r/ both speakers used more [ʁ] and [r]. Therefore one can see that the male participants in the group, unlike the hypothesis claims, seem to go for the 'correct' French pronunciation rather than rolling the /r/ for 'showing masculinity' and 'marking the gender difference', as previous research (see chapter 1.4.) says.

5.3.7. Focus group 4: MS students in Renewable Energy - Female speakers

Speaker 4A: 73 words pronounced with French [ʁ], 22 with Arabic [r]

Speaker 4B: 55 words pronounced with French [ʁ], 0 with Arabic [r]

Speaker 4C: 7 words pronounced with French [ʁ], 10 with Arabic [r]

Speaker 4D: 6 words pronounced with French [ʁ], 2 with Arabic [r]

Of the total 175 French words containing the phoneme /r/ expressed by the female participants in focus group 4, 141 cases were pronounced with the French, guttural [ʁ] and the rest 34 with alveolar trill [r]. Speaker 4A pronounced 73 words with [ʁ] and 22 with [r]; speaker 4B 55 words with [ʁ] and none with [r]; speaker 4C seven words with [ʁ] and 10 with [r]; and speaker 4D six words with [ʁ] and two with [r].

The female participants in focus group 4, as the data above presents, seem to have a strong tendency to pronounce French words containing the phoneme /r/ with the French, guttural [ʁ], leaving the usage of alveolar trill to significantly fewer cases. As the language of instruction for the group in question is French, high competence in French could be said to be a natural part of the group, and therefore a more 'correct' pronunciation of French can be thought to be a merit among the speakers, not least being aware of the fact that it is seen as more prestigious and elegant. Only speaker 4C pronounced a higher amount of words with [r] than with [ʁ], while the other participants ranked at times much higher, or in the case of speaker 4B, without exception, using [ʁ]. Speaker 4A expressed

one arabicised French verb containing the phoneme /r/, pronounced with [r], yet her speech other-wise was clearly dominated by the usage of [ʁ].

5.3.8. Focus group 4: MS students in Renewable Energy - Male speakers

Speaker 4E: 25 words pronounced with French [ʁ], 33 with Arabic [r]

Speaker 4F: 21 words pronounced with French [ʁ], 34 with Arabic [r]

Speaker 4G: 1 word pronounced with French [ʁ], 15 with Arabic [r]

Speaker 4H: 62 words pronounced with French [ʁ], 10 with Arabic [r]

Speaker 4I: 66 words pronounced with French [ʁ], 55 with Arabic [r]

Of the total 264 French words containing the phoneme /r/ expressed by the male participants in focus group 4, 150 cases were pronounced with the French, guttural [ʁ] and the remaining 114 with alveolar trill [r]. Speaker 4F pronounced 21 words with [ʁ] and 34 with [r]; speaker 4G one word with [ʁ] and 15 with [r]; speaker 4H 62 words with [ʁ] and 10 with [r]; and speaker 4I 66 words with [ʁ] and 55 with [r].

The male participants in focus group 4 performed more French, guttural [ʁ] than alveolar trill [r], yet the only clear preference to use [ʁ] rather than [r] was made by speaker 4H. Speaker 4G seemed to use more [r] than [ʁ]. The other speakers contributed with relatively homogenous numbers in both [ʁ] and [r], yet speakers 4E and 4F preferring the lateral trill over the guttural [ʁ], and speaker 4I preferring the guttural [ʁ] over [r]. The group in question also contributed with an amount of arabicised French verbs containing the phoneme /r/: in total nine cases pronounced with [ʁ] and eight cases of [r], which makes the spread rather equal. Yet four of five speakers used both [ʁ] and [r], which makes it rather impossible to see a preference regarding the pronunciation of /r/ when it is a part of an arabicised French verb.

5.3.9. Focus group 6: MA students in Islamic Studies - Female Speakers

Speaker 6A: 6 words pronounced with [ʁ], 2 with [r]

Speaker 6B: 0 words pronounced with [ʁ], 0 with [r]

Speaker 6C: 0 words pronounced with [ʁ], 0 with [r]

Speaker 6D: 0 words pronounced with [ʁ], 0 with [r]

Of the total eight French words containing the phoneme /r/ expressed by the female speakers in focus group 6, six cases were pronounced with the French, guttural [ʁ] and two with alveolar trill [r]. All the cases were expressed by speaker 6A, as the other female participants did not speak French at all.

Investigating the pronunciation of the phoneme /r/ among the female speakers in focus group 6 was applicable only to speaker 6A as the occurrence of French was very low. The language of instruction of the group in question was Arabic, which may play a role regarding the linguistic exposure to French. Yet speaker 6A preferred to pronounce French words with [ʁ], which could imply female speakers trying to achieve a 'correct' French pronunciation.

5.3.10. Focus group 6: MA students in Islamic Studies - Male speakers

Speaker 6E: 1 word pronounced with [ʁ], 11 with [r]

Speaker 6F: 0 words pronounced with [ʁ], 1 word with [r]

Speaker 6G: 0 words pronounced with [ʁ], 0 with [r]

Speaker 6H: 0 words pronounced with [ʁ], 0 with [r]

Of the total 13 French words containing the phoneme /r/ expressed by the male speakers in focus group 6, one word was pronounced with the French, guttural [ʁ] and the remaining 12 with alveolar trill [r]. Speaker 6E expressed one word with [ʁ]. The French words pronounced with alveolar trill were 11 cases by speaker 6E; and 1 case by speaker 6F, whereas speakers 6G and 6H, due to not speaking any French during the discussion did not contribute with cases of French words containing the phoneme /r/.

The amount of code-switching was low among the male participants in focus group 6, but a strong tendency to prefer the alveolar trill can be seen, which supports the theory of male speakers using more [r] than [ʀ].
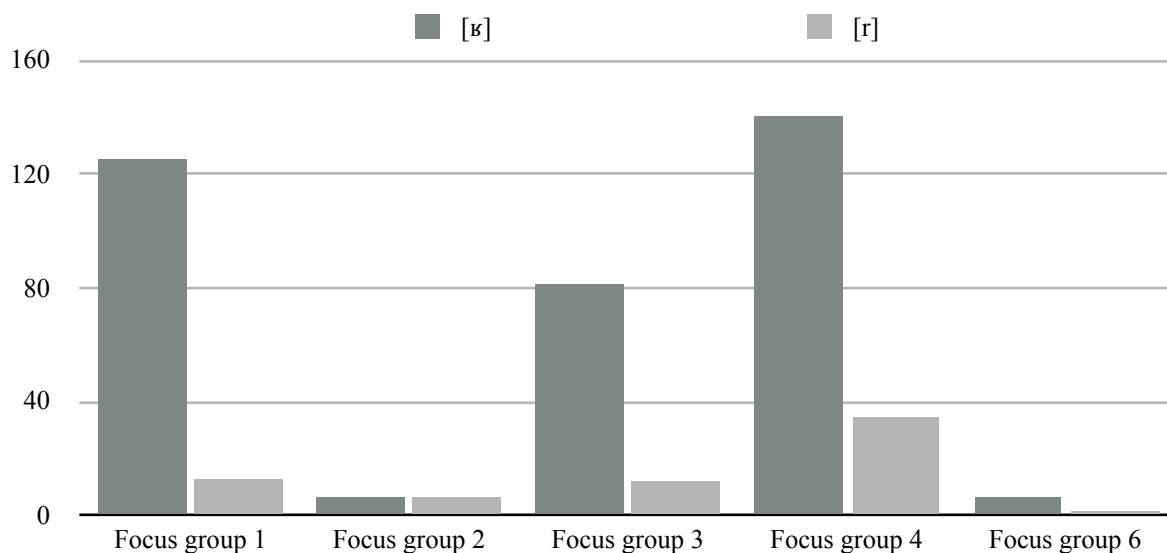
5.3.11. Summary of groups: pronunciation of the phoneme /r/

Female speakers:

Focus group 1: 126 [ʀ], 31 [r]

Focus group 2: 6 [ʀ], 6 [r]

Focus group 3: 81 [ʀ], 12 [r]

Focus group 4: 141 [ʀ], 34 [r]

Focus group 6: 6 [ʀ], 2 [r]

The figure below presents the spread of the occurrence of [ʀ] vs. [r] among female participants.

Figure 5: The pronunciation of /r/ in French
words
- female participants -

As the data, as well as table 11 presents, there are differences in the pronunciation of the phoneme /r/ in French words between the different focus group among the female participants. The female participants in total used 445 French words with /r/, of which they pronounced 360 with [ʁ], i.e. the vast majority, 81 %, and 85 words, i.e. 19 % with [r]. The female speakers in focus group 1 used in total 157 French words containing the phoneme /r/ of which 126 were pronounced with [ʁ] and 31 with [r]; focus group 2 in total 12 French words containing the phoneme /r/ of which six were pronounced with [ʁ] and six with [r]; focus group 3 in total 93 French words containing the phoneme /r/ of which 81 were pronounced with [ʁ] and 12 with [r]; focus group 4 in total 175 French words containing the phoneme /r/ of which 141 were pronounced with [ʁ] and 34 with [r]; and focus group 6 eight French words containing the phoneme /r/ of which six were pronounced with [ʁ] and two with [r]. In average each female participant contributed with 18,95 realisations of [ʁ] and 4,47 realisations of [r].

Male speakers:

Focus group 1: 26 [ʁ], 33 [r]   Focus group 4: 150 [ʁ], 114 [r]
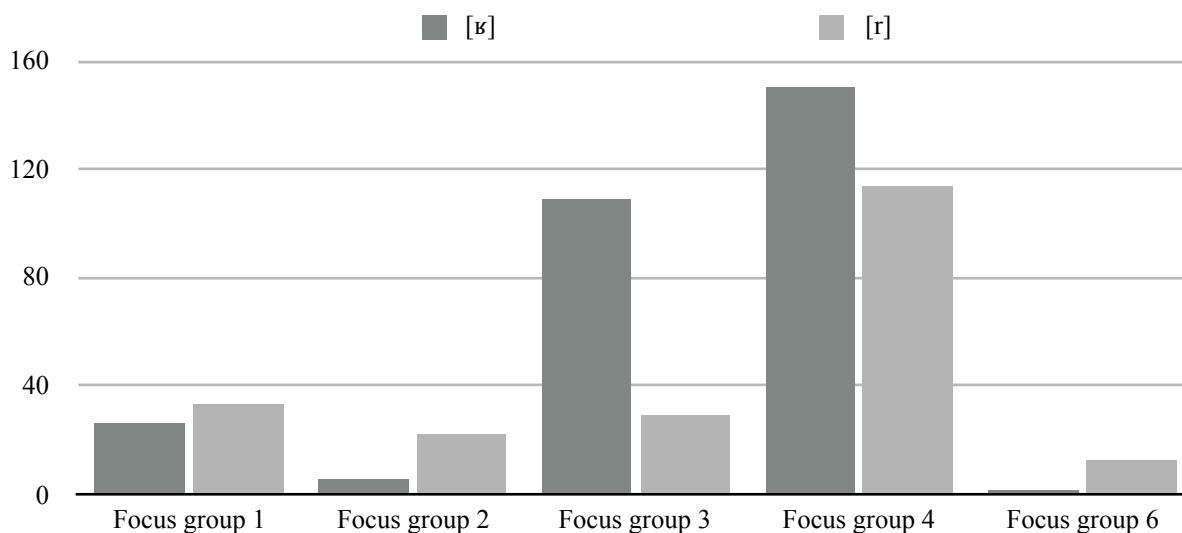
Focus group 2: 5 [ʁ], 22 [r]   Focus group 6: 1 [ʁ], 12 [r]

Focus group 3: 109 [ʁ], 29 [r]

The chart below presents the spread of the occurrence of [ʁ] vs. [r] among male participants.

Table 6: Pronunciation of /r/ in French words
- male participants -

The data presents that there are differences in the pronunciation of the phoneme /r/ between the different focus groups among the male participants. The male participants expressed in total 501 French words containing the phoneme /r/ of which 291 were pronounced with [ʁ] and 210 with [r], i.e. 58 % with [ʁ] and 42 % with [r]. The male speakers in focus group 1 used in total 59 French words containing the phoneme /r/ of which 26 were pronounced with [ʁ] and 33 with [r]; focus group 2 in total 27 French verbs containing the phoneme /r/ of which five were pronounced with [ʁ] and 22 with [r]; focus group 3 in total 138 French words containing the phoneme /r/ of which 109 were pronounced with [ʁ] and 29 with [r]; focus group 4 in total 264 French words containing the phoneme /r/ of which 150 were pronounced with [ʁ] and 114 with [r]; and focus group 6 in total 13 French words containing the phoneme /r/ of which 1 was pronounced with [ʁ] and 12 with [r]. In average each male participant contributed with 14,55 realisations of [ʁ] and 10,50 realisations of [r].

Participants altogether:

As tables 11 and 12 above present, there are great differences between the different focus groups as well as male and female speakers regarding the pronunciation of the phoneme /r/. The differences between the five focus groups are evident, as can be seen in the charts, but a difference can also be found between male and female speakers. In total seven participants did not contribute with usage of French words containing the phoneme /r/ at all, of which five were in the field of humanities and therefore did not provide results regarding the usage of either [ʁ] or [r]. Four of these five participants were in focus group 6, MA students in Islamic Studies, and one in focus group 2, MA students in Literature and Comparative Criticism.

The greatest differences regarding the pronunciation of /r/ in French words can be found among the female participants, as four of five groups used a higher amount of [ʁ] than [r], as the hypothesis suggests. The preference to use [ʁ] instead of [r] is significantly strong in three groups, namely focus groups 1, 3 and 4, yet even the group that was by far the most dominant in Arabic and therefore contributed the least with French words, focus group 6 in Islamic Studies, shows a stronger tendency in the usage of [ʁ] instead of [r]. There are also many cases of a speaker providing both [ʁ] and [r]. In average each female speaker pronounced 18,95 French words containing the phoneme /r/

with [ʁ] and 4,47 words with [r], which implies that the French, guttural [ʁ] is a clearly more often occurring way to pronounce /r/ than [r].

Among the male participants there seems to be a difference in the pronunciation of /r/ in French words as well, yet the division is not as strong as among the female participants. Of five groups three, i.e. focus groups 1, 2 and 6 provided more realisations of alveolar trill [r] than guttural [ʁ], whereas the remaining two, i.e. focus groups 3 and 4 provided a higher amount of [ʁ] than [r]. As seen, individual differences occur as well, and a speaker may use both [ʁ] and [r] in his pronunciation. The hypothesis suggests that male speakers are more likely to use [r] than [ʁ], which up to a certain extent is applicable in this case. Looking only at the groups, three of five focus groups would support the hypothesis, as two groups would falsify it. It is, again, interesting to note that a tendency to use French for some male speakers correlates with the more 'correct' pronunciation of /r/ in French words.

In average each male speaker pronounced 14,55 French words containing the phoneme /r/ with [ʁ] and 10,50 words with [r], which implies that the French, guttural [ʁ] is used more often when pronouncing French words with /r/ than with [r] even among male speakers, yet the average occurrence of [ʁ] is lower than among female speakers, whereas [r] is higher compared to female speakers.

Regarding the pronunciation of French verbs that are adapted into Moroccan Arabic, it is interesting to notice that there seems to be no systematic use coming to whether the words are pronounced with [ʁ] or [r], as even people who pronounced a clear majority of French words containing /r/ with [ʁ] might pronounce arabicised French verbs containing /r/ with [r], and vice versa. The arabicised French verbs sometimes seemed to be treated as French words and possibly therefore maintain the French [ʁ], while in other cases the verbs were pronounced with [r], which could imply the adoption of the item into colloquial Moroccan Arabic even on the phonological level, and therefore support the theory that arabicised French verbs, indeed, are cases of lexical borrowing, not code-mixing.

5.4. Repetition / confirmation

The following chapter will present the cases of intra-sentential code-switching in the occurrence of repetition, whether in cases of rhetorical emphasis and confirmation or just repeating or adding a word or an expression with the same or similar content. Naturally, it is difficult to determine whether a speaker intended to emphasise or just repeat an item; therefore this part of the analysis only presents the occurrence of an item being repeated without focusing on analysing why. A suitable translation to match the content of the utterance, and that fits in the context, is provided. The French word being a part of the phenomenon is underlined, and the Arabic counterpart is written in italics.

5.4.1 Focus group 1: BA students in Italian - Female speakers

(24) Speaker 1A: hādū *muʿtaqadāt* hādū les pensées dyāl l-mghārba

(These are *beliefs*, these are the thoughts of the Moroccans)

(25) Speaker 1D: nās kijiw bāghiyyīn yistatmrū f l-maghreb yidīrū *š-šarikāt* dyālhum, des entreprises, bāqī ṣaʿib hna.

(People come willing to invest in Morocco, start their *companies*, companies, it is still difficult here)

5.4.2. Focus group 1: BA students in Italian - Male speakers

(26) Speaker 1H: f première année, f *l-ʿām l-ʾuwwl* w mn baʿd dkəhlt en contact mʿa d-drārī

(in the first year, in *the first year* and later i got in touch with the guys)

5.4.3. Focus group 2: MA students in Literature and Comparative Criticism - Female speakers

(27) Speaker 2A: kayfīdək imtilāk loghāt *oḫrā*, <u>des plus</u>

(It is beneficial for you to acquire *other* languages, <u>more</u>)

5.4.4. Focus group 2: MA students in Literature and Comparative Criticism - Male speakers

(28) Speaker 2C: *l-faṣl l-ʾawwal*, <u>semestre un</u> w semestre deux

(*the first semester*, <u>semester one</u> and semester two)

(29) Speaker 2D: yjīblək *klima*, <u>un terme</u>

(Brings you *a word*, <u>a term</u>)

(30) Speaker 2D: yaʿnī llī kayqraw mʿāna linjlīziyya kangūlu hādū <u>la crème sociale</u>

n-nuḫba

(I mean the ones who study English with us, we say they are <u>the social cream</u>, *the elite*)

5.4.5. Focus group 3: MA students in Gender Studies - Female speakers

(31) Speaker 3A: ana f l-iʿdādī *s-sana r-rābiʿa* quatrième année fāš nāḫud la note dyālī

(In junior high school, *the fourth year*, fourth year when I would get my grades)

(32) Speaker 3C: bl-ʾiḍāfa ʾanna un organisme *kayʿqed* liqāʾ *ṣaḥafī w ṣaḥafiyyāt tayʿayyet* ʿala des journalistes *kaynḍḍəm* liqāʾ təwāṣulī

(in addition an entity *organises* a meeting for *male journalists and female journalists*, *contacts* the journalists, *organises* a networking meeting)

5.4.6. Focus group 3: MA students in Gender Studies - Male speakers

(33) Speaker 3E: mnīn tikūnū mrīḫīn w kayhezzū journal *jarīda* w tiqraw wāḥəd l-ḫabar f ṣ-ṣəfḥa l-uwla

(when you are relaxing and take a newspaper, *newspaper* and you read some news on the first page)

(34) Speaker 3E: ila rjəʿt lə… *l-kulliyyat*, la fac des lettres, *kulliyyat l-ādāb w l-ʿulūm l-insāniyya*

(if I returned to… *the faculties*, the faculty of arts, *faculty of arts and humanities*)

5.4.7. Focus group 4: MS students in Renewable Energy - Female speakers

(35) Speaker 4B: *ʾana* <u>je</u> suis d'accord avec ssi l-wzīr šnū taygūl

(*me*, <u>I</u> agree with the minister about what he says)

5.4.8. Focus group 4: MS students in Renewable Energy - Male speakers

(36) Speaker 4H: kanʿārf wāḥəd ustād jāmiʿī ʿandū <u>doctorat</u>, ʿandū d-doktōra fi biolōjia rāh ustād – kātib ḍabt f maḥkama

(I know a university teacher who has a <u>Doctorate</u>, he has a *Doctorate in biology*, he became a teacher – an adjust in court)

(37) Speaker 4I: šī wāḥd ghādī yāḫud doktōra bla ma publié b l-injliziyya wəlla b l-faransiyya, hādi ma yimkənš yāḫud bāš ghādī, matalan ghādī f l-<u>energetique</u>, wāš ghādi publié b l-ʿarabiyya, ṣəʿib, ḥtta *l-mustalaḥāt* <u>les mots techniques</u> šnū b l-ʿarabiyya šnū hiya l-<u>photovoltaique</u> b l-ʿarabiyya matalan, ma ʿandhāš ma ʿndha ḥtta maʿna

(is there someone who is going to go for doctoral studies without publishing in English or in French, it does not work in for example in [the field of renewable] energy, is one going to publish in Arabic, it is difficult, what is *the terminology*, <u>the technical terminology</u> in Arabic, what is for example photovoltaic in Arabic, it does not have a meaning)

5.4.9. Focus group 6: MA students in Islamic Studies - Female speakers

(38) Speaker 6B: ra ʿandū wāḥəd <u>la somme</u>, ʿandu wāḥəd *l-majmūʿ* ṭayyib

(he has <u>a sum</u>, he has *a* good *sum*)

5.4.10. Focus group 6: MA students in Islamic Studies - Male speakers

There were no cases of repetition among the male speakers in focus group 6.

5.4.11. Summary of groups - repetition

Female participants:

Focus group 1: 2

Focus group 2: 1

Focus group 3: 2

Focus group 4: 1

Focus group 6: 1

In total: 7

As the data presents, the female participants altogether expressed seven cases of emphasis or rhetorical confirmation reached by repetition with code-switching. The occurrence of repetition in focus group 1 was in total two cases; in focus group 2 in total one case; in focus group 3 in total two cases; in focus group 4 in total one case; and in focus group 6 in total one case.

Male participants:

Focus group 1: 1

Focus group 2: 3

Focus group 3: 2

Focus group 4: 2

Focus group 6: 0

In total: 8

As the data presents, the male participants altogether expressed eight cases of emphasis or rhetorical confirmation reached by repetition with code-switching. The occurrence of repetition in focus group 1 was in total one case; in focus group 2 in total three cases; in focus group 3 in total two cases; in focus group 4 in total two cases; and in focus group six none.

The data presented shows that repetition and rhetorical confirmation reached by code-switching occurs in all the groups, with the total occurrence of 15 cases of which female participants in total provided seven cases and male participants eight cases. The types of emphasis are various, and there is as well a difference in whether the repetition takes place in French or Arabic.

A differentiation between the compositions that reflect a 'pure' switch between Arabic and French (or vice versa) and the construction that seems to reflect the French 'moi, je suis'[31] structure (as seen in example 35) shall be made (see paragraph below). Therefore, of the six cases of repetition expressed by the female participants, five were expressed by the concept first being uttered in Arabic and then repeated in French, while one was first expressed in French and then repeated in Arabic. Therefore one can see that the majority, i.e. 5/6 cases of the switches expressed when repeating, were from Arabic to French. The results among male speakers are different; not only did the male speakers contribute with more repetition reached by code-switching with the total occurrence of eight cases, but half of them, i.e. 4/8 were constructed with the concept first being uttered in Arabic and then repeated in French, while the other four, i.e. 4/8 first in French and then in Arabic. Therefore, among the participants altogether the division between of the constructions is equal.

As example 35 presents, there was a case of repeating the personal pronoun in the style of the French 'moi, je suis' structure, expressed by a female speaker in focus group 4. The case of repetition constructed this way shall be distinguished from the ones discussed in the paragraph above as it mostly reflects a direct loan structure from French rather than other repetition or rhetorical confirmation reached by code-switching. The reason to its existence might be, as discussed earlier, the different requirements that Arabic and French have for either including the personal pronoun in a phrase or not, as well as Arabic lacking a verb 'to be' in the present tense; the preference to use the desired verb in French causes a situation where inserting a French personal pronoun is necessary – this in order to avoid structures like ''ana suis', *I am*, or 'ḥna obligé', *we are obliged*, as well as ''ana pense', *I think*, that would not be permitted types of structures[32].

Repetition, whether when used to rhetorically confirm a concept or just simply to repeat an item, is not as much occurring as other phenomena analysed in this study. Even though the investigation of

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[31] Literarily: *me, I am.*

[32] See chapter 1.4. Previous studies.

the phenomenon in question is rather qualitative than quantitative, it is worth noticing that the results show and imply that the phenomena exists in all groups regardless field of study, yet the amount and type of the repetition and confirmation differ, and was used by 14 of the total 39 participants. In focus group 1 the total occurrence of the phenomenon was three cases; in focus group 2 four; in focus group 3 five; in focus group 4 two; and in focus group 6 one.

5.5. Summary of analysed features of intra-sentential code-switching

This chapter will briefly summarise the findings of this study separating the results between female and male participants. Chapter 5.5.1. will present the findings regarding female participants, and chapter 5.5.2. will present the results found in the speech of male participants. Chapter 5.5.3. presents the results of the participants altogether.

5.5.1. Female speakers:

5.5.1.1.Verbs:

Of the 48 French verbs that occurred in the parts of speech where intra-sentential code-switching was present the female participants altogether expressed 27 French verbs that were adapted into Moroccan Arabic verb morphology patterns, while 21 verbs were used as regular French verbs, which means that 56 % of the verbs were arabicised and 44 % were used as regular French verbs. In average each female participant contributed with 1.4 arabicised French verbs and 1.1 regular French verbs, implying that the adoption of the French verb stems into colloquial Moroccan Arabic occurs slightly more often than code-mixing with regular French verbs.
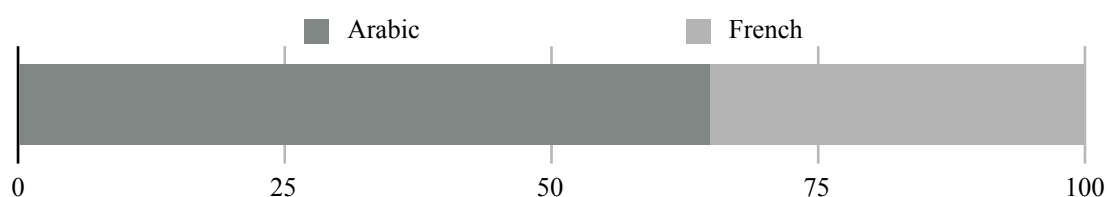
Figure 7: French verbs in percentage: female
speakers (100% = 48 verbs)
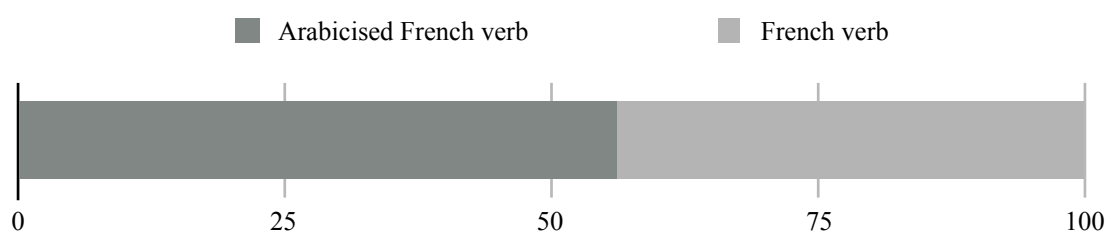
5.5.1.2. Numerals:

Of the 168 numerals used in the parts of speech where intra-sentential code-switching was present the female participants altogether expressed 109 numerals in Arabic and 59 in French, which means that 65 % of the numbers used were referred to in Arabic and 35 % in French. In average each female participant contributed with 5.7 numerals in Arabic and 3.1 numerals in French.

Figure 8: Numerals in percentage: female speakers (100% = 168 numerals)

5.5.1.3. Pronunciation of the phoneme /r/

Of the 445 French words containing the phoneme /r/ used in the parts of speech where intra-sentential code-switching was present the female participants altogether pronounced 360 words with the French, guttural [ʁ] and 85 words with alveolar trill [r], which means that 81 % of the French words that occurred were pronounced with [ʁ] while 19 % were pronounced with [r]. In average each female participant contributed with 19 French words containing the phoneme /r/ pronounced with [ʁ] and 4.5 with [r].

Figure 9: Pronunciation of the phoneme /r/ in French words: female speakers - (100% = 445 French words with /r/)
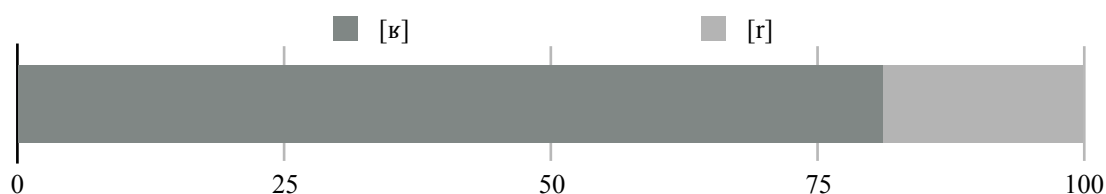
5.5.1.4. Repetition / confirmation

Of the total seven cases of repetition and rhetorical confirmation reached by code-switching the female participants altogether provided six cases of repeating concepts or words, of which five were first expressed in Arabic and then repeated in French, and one first expressed in French and then repeated in Arabic; one of the constructions imply the adoption of the French 'moi, je suis' structure.

5.5.1.5. Summary of female participants

In a nutshell, the female participants in all focus groups altogether expressed in total 48 French verbs of which 27, i.e. 56 % were adapted into Moroccan Arabic verb morphology patterns, and 21, i.e. 44 % were used as regular French verbs, which leads to an average occurrence of 1.4 arabicised French verbs and 1.1 regular French verbs. Numerals were used in total 168 times, of which 109, i.e. 65 % expressed in Arabic and 59, i.e. 35 % in French, i.e. 5.7 numerals in Arabic and 3.1 numerals in French in average. Of the overall 445 French words containing the phoneme /r/ 360 words, i.e. 81 % were pronounced with the French, guttural [ʁ] and the remaining 85 words, i.e. 19 % with alveolar trill [r], i.e. 19 words with [ʁ] and 4.4 with [r]. The total occurrence of repetition was seven cases.

Figure 10: summary of participants
- female speakers -
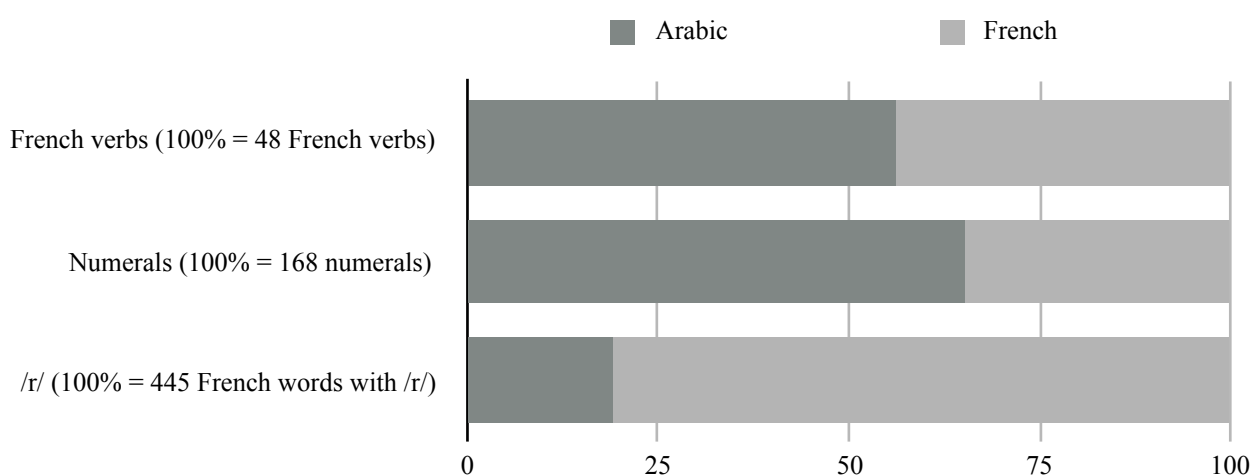
5.5.2. Male speakers:

5.5.2.1. Verbs

Of the 104 French verbs that occurred in the parts of speech where intra-sentential code-switching was present the male participants altogether expressed 62 verbs that were adapted into Moroccan Arabic verb morphology patterns, while 42 verbs were used as regular French verbs, which means that 60 % of the verbs were arabicised and 40 % were used as regular French verbs. In average each male participant contributed with 3.1 arabicised French verbs and 2.1 regular French verbs.

Figure 11: Verbs in percentage: male speakers
(100% = 104 French verbs)
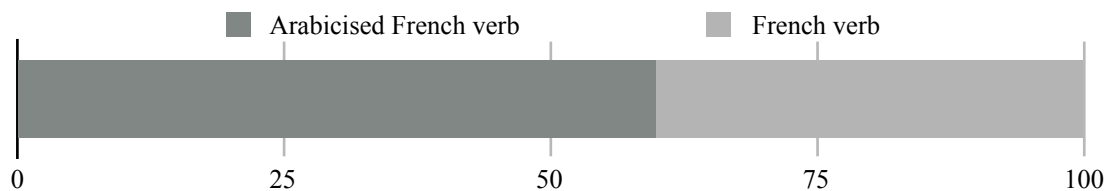
5.5.2.2. Numerals:

Of the 157 numerals used in the parts of speech where intra-sentential code-switching was present the male participants altogether expressed 128 numerals in Arabic and 29 in French, which means that 82 % of the numbers used were in Arabic and 18 % in French. In average each male participant contributed with 6.4 numerals in Arabic and 1.5 numerals in French.

Figure 12: Numerals in percentage: male speakers
(100% = 157 numerals)
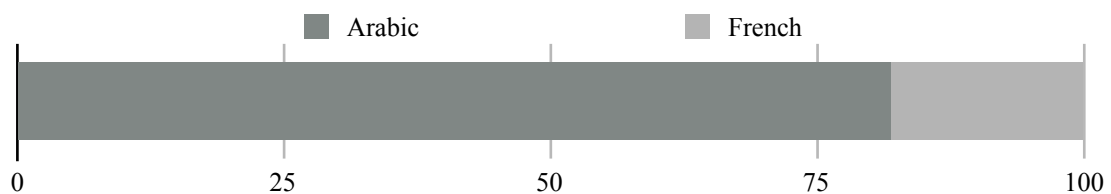
5.5.2.3. Pronunciation of the phoneme /r/

Of the 501 French words containing the phoneme /r/ used in the parts of speech where intra-sentential code-switching was present the male participants altogether pronounced 291 words with the French, guttural [ʁ] and 210 words with alveolar trill [r], which means that 58 % of the French words that occurred were pronounced with [ʁ] while 42 % were pronounced with [r]. In average each male participant contributed with 15 French words containing the phoneme /r/ pronounced with [ʁ] and 11 with [r].

Figure 13: Pronunciation of the phoneme /r/: male
speakers (100% = 501 French words with /r/)
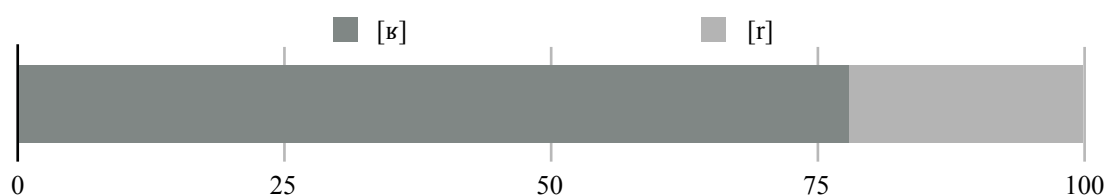
### 5.5.2.4. Repetition and rhetorical confirmation reached by code-switching

Of the total eight cases of repetition and rhetorical confirmation reached by code-switching the male participants altogether provided four cases of repetition that was first expressed in Arabic and then repeated in French, and another four cases that were first expressed in French and then repeated in Arabic.

5.5.2.5. Summary of male participants

In a nutshell, the male participants in all focus groups altogether expressed in total 107 French verbs of which 62, i.e. 6 % were adapted into Moroccan Arabic verb morphology patterns, and 42, i.e. 40 % were used as regular French verbs, i.e. 3.1 arabicised French verbs and 2.1 regular French verbs in average. Numerals used were in total 157, of which 128, i.e. 82 % were expressed in Arabic and 29, i.e. 18 % in French, i.e. 6.4 numerals in Arabic and 1.5 numerals in French in average. Of the

overall 501 French words containing the phoneme /r/ 291 words, i.e. 58 % were pronounced with the French, guttural [ʁ] and the remaining 210 words, i.e. 42 % with alveolar trill [r], i.e. 15 words with [ʁ] and 11 with [r] in average. The total occurrence of repetition was eight cases.

Figure 14: Summary of participants
- male speakers -
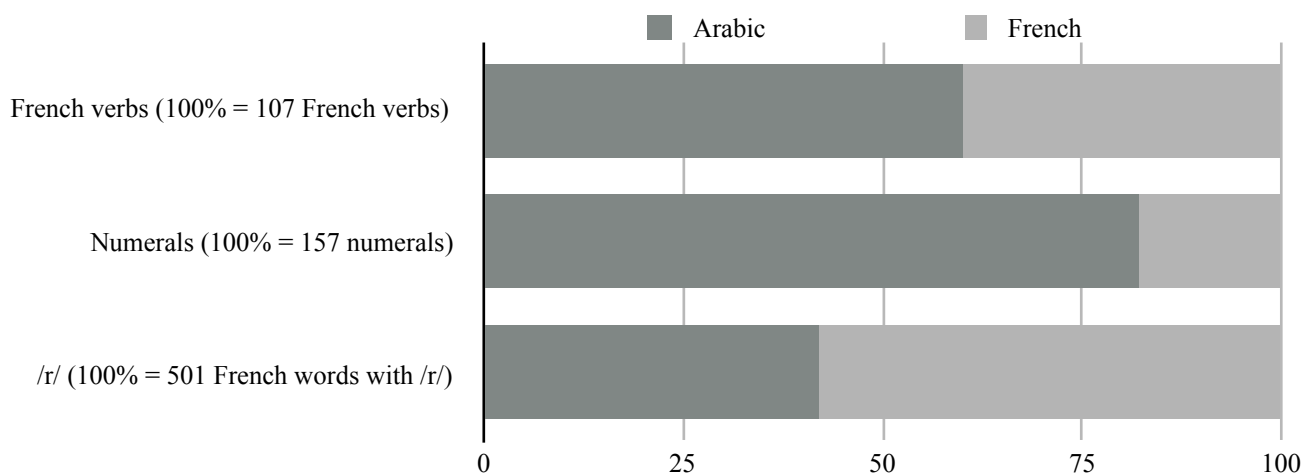
5.5.3. Summary of participants altogether

Verbs:

Focus group 1: 21 cases of AF, 8 cases of F

Focus group 2: 12 cases of AF, 0 cases of F

Focus group 3: 15 cases of AF, 42 cases of F

Focus group 4: 41 cases of AF, 33 cases of F

Focus group 6: 0 cases of AF, 0 cases of F

In total: 89 cases of AF, 83 cases of F

Figure 15: Summary of participants altogether:
French verbs
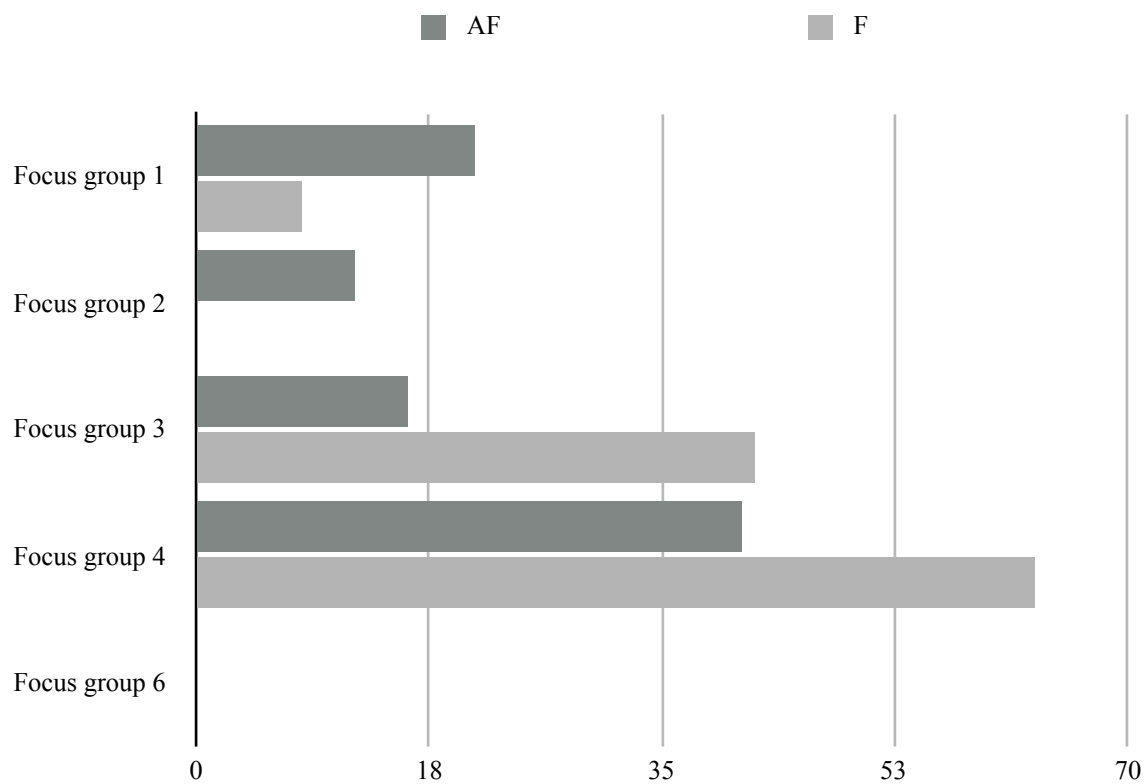
Numerals:

Focus group 1: 62 in Arabic, 46 in French

Focus group 2: 57 in Arabic, 9 in French

Focus group 3: 33 in Arabic, 10 in French

Focus group 4: 68 in Arabic, 21 in French

Focus group 6: 17 in Arabic, 2 in French

In total: 237 in Arabic, 88 in French

Figure 16: Summary of participants altogether: numerals
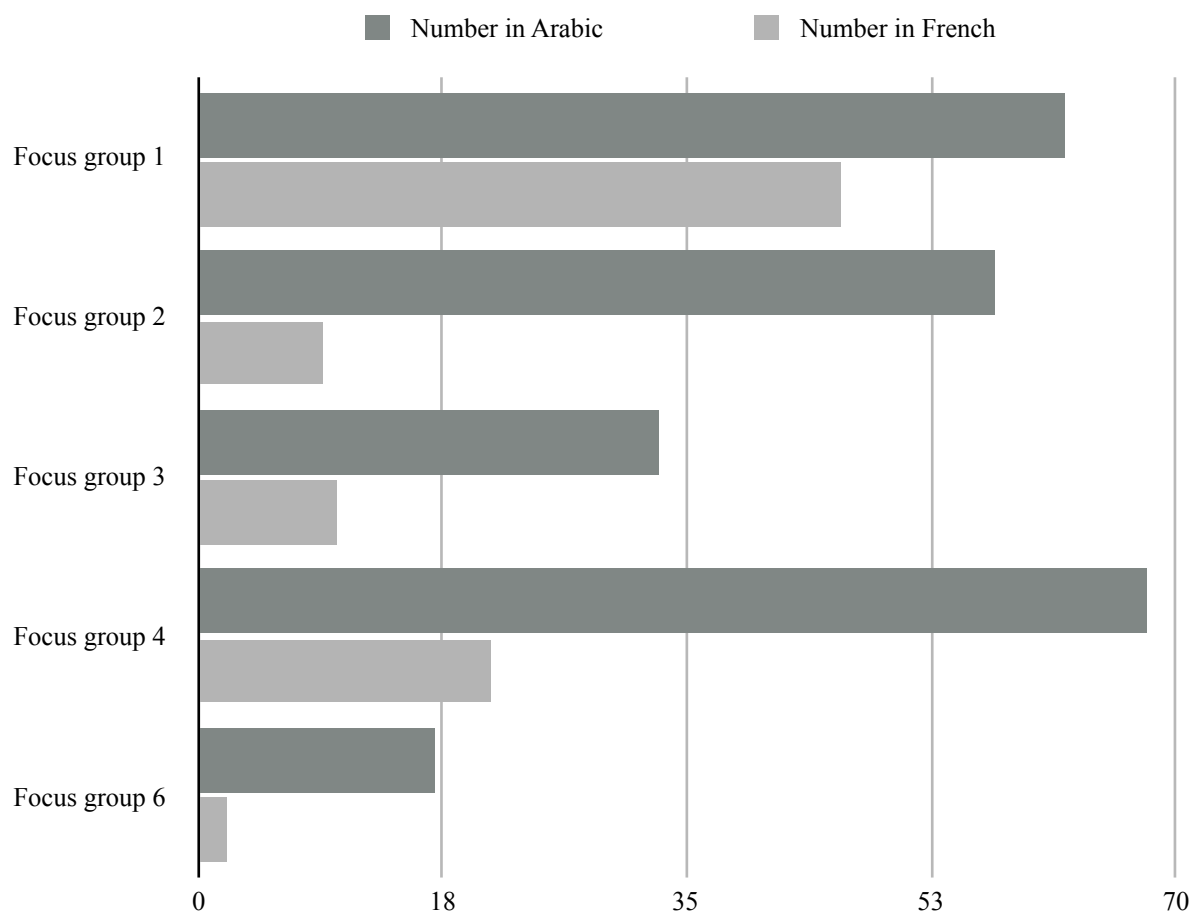
Pronunciation of the phoneme /r/:

Focus group 1: 152 cases of [ʁ], 64 cases of [r]

Focus group 2: 11 cases of [ʁ], 28 cases of [r]

Focus group 3: 190 cases of [ʁ], 41 cases of [r]

Focus group 4: 291 cases of [ʁ], 148 cases of [r]

Focus group 6: 7 cases of [ʁ], 14 cases of [r]

In total: 651 cases of [ʁ], 295 cases of [r]

Figure 17: Summary of participants altogether
- /r/ -
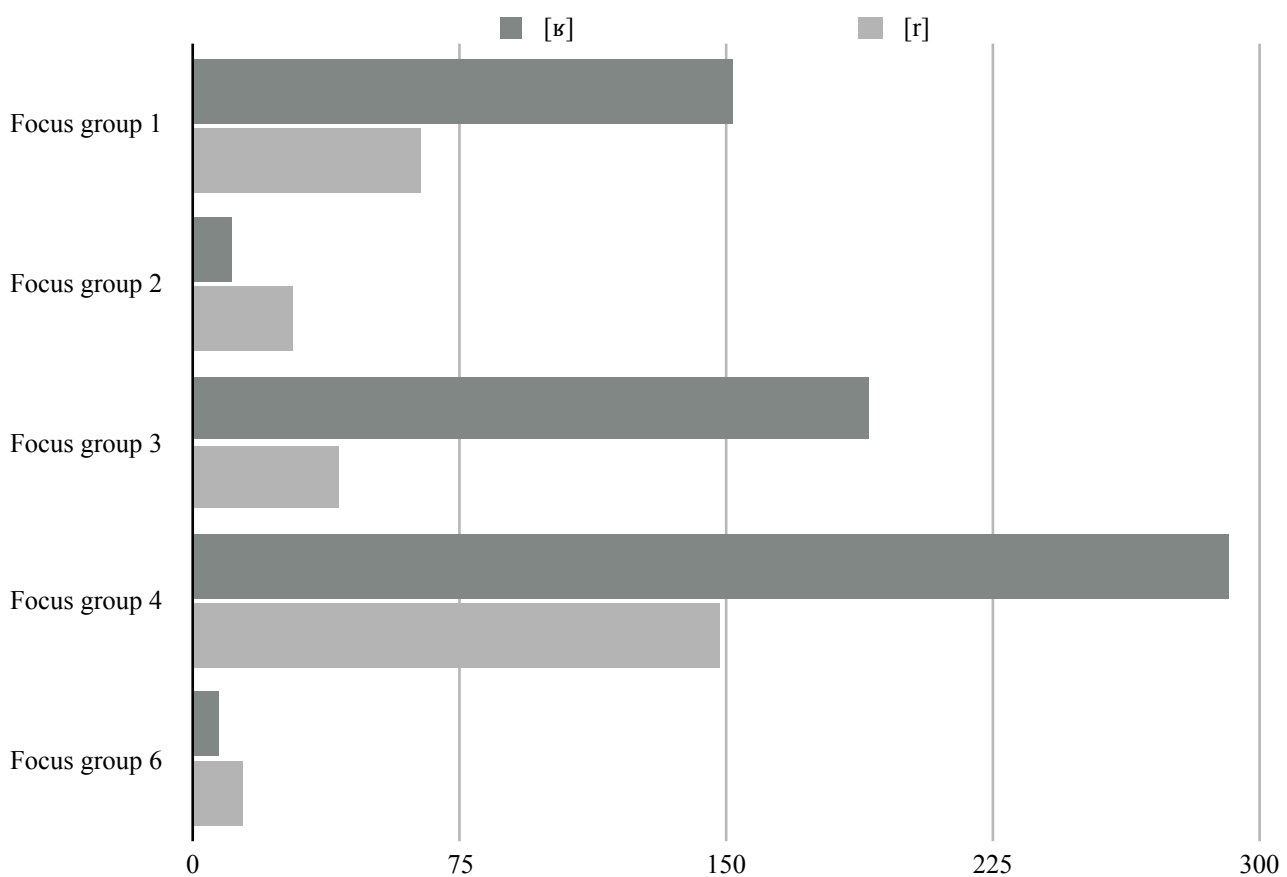
Repetition / confirmation:

Focus group 1: 3 cases

Focus group 2: 4 cases

Focus group 3: 5 cases

Focus group 4: 2 cases

Focus group 6: 1 case

In total there were 15 cases of repetition and rhetorical confirmation reached by code-switching, of which female participants expressed seven cases, and male participants eight. Among the female participants six of seven cases represented repetition or emphasis, whereas one case rather reflected the French 'moi, je suis' construction. Among male participants all eight cases of repetition represented repetition or rhetorical emphasis.

6. Conclusion

This chapter will present and discuss the results of the study in relation to the hypotheses posed in order to provide a clear outlook regarding the features of the investigated phenomena.

Hypothesis 1 – French verbs: The hypothesis suggests that one can expect to find both usage of French verbs that are adapted into colloquial Moroccan Arabic verb morphology patterns, i.e. loanwords, as well as regular French verbs, i.e. French verbs that are used without morphological or syntactic changes in their body.

The data presents a high frequency of French verbs, both adapted into colloquial Moroccan Arabic verb morphology patterns (i.e. cases of lexical borrowing) as well as being used as regular French verbs without changes in their structure (i.e. cases of intra-sentential code-switching). Whether adapted into Moroccan Arabic verb morphology patterns or used as regular French verbs, the overall occurrence of the phenomenon implies that focus groups with Arabic as their language of instruction use a more limited amount of French verbs (if any) than the groups in which the participants had French as their language of instruction. As mentioned, arabicised French verbs should be interpreted as cases of lexical borrowing, implying that French verbs going through the adaptation into Moroccan Arabic verb morphology patterns have become loanwords, whereas French verbs used as they are, with neither syntactic nor morphological changes in their body, imply the usage of intra-sentential code-switching, i.e. code-mixing. Even though the study does not focus on lexical borrowing in cases other than verbs, the arabicised French verbs, on the contrary, have been carefully listed in order to provide comparable results regarding the range of code-mixed vs. lexically borrowed French verbs throughout the whole material. The overall occurrence of arabicised French verbs expressed by the participants was 52 % of all the French verbs, while the remaining 48 % were cases of code-mixing with regular French verbs. The participants altogether provided 172 French verbs in the parts of speech where intra-sentential code-switching was present, of these 89 were adapted into Moroccan Arabic, while 83 were used as regular French verbs. The usage of French verbs, whether arabicised or not, differs between male and female speakers. The female participants contributed with 27 arabicised French verbs and 21 regular French verbs, whereas the male participants contributed with 62 arabicised French verbs and 42 regular French verbs. As the number of male and female participants in the study is not directly comparable, an average number of the oc-

currence of French verbs, whether arabicised or not, was counted. The average occurrence among female participants was 1.4 arabicised French verbs and 1.1 regular French verbs, and among male participants 3.1 arabicised French verbs and 2.1 regular French verbs. Arabicised French verbs, which shall be recognised as lexically borrowed items and as a part of the local colloquial, were used more than regular French verbs by both the male and female participants. Thus, the participants altogether in average used 2.3 arabicised French verbs and 2.1 regular French verbs. Quantitatively, in average male participants used both more regular and arabicised French verbs than female participants.

The groups that have Arabic as their language of instruction also provide repetitive patterns when using French verbs. Exposure to Arabic, and therefore its influence on the linguistic capability of a speaker, seems to play a big role in a persons habit of speech in the group. The same applies for the speakers who have experienced higher exposure to French and therefore use more French; the participants that used more French provided both a higher amount of intra-sentential code-switching as well as more diversity in their usage of French verbs, both when adapted into colloquial Moroccan Arabic, and when used as regular French verbs. One should anyhow bear in mind that code-switching is a phenomenon that may be used for several different reasons, and a person's linguistic behaviour may therefore be somewhat different when whether among or outside a specific group.

As a conclusion one can see that the data implies that the overall frequency of code-mixing with French verbs correlates with the occurrence of arabicised French verbs used by a speaker, especially regarding diversity and quantity. When linking this feature with another topic analysed in this study, namely the pronunciation of the phoneme /r/ in French words, an interesting finding can be seen in the pronunciation of French verbs that are adapted into Moroccan Arabic: even the participants that where highly competent in French and pronounced the /r/ as the French, guttural [ʁ] would often pronounce French, arabicised verbs with alveolar trill [r], which implies that arabicised French verbs certainly shall be seen as loanwords, not as cases intra-sentential code-switching.

In a nutshell, the results suggest higher usage of French verbs that are adapted into Moroccan Arabic verb morphology patterns: among female speakers the percentual occurrence for arabicised French verbs was 56 % and for regular French verbs 44 %; among male participants 60 % for arabicised French verbs and 40 % for regular French verbs. Therefore, the usage of French verbs that

reflect the adoption of the French verb stem into colloquial Moroccan Arabic is a more often occurring phenomenon than code-mixing directly with regular French verbs.

Hypothesis 2 – Numerals: The hypothesis suggests that one could predict to find intra-sentential code-switching coming to both cardinal and ordinal numerals, with a previously recorded tendency to refer to time and date in French in an otherwise Arabic speech situation.

The usage of numerals in French occurs frequently at times, but in no case this exceeded the usage of numerals in Arabic. The hypothesis suggests that references to time and date often would take place in French – yet this particular detail was not a major finding in this study. The data presents that the overall usage of numerals used by the participants in the parts of speech where intra-sentential code-switching was present implies that both Arabic and French were used, yet the majority of the numerals were used in Arabic. Bentahila's (1983b) study, as mentioned in chapter 1.4., suggest that using numerals for expressing time and date in French occurs in an otherwise Arabic speech situation. When code-mixing, the numerals could be seen to be used differently, as the topics related to the education system and academia often seemed to require a switch to foreign, i.e. French terminology, which could imply the need to refer to a topic based on a foreign system in a foreign language, i.e. French in this case, as also presented in previous research. Of the entire 325 numerals that were used, 237 (73 %) were used in Arabic, while the remaining 88 (27 %) were used in French. As the data shows, there is a difference between the male and female participants. Out of the 168 numerals expressed by the female participants 109 were Arabic and 59 French, implying that Arabic numerals were used 65 % of the time and French numerals were used 35 % of the time, with an average occurrence of 5.7 numerals in Arabic and 3.1 French numerals expressed by each female participant. Of the 157 numerals in total among the male participants, 128 numerals were expressed in Arabic and 29 in French, implying a higher usage of Arabic with the percentage of 82 %, as French numerals were used 18 % of the time, with an average occurrence of 6.4 numerals in Arabic and 1.5 numerals in French expressed by each male participant. Thus, the data presents that the female speakers used more French numerals than the male speakers. To conclude, Arabic seemed to be the language that was used more often when expressing numerals, yet French numerals were found to be used often when referring to the educational system, e.g. when talking about semesters, years and other topics related to it, which could lead one questioning whether these cases are actually cases of just code-switching or, perhaps, lexical borrowing. At the same time it is valuable to note that

these cases were not predominantly talked about in French; therefore treating them as generally occurring loanwords is not applicable, at least, not with as limited amount of data as this study analyses.

Hypothesis 3 – Pronunciation of the phoneme /r/: The hypothesis suggests that one can expect to find a difference in the pronunciation of the phoneme /r/ in French words between male and female speakers.

Of the total occurrence of French words containing the phoneme /r/ expressed in the parts of speech where intra-sentential code-switching was present, the participants altogether expressed 946 French words, of which 651 were pronounced with the French, guttural [ʁ] while the remaining 295 were pronounced with alveolar trill [r]. The female participants in total used 445 French words with the phoneme /r/, of which they pronounced 360 with [ʁ], i.e. the vast majority, 81 %, and 85 words, i.e. 19 % with [r]. The male participants expressed in total 501 French words containing the phoneme /r/ of which 291 were pronounced with [ʁ] and 210 with [r], i.e. 58 % with [ʁ] and 42 % with [r]. In average the female participants used 19 words pronounced with [ʁ] each, and 4.5 with [r], whereas the male participants 15 with [ʁ] and 11 with [r]. Therefore the results show that female speakers do use the correct French guttural [ʁ] significantly more than the male speakers. The high usage of French among both female and male speakers was noted to correlate with a more correct pronunciation.

The data implies that the groups that used more French also provided more French, guttural [ʁ] than alveolar trill [r], which clearly applies for focus groups 1, 3 and 4. Therefore one could interpret the findings as if higher usage of French in a way correlates with the usage of the 'correct', French [ʁ] and vice versa, whereas lower usage of French also results in usage of [r] when pronouncing of the phoneme /r/ in French words. Female participants seemed to provide more French, guttural [ʁ] than alveolar trill [r], yet here again, individual tendencies occur. Anyhow, the overall occurrence of the realisation of the phoneme /r/ in French words among female speakers implies higher usage of [ʁ], whereas among male speakers the situation is different, as the phoneme /r/ was more often realised with alveolar trill [r] than guttural [ʁ]. Even among male speakers differences occur, as focus groups 3 and 4 with French as their language of instruction provided more realisations of [ʁ] than [r], but also due to speaking more French than the other focus groups changed the hypothetical oc-

currence of the pronunciation of the phoneme /r/ in French words. Looking at the distribution of the pronunciation between different groups, the overall results of the study support the hypothesis of male speakers using more [r] while female speakers use more [ʁ].

Hypothesis 4 – Code-switching and repetition: The hypothesis suggests that code-switching can be used as a rhetorical device for repetition or for emphasising a concept.

The data presents in total 15 cases of code-switching being used for repetition or as a rhetorical device for emphasis or confirmation. There were two types of confirmation: emphasis/confirmation reached by repeating a word or a concept in one language after the other; and in one case a construction repeating the personal pronoun in French after first expressing it in Arabic, closely related to the *moi, je suis* structure used in French (as presented by Bentahila & Davies 1983). Of the cases of repetition the female participants expressed seven cases and the male participants eight. The majority of this type of repetition was constructed by first expressing the concept in Arabic and then repeating it in French, five of six among female participants, and all nine among male participants. Emphasis created by first expressing the emphasised word in French and then in Arabic occurred once among female speakers. The French-influenced, *ana, je + [verb]* constructions occurred only once, expressed by a female participant.

Repetition and rhetorical confirmation and emphasis reached by code-switching was used in all groups, yet naturally correlates with the amount of French spoken by the participants. Therefore one can find the emphasis to occur more in the groups that also used more French; yet it is interesting to notice that focus group 6, MA students in Islamic Studies, also contributed with one item to be investigated for the analysis, yet otherwise the usage of French was very low. Therefore one can wonder whether repetition reached by code-switching is a phenomenon that is used no matter the level of proficiency in French – yet no generalisations should be drawn. Some participants contributed with more cases of repetition than others, which yet again implies the usage of repetition as a rhetorical tool, as well as intra-sentential code-switching in general, to be a phenomenon that varies between individuals.

Hypothesis 5 – The gender difference: The hypothesis suggests that there is a difference in the type and quantity of code-switching between male and female speakers.

The variation of intra-sentential code-switching depending on gender was strongly highlighted in this study, as the separation between male and female speakers was taken into account throughout the whole study. As the data presents, the amount of features of intra-sentential code-switching analysed in this study vary between male and female participants. In parts of speech where intra-sentential code-switching was present the French verbs, both the ones adapted into Moroccan Arabic verb morphology patterns (i.e. loanwords) and the ones used as regular French verbs, occurred, but vary between the two genders. With the percentage of 56 % arabicised French verbs and 44 % regular French verbs that where expressed by female speakers they contributed with slightly higher number regular French verbs than the male participants, as the male speakers of the total amount of verbs used 60 % arabicised French verbs and 40 % regular French verbs. Yet the male speakers contributed with more quantity and diversity regarding French verbs, both arabicised and regular ones. As the female participants were fewer than male participants, the numbers cannot be compared as such, and after counting an average occurrence of the usage of French verbs, whether arabicised or not, male speakers in average used more French verbs than female speakers in quantity (the average for female participants was 1.4 arabicised French verbs and 1.1 regular French verbs, whereas the average for male participants was 3.1 arabicised French verbs and 2.1 regular French verbs). The female participants used more French when using numerals, as female participants altogether expressed 65 % of the numerals in Arabic and 35 % in French (in average 5.7 numerals in Arabic and 3.1 in French), and the male participants 82 % of numerals in Arabic and 18 % in French (in average 6.4 numerals in Arabic and 1.5 in French). The female speakers provided more realisations of the French, guttural [ʁ] than the male speakers, as the division of the total usage of [ʁ] vs. [r] among the female participants was 81 % of [ʁ] and 19 % of [r] (in average 19 words with [ʁ] and 4.5 with [r]), while the male participants's pronunciation included 58 % of [ʁ] and 42 % of [r] (in average 15 with [ʁ] and 11 with [r]). Both male and female participants used intra-sentential code-switching as a method for emphasis or rhetorical confirmation.

This study did neither focus on the reasons of code-switching nor the reasons of the pronunciation, whether French, guttural [ʁ] or alveolar trill [r]. The hypothesis suggests that female speakers tend to try to achieve the more correct French, guttural [ʁ], which, looking at the results among groups, especially dividing between male and female speakers, is verified. All in all, male speakers statisti-

cally seemed to produce higher amounts of each phenomenon in question, which shall not be misinterpreted as if male speakers use more French – in several cases the male participants were code-mixing more than the female participants due to also speaking more, whereas the female participants seemed to tend to express their ideas in one language or another without shifting between them in an utterance as much as the male participants.

Hypothesis 6 – The impact of the field of study: The hypothesis suggests that the field of study, due to its impact on the language of instruction and exposure to either Arabic of French, has an impact on an individual's likelihood to code-switch or not.

The field of education, due to its influence on the exposure to Arabic or French, was suggested to have an impact on the likelihood of a speaker to code-switch between Arabic and French, which was verified in this study as the types and frequency of intra-sentential code-switching vary between the different focus groups. The results show that the focus groups with French as their language of instruction use more French than the groups with Arabic as their language of instruction, even causing a focus group to be excluded from the study of Arabic-to-French code-switching. The amount and type of the different features analysed also varies between the groups. Likewise, individual features were found to occur among most groups, implying that code-switching, even in an arranged speech situation, is a personalised feature that differs from speaker to speaker. The different focus groups provided diverse results in the amount and type of intra-sentential code-switching, and therefore the results imply that the field of study certainly has an impact on the likelihood and nature of code-switching. The most considerable differences could be found between the groups that study humanities are more exposed to Arabic due to the language of instruction being Arabic, and the groups in the scientific field are more exposed to French due to the language of instruction being French. The largest amount of participants who did not provide cases of each analysed phenomenon, in other words, participants that did not code-mix, were in the field of humanities as well. The groups in the field of humanities used less French regarding both numerals and French verbs, whether adapted into Moroccan Arabic verb morphology patterns or not. It is interesting to notice that focus group 6, MA in Islamic Studies, provided little, if any, results for the study; neither French verbs adapted into Moroccan Arabic verb morphology patterns nor regular French verbs were used, and regarding other features of intra-sentential code-switching investigated in this study the occurrence was low. Groups in the scientific field contributed with a larger amount of French

verbs, both the ones adapted into colloquial Moroccan Arabic and regular French verbs. As mentioned, the extensive usage of French led to the exclusion of focus group 5 from the study of Arabic-to-French code-switching. Therefore, in the final analysis, there were only two groups, i.e. focus groups 3 and 4, that had French as the language of instruction. It was even noted that the groups that used more French used more variety in their expressions in French, as well as more correct pronunciation of the phoneme /r/. Therefore one can see that all the features the study investigates occur among both male and female speakers, nearly in all groups (apart from focus group 6 that did not provide any cases of French verbs, whether adapted into Moroccan Arabic verb morphology patterns or not). The occurrence of each phenomenon varies between the groups and between male and female speakers, yet individual preferences and tendencies seem to play a great role in the overall occurrence of intra-sentential code-switching among the participants of this study. As the male vs. female separation was carried out throughout the whole study, as well as the different focus groups based on different fields of study, gender and field of study can be seen to have a strong impact on the occurrence of each of the phenomena analysed.

The participants in focus group 1, BA students in Italian, and focus group 2, MA students in Literature and Comparative Criticism, were dominant in Arabic but contributed with an amount of intra-sentential code-switching, yet individual preferences and features were clearly seen in its occurrence and extent. These two groups did not provide great amounts of Arabic-French code-switching, but as the data presents, all elements that this study investigates were found to a certain extent. As the language of instruction of the groups in question is Arabic, the likelihood to code-switch between Arabic and French already can be hypothetically thought to be rather low when comparing to a group that has French as language of instruction. On the contrary, most of the code-switching, both intra- and inter-sentential, could be noticed in the diglossic level between different varieties of Arabic – indeed, more formal varieties of Arabic, i.e. Classical Arabic / Modern Standard Arabic and Middle Moroccan Arabic[33] were varieties of language that some participants at times preferred to maintain speaking. Perhaps, this could be a result of higher competence and more importantly, higher importance given to Arabic, that could be seen as a feature that correlates with the participants' major field of study. It also could be thought to support Wardhaugh's (2010) theory of speakers of Arabic (as well as speakers more competent in Arabic) gaining prestige from using the Classical variety of the language.

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[33] See appendix.

The participants in focus group 3 used significantly less Classical Arabic than the focus groups that had their major field of study being taught in Arabic (i.e. focus groups 1, 2 and 6); the groups with French as language of instruction spoke mostly colloquial Moroccan Arabic or Middle Moroccan Arabic in case Arabic was spoken. This might be due to higher exposure to French, which therefore correlates with the linguistic choices made. The fact that the participants in groups apart from focus groups 1 and 2 were neither linguists nor language students may or may not play a role in their views regarding languages as well how and when the participants use different languages, and especially what language to strive for in case one desires to achieve an extra sense of prestige or classiness. At times the participants switching between languages seemed to trigger others to switch as well, but among a group that mostly spoke colloquial Moroccan Arabic with occasional intra-sentential code-switches to French a speaker switching completely to French seemed to cause confusion; at times some participants seemed to try to express their ideas in French, yet struggled with finding words.

Focus group 4, MS students in Renewable Energy, introduced a different, higher level of linguistic competence as a high amount of the participants provided numerous cases of intra-sentential code-switching. All the speakers were code-mixing a lot between colloquial Moroccan Arabic and French – as the subject is taught in French, exposure to it was high, which correlates with the amount of switches made, and not only by certain individuals but by every participant in the group. One could think that in an environment as such even remaining speaking only Arabic would be a sort of personal statement or an identity marker, as not everyone started with code-mixing – yet at times the speakers seemed to feel the need to fetch in item from the other language, and then even the ones that tried to stick to Arabic seemed to 'give up' and started to code-mix more. Among the participants in this group Classical Arabic was not heard at all, but as the conversation went on, the speakers seemed to get more relaxed and gave up speaking more formal levels of Arabic and felt more comfortable with expressing their ideas in colloquial Moroccan Arabic serving as a base language, and occasionally code-mixing.

The participants in focus group 6, MA students in Islamic Studies, provided results very different from the other groups. Due to the nature of the field of education the language of instruction was Arabic, therefore another foreign-born participant, a male speaker from Mauritania, adapted into the linguistic atmosphere without problems, yet in order to serve the purpose of a study of intra-senten-

tial code-switching in Morocco, had to be excluded from the analysis. Arabic also seemed to function as the language for a speaker to gain more respect when talking, or perhaps just as a habit, as all the participants for the first one hour or so started their lines with 'in the name of God, most Gracious, most Compassionate' and expressed themselves in Classical Arabic, judging colloquial Moroccan Arabic as 'an ugly language'[34]. Among the participants in this group, Classical Arabic indeed seemed to function as both an identity and an in-group marker[35]; French was nearly non-existent. This could imply that formal varieties of Arabic are the ones being used even in an informal setting of conversation when maintaining a certain level or classiness of speech is desired. Towards the end of the conversation, as more personal experiences and opinions were shared, the presence of Classical Arabic was already very low as the participants were speaking in colloquial Moroccan Arabic. Finally, the field of study of the group in question may imply that the participants of the group represent a sample of population that tends to maintain the usage of Arabic more than e.g. a person educated in French in the scientific field, hence Arabic is the ruling language in the speech situation.

Code-switching seemed to be a phenomenon that, when being heard, triggers other participants to do the same – the conversations nearly in all cases started with the participants speaking one language until someone started code-switching. As mentioned in footnote 14, in several cases participants struggled with expressing their ideas as they seemed to be confused with which language to use to express themselves. Naturally, in those cases the moderator told them to feel free to express themselves in whatever language they felt most comfortable with, and even the hesitating ones would start relaxing and express themselves. In all conversations the participants started with more formal varieties of Arabic, i.e. either Classical Arabic / Modern Standard Arabic or Middle Moroccan Arabic, yet during the discussion started shifting more and more towards more relaxed everyday speech, i.e. using colloquial Moroccan Arabic, which the participants nearly without exception judged as 'vulgar' and 'language of the streets'. It was also noted that the participants from the Sahara region spoke more Classical Arabic than colloquial Moroccan Arabic – naturally, regional varieties occur[36] and the variety of Arabic spoken in the Sahara region is quite distinct from the colloquial

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[34] ‘‘العربية جميلة والدارجة لا’’ i.e. ‘‘al-ʿarabiyya jamīla wa d-dārija la’’, *Arabic is beautiful and Darija is not.*

[35] Compare with the theory of code-switching being used as an identity and in-group marker.

[36] See appendix.

variety of Arabic spoken for example in Rabat, where the study was conducted and where a large amount of participants came from.

7. Suggestions for further research

As noted, the focus of this study has been on a small part of features that occur in Arabic-French code-switching among university students at Mohammed V University of Rabat, Morocco. Covering all the phenomena that occur in the recorded data would require an extensive amount of work that would exceed the limits of an MA thesis. During the analysis and writing process many worthy features of possible topics for future research have been noted, and it is worth mentioning some of them.

As mentioned in chapter 1.3. (Limitation of research) there are a lot of features of both intra- and inter-sentential code-switching occurring in the material collected for this study. The aim of the study was to test a limited amount of hypotheses and results of previous studies, but there is a lot more one could do. This study focused on intra-sentential code-switching between colloquial Moroccan Arabic and French. One could include other languages as they occur, yet their occurrence was not that significant, unlike expected when conducting the study – the references to Italian for example were only grammatical words or features of the languages, as well as proper nouns and names of different concepts. English occurred a few times as well, yet not enough to carry out a study only based on English in the collected material. On the contrary, diglossic code-switching between different varieties of Arabic used in the Moroccan society is a phenomenon that one very well could focus on as its occurrence is high and varies between different groups and speakers at times even more than Arabic-French code-switching – as the author of this thesis I shall say that I highly regard the diglossia between the different levels of Arabic a very interesting phenomenon.

In the field of Arabic-French code-switching one could focus on which topics of discussion require most switches, yet an overview of that has been given in this study as well. Syntax, noun phrase structures, adverbs, fillers and whether some kind of grammatical harmony between articles and determiners exists are all features that previous studies talk about but that are not analysed or presented in this study – more than in case features alike occur as a part of the examples provided, yet all are highly occurring phenomena in intra-sentential code-switching. Moreover, age could be used as a variable in a study as well, and the impact of the younger vs. older generation could be investigated. On top of it, the participants' origin, could be used as a variable in comparing what features certain speakers cultivate in their speech.

As previous studies also mention attitudes regarding Arabic and French, one could also carry out a study focusing on the attitudes of the participants of this study, since two of the questions involved in the focus group discussions were about language usage and language policies in Morocco. This would, naturally, take the study to a slightly more sociological level which due to this thesis being an MA thesis in linguistics is out of question. Yet it must be said that the attitudes towards domestic languages in Morocco, as brought to light in the discussions, were material of which one could get highly interesting data regarding attitudes and emotions towards the region and the Arab vs. Amazigh identity in the modern world where French and English are seen as the keys to future.

Moreover, this study only focused on university students at Mohammed V University of Rabat, Morocco. One could expect to find different types of code-switching and linguistic choices made if a study outside the academic environment was conducted. Focusing on people from different socio-economic backgrounds on a larger scale geographically would also most likely provide more variety and data – yet, needless to say, such research would require extensive effort and a lot of time, which for example for conducting a study for an MA thesis is too much. On the other hand one could focus on code-switching in different domains, such as social media, advertisement, radio and television or cinema and theatre. Taking the study out of Morocco to a country with different dialects and a different linguistic background would also probably provide different types of switches than the ones that occurred in this study; a similar study could be conducted in any (Arabic) country in which diglossia and societal, educational or historical bilingualism exist.

When conducting the analysis regarding numerals in use it was noted that in many cases matters related to the education system and academia were talked about in French, e.g. when talking about semesters, years, modules. This study did not focus on investigating whether these elements are only code-switching or whether they actually might imply lexical borrowing, in case they are more often referred to in French or in Arabic. Likewise, it would be interesting to investigate the occurrence of the 'jūj + (noun)' construction, i.e. to what extent the Moroccan Arabic term 'jūj', *two*, is used instead of the possible dual structure. Due to the nature of the current research and the time an extra research, especially one that would exceed the limits of code-switching in the sense the study is treating code-switching, these two possible topics of research were not given much importance in this study, yet noted for further research possibilities in the future.

8. Appendix

8.1. Linguistic situation in the Maghreb

Since Islam and Arabic were introduced in North Africa year 467 Arabic became the official language, which through occasional changes has been the case until today. France established its first protectorate in the Maghreb in 1830 in Algeria which is the country that was colonised by France the longest, i.e. until 1962; Tunisia was under French rule between 1881 and 1956, and Morocco between 1912 and 1956 (Sayahi 2014, pp. 38-39). During the colonial era the French language had a high position in the society, but its prestigious status remained up until today (Daoud 2010, p. 11). Even though this study focuses on Morocco, referring to the whole Maghreb region is not farfetched; Sayahi (2014) claims that Algeria, Morocco and Tunisia share a very similar profile sociolinguistically due to historical reasons, naming that "At the economic, demographic, and educational levels, they also have comparable policies and planning strategies." (Sayahi 2014, p. 16). Various different languages that have been used throughout the history of the region, as well as the usage of these languages varies from generation to another in different domains e.g. business, education, media as well as governmental and administrative matters, which has led to the diglossic and sociolinguistic situation in the Maghreb region being extensively studied (cf. Bentahila 1983a/b, Bentahila & Davies 1983, Bentahila & Davies 1995, Daoud 2010, Gabsi 2011, Sayahi 2011a/b). Therefore it is valuable to recognise the previous studies conducted in the Maghreb as highly valuable data for this study.

The history of North Africa has throughout times had a versatile linguistic ground (Sayahi 2014, p. 16), and it is worth mentioning that bilingualism and diglossia already were present in the area before the French protectorate (Bentahila 1983b, p. 1) due to the co-existence of the Arabic varieties and Amazigh (ibid. p. 5). Moreover, due to its geographical location and interaction with Africa, Europe and the Middle East the Maghreb is home for a number of both indigenous and foreign languages (El Kirat El Allame, Hajjam & Blila 2010, p. 335). Historically the Maghreb countries have hosted several languages that have played a significant role in the formation of the local Arabic colloquial varieties; Amazigh, Punic, Latin, Greek and Turkish have had their impact on the area in the past (Daoudi 2001, p. 5-6), as well as more recently French, Spanish, Italian and English (Sayahi

2014, p. 15). The exposure to Arabic began when Islam was introduced in the area, which led to several waves of immigration from the Middle East to North Africa (Sayahi 2014, p. 25). For the time being there seem to be two languages competing for the same sphere; French and Modern Standard Arabic (Veerstegh 1997, p. 203).

8.1.1. Amazigh

Originally the native population of North Africa were speakers of Amazigh (Sayahi 2014, p. 26), which belongs to the Afro-Asiatic language family, a group of languages also known as Hamito-Semitic languages (Veerstegh 1997, p. 15). According to El Kirat El Allame et al. (2010) Amazigh is known to be the first indigenous language in the region (El Kirat El Allame et al. 2010, p. 335), and is widely spread throughout North Africa, although considering the amount of its speakers the vast majority of its speakers are in Algeria and Morocco (Sayahi 2014, p. 17). It is also found spoken in Egypt, Libya, Mauritania and Tunisia by smaller communities (ibid. p. 17).

There are several dialectal varieties of Amazigh spoken in different areas throughout North Africa. In Morocco the three different dialects are Tamazight, Tashelhit and Tarifit (El Kirat El Allame et al., p. 336). In Algeria the local varieties include Kabyle, Shawia and Mzab, as well as Tuareg varieties that are spoken in the south of Algeria and in certain areas in Mali, Niger and Burkina Faso (Sayahi 2014, p. 17-18). Whether the different varieties of Amazigh are dialects or rather different languages is speculative (Sayahi 2014, p. 17).

El Kirat El Allame (2009) argues that Amazigh is not valued even by a large amount of its native speakers who therefore do not transmit the linguistic heritage to the new generations (El Kirat El Allame 2009, p. 5). El Kirat El Allame et al. (2010) claim that a long period of stigmatisation has caused that the different varieties of Amazigh have been – and still are – seen as somewhat useless and non-prestigious languages (El Kirat El Allame, Hajjam & Blila 2010, p. 334). El Kirat El Allame (2009) also claims that "The social stigmatisation of the Amazigh language and identity has led not only to linguistic insecurity and linguistic and cultural accommodation and /or assimilation but also to the rejection of the Amazigh language and disavowal of the ethnic identity." (El Kirat El Allame 2009, p. 7). Moreover she claims that Amazigh was for long considered as a dialect rather than a language due to the fact that it was seen as a threat to the national unity (ibid. article p. 5).

Amazigh languages in Morocco are mostly used verbally and have almost no written data (ibid. article), though the Amazigh in Kabylia region in Algeria was somewhat successfully documented by using the Latin alphabet (Sayahi 2014, p. 19). After controversial discussions whether Amazigh should be written by using Latin or Arabic letters, an adapted form of Tifinagh alphabet, a system based on a former way of writing Tuareg, was created to make written documentation possible (ibid., p. 19), (El Kirat El Allame 2006, p. 7). IRCAM, The Royal Institute of the Amazigh Culture, is putting extensive effort on preserving Amazigh in Morocco; apart from developing educational material their activities include for instance authoring books and comics, as well as broad research in the field of language documentation (El Kirat El Allame & Ahoujil 2010, p. 49). IRCAM is also responsible for introducing Amazigh into the Moroccan education system where it has been taught in a standardised form since 2003 (ibid., p. 49). Despite the effort put on standardising Amazigh it does not seem to be fully codified up until today, yet all the effort put on preserving the language has resulted in a situation where Amazigh seems to gain more ground in the Moroccan linguistic market; moreover the recognition of Amazigh is currently leading to the Amazigh population growing as well as passing the language further to the younger generations (Sayahi 2014, pp. 17-18). Compared to other countries where Amazigh in all its varieties is spoken, Amazigh in Morocco and Algeria does not seem to be facing endangerment, so to say – since 2001 Amazigh has been recognised as one of the languages even in Algeria (ibid., p. 19).

The situation is different in Tunisia: scholars such as El Kirat El Allame (2009), Daoud (2010) and Gabsi (2011) mention that Amazigh in Tunisia is on its way to extinction. "At present, Amazigh and the dialectal varieties of Arabic are in high competition in Morocco and Algeria; In Tunisia the indigenous language has completely lost ground in favour to Tunisian Dialectal Arabic." (El Kirat El Allame 2010, p. 24). Apart from the stigma and identity issues, Gabsi (2011) claims the regression of Amazigh in Tunisia to be contributed mainly by geographical, economical and socio-cultural factors (Gabsi 2011, p. 141). Moreover, Gabsi (2011) claims the governmental support for preserving Amazigh in Tunisia to be inexistent, mentioning that maintaining Amazigh can even be seen as a threat: "Arabic is the language of the Koran and, in unscientific minds, any attempt to raise the status of a minority language like Berber [i.e. Amazigh] is seen as an attack on the religion itself." (Gabsi 2011, p. 151). Perhaps this might be related to the fact that even though many political decisions regarding language use in Tunisia have been made throughout the years, the question has mainly been between the usage of Arabic, French and English – Amazigh has not been men-

tioned nor given higher importance (Daoud 2010, p. 40). For natural reasons many Amazigh speakers are native bilinguals with Amazigh and colloquial Moroccan Arabic (Bensoukas 2010, p. 138). Combining the already existing diglossia with societal and educational bilingualism, may lead to even tri- or multilingualism for many speakers of Amazigh. (ibid., pp. 137-139).

8.1.2. Arabic

Arabic, a Semitic language (Veerstegh 1997, p. 9) that derives from the Arabian Peninsula where it is thought to have developed between the fourth and fifth centuries, is one of the most spoken languages in the world (Sayahi 2014, p. 20). According to Wardhaugh (2010) the amount of regional varieties of Arabic colloquials is large throughout the Arab world, but despite the great differences between the varieties each dialect has taken a lot of vocabulary from Classical Arabic (Wardhaugh 2010, p. 91), which is considered to be the most prestigious form of Arabic and is either thought to have developed from various Bedouin varieties of Arabic spoken in the Arabian Peninsula (Sayahi 2014, p. 22), or from a so called koine that was used aside Classical Arabic and that was a preliminary form of what later on would become the dialects (Ferguson 1959, pp. 50-51). Soon after it gained its status as the language of the Qur'an and Islam (ibid. p. 22). There are several different varieties of Arabic in use in the Maghreb, and each variety has its forum in the society.

Sayahi (2014) claims Classical Arabic to be the "the most uniform language variety across the Arabic-speaking world." (Sayahi 2014, p. 24). El Kirat El Allame et al. regard Classical Arabic as the most prestigious one of the Arabic varieties that is used in religious ceremonies and practices (El Kirat El Allame, Hajjam & Blila 2010, p. 335). There is also a long tradition of using Classical Arabic in poetry and literature (ibid., p. 335). According to Ech-Charfi Classical Arabic is also the unifying language of the so called Arab nation (Ech-Charfi 2010, p. 371).

In Morocco, Modern Standard Arabic functions as the language for both printed and broadcasted media and can be seen and heard in the news, other publications and talk shows (El Kirat El Allame, Hajjam & Blila 2010, p. 335). According to El Kirat El Allame et al. (2010) Modern Standard Arabic is mainly used by the educated Moroccan elite. They also argue for the existence of Middle Moroccan Arabic, which according to them is a simplified form between the formal varieties of Arabic and the colloquial Moroccan Arabic, Darija, and is mainly used in formal contexts by edu-

cated Moroccans (ibid. p. 335). Bensoukas (2010) defines it as "that variety which maintains the basic phonology, morphology and syntax of MA [Moroccan Arabic] and enriches its lexicon with MSA [Modern Standard Arabic] words and technical terms…" (Bensoukas 2010, p. 138-139), and claims that even though Modern Standard Arabic is officially stated as the official language of Morocco, in reality Middle Moroccan Arabic is the variety that is more used (Bensoukas 2010, p. 139). In fact, the different varieties of Arabic can be considered, and are claimed, to be in a diglossic, or even triglossic relation with each other (Bentahila & Davies 1995, p. 79), (Sayahi 2014, p. 58), (El Kirat El Allame, Hajjam & Blila 2010, p. 335).

Daoud (2010) mentions that the situation of the Arabic varieties in Tunisia is similar to that of Morocco, claiming that there are several different types of Arabic in use in Tunisia (Daoud 2010, p. 7). The official language of all governmental and religious matters in Tunisia is Written Arabic, which is also the language of both printed and broadcasted media, law and some fields of education, namely humanities, social sciences and arts (ibid., p. 7). Moreover, there are other Arabic varieties used in the society: Classical Arabic, which is the language of the Qur'an, and other high varieties of Arabic that are derived from it; Modern Standard Arabic, sometimes referred to as Literary Arabic, which is the variety that seems to be used for ''school manuals, official documents, the written media, and some political speeches and radio/TV programmes." (ibid. p. 7-8); the so called 'middle variety' of Arabic, claimed to be the educated way of speaking the local colloquial, is claimed to exists in Tunisia as well (Sayahi 2011a, p. 2). Therefore one can notice the diglossia between different varieties of Arabic exist in both Morocco and Tunisia, as in the Arab world in general (Sayahi 2014, p. 58).

The difference between the Arabic varieties is not always as clear, especially introducing the concept of the middle varieties, such as Middle Moroccan Arabic and educated Tunisian Arabic, might raise opinions, as Sayahi (2014) argues:

> ''This approach implies that the vernacular does not borrow from MSA [Modern Standard Arabic] but that, instead, there is a stable third variety that bridges the lexical, structural, and functional gap between the two while they stay separate. It is important, however, to recognize that beyond contextual convergence produced through diglossic code-switching or the rendering of MSA [Modern Standard Arabic] elements in a vernacular phonol-

ogy, as in the case of nonce borrowing, elements from the standard variety enter the vernacular as stable loanwords, sometimes to fill a conceptual gap and at other times compete with an existent vernacular word or a non-Arabic loan."

(Sayahi 2014, pp. 129-130).

Therefore, as Bentahila (1983a) presents, the main differences between the previously mentioned varieties seem to be mainly lexical and stylistic, as the grammar itself has remained untouched throughout the times (Bentahila 1983a, p. 3).

8.1.3. Moroccan Arabic

The colloquial Arabic varieties that are spoken in the Maghreb belong to the Western Arabic dialect group (Sayahi 2011a, p. 1) and are generally known as Maghrebi Arabic (Sayahi 2014, p. 24). Even the colloquial varieties spoken in Libya, Mauritania and Malta are included in this group of dialects (ibid. p. 24). Sayahi (2014) claims the Arabic colloquial varieties in the Maghreb region to be influenced by the native languages (Sayahi 2014, p. 25). Miller et al. (2008) argue that North African urban dialects are influenced by two distinct linguistic groups; Bedouin dialects and pre-Hilali and Andalusi dialects (Miller et al. 2008, p. 10). According to Veerstegh (1997) the pre-Hilali dialects represent the sedentary varieties of colloquial Arabic, whereas the Bedouin dialects of the region are representations of Hilali dialects (Veerstegh 1997, p. 164). The terms, pre-Hilali and Hilali, refer to the two distinct waves of migration into North Africa, that Veerstegh (1997) claims to be one of its kind: "In no other area of the Arabophone world has there been such a marked separation in time between the two stages of arabicisation." (ibid., p. 164).

Moroccan Arabic, in Morocco known as Darija, is the colloquial variety of Arabic that is commonly used in communication in the Moroccan society and in the case of Arabic speakers in Morocco is the language that one acquires first (Bentahila 1983a, p. 4), (El Kirat El Allame et al. 2010, p. 335). Bentahila (1983a) claims that, despite the significant differences in the phonological, grammatical and lexical level, Moroccan Arabic, as well as the Maghrebi dialects in general are thought to derive from Classical Arabic, yet Amazigh being the indigenous language of the region had a central role

in what afterwards would become Maghrebi Arabic and the different dialects (ibid. p. 4), (Sayahi 2011a, p. 3), (Sayahi 2014, p. 25). A large number of loanwords from French and Spanish have been introduced into Moroccan Arabic which is one of the features that distinguish the colloquial from Classical Arabic on the lexical level (Bentahila 1983a, p. 4). Moreover, a lot of the vocabulary that exists in both varieties differ in meaning (ibid. p. 4). Bensoukas (2010) argues that Moroccan Arabic can be classified into four different categories with, at times, significant differences: urban, Bedouin, Jebli and Hassania (Bensoukas 2010, p. 137).

Turkish, Spanish and Italian have played a role in forming the vocabulary of Tunisian Arabic, while more recently Modern Standard Arabic, due to mass media and international broadcasts, has been increasingly borrowed into the Maghrebi colloquials (Sayahi 2011a, pp. 2-3). Although the impact of other languages has mostly been on the lexical level even structural influences may have been borrowed (ibid., p. 4). Due to the period of colonisation and intense contact with France and French the Maghrebi dialects contain a great amount of French loanwords (ibid., p. 4). The high, prestigious status French enjoys in the Maghrebi society (see part 4.3 below) has led to extensive code-switching being an often occurring phenomenon in the region (ibid., p. 4).

8.1.4. French

During the years of the French Protectorate in North Africa, from 1830 until 1962 in total (Sayahi 2014, pp. 38-39) as presented earlier, French was nearly exclusively used as the language for all educational and administrative purposes; French was, indeed, used as the official language (Bentahila & Davies 1995, p. 79), (El Kirat El Allame 2010, p. 27). Heath (1989) argues that the stigma and other negative attitudes towards the French language as remains of the former coloniser in the area have afterwards been replaced by French becoming the language of liberation and socioeconomic advancement (Heath 1989, p. 12). French maintained its prestigious role even after Arabic becoming the official language (Veerstegh 1997, p. 202).

The French protectorate ruled Tunisia between 1881-1956, during which French had a high position that, despite several Arabisation attempts and constitutional changes and reforms, has remained prestigious up until today (Daoud 2010, p. 11). Daoud (2010) claims that it is obligatory to master French in order to perceive a good education resulting in a good employment in Tunisia; this seems

to be even a built-in code among citizens (ibid. 2010, p. 22). Benrabah (2004) mentions that the situation is similar in Algeria, where French is the language of higher education especially in the scientific field (Benrabah 2004, p. 67). He claims that Algeria nowadays is a community where different ethnicities i.e. Arabic vs. Amazigh as well as people supporting different linguistic capabilities i.e. French vs. Arabic, are polarised, which is the result of the failed attempts to unify the country after the French Protectorate (ibid. p. 73-74).

Daoud (2010) claims that French is extensively used by middle and upper class citizens, furthermore especially by women (Daoud 2010, p. 22). French has a high status in the society and it can be either the language predominantly used for all communication between certain socio-economic classes or it may be used by code-switching between Arabic and French. Sayahi (2011) claims that women seem to have a tendency to use more code-switching and French in their speech than men, which supports the theory of "franco-arabe masculin et franco-arabe féminin" (Sayahi 2011b, p. 117). Gendering the usage of a certain language, in this case French in Tunisia, has been studied by Walters (cf. Walters 2011). The usage of French varies between generations; Daoud (2010) argues that the younger generations tend to use Arabic more than French due to reasons as simple as lower proficiency in French (ibid. p. 22).

Sayahi (2014) claims that even after the native French-speaking population that previously was settled down in the Maghreb returned to Europe after the Maghreb countries became independent, French maintained its high social value and remained prestigious, spreading both faster and further than during the time of the colonisation (Sayahi 2014, pp. 41-42). Even after the fall of the French protectorate French has remained its high value in the society, regardless numerous Arabisation programmes that partly have managed to change the language policies to favouring of Arabic in certain domains (Bentahila & Davies 1995, p. 79). Despite the linguistic changes French can still be seen to have a prestigious role in the society. As French is widely used in administration and especially in private sector institutes, as well as in higher education in the scientific and technological fields knowing French is often required for being able to succeed in employment (El Kirat El Allame, Hajjam & Blila 2010, p. 336). Sayahi (2014) argues that "The higher a speaker's educational level, the better their competence in French is, which correlates negatively with competence in MSA [Modern Standard Arabic]. As French continues to be the dominating language in science, technology, engineering, and medicine, the educated population that belongs to these fields is the one that has higher competence in French and, most often, is better positioned

socioeconomically." (Sayahi 2014, p. 75). This supports the argument that French is indeed the language of the social elite. As several languages are used in Morocco, one could assume that French has the role of a lingua franca and therefore brings people from different backgrounds closer to each other over linguistic barriers. That is not the case, though; since not all Moroccans know French it does not have a unifying function for the society - on the contrary, it seems to create gaps between different social classes (Bentahila 1983a, p. 21).

Code-switching between the local Arabic colloquials and French seems to be a big trend, as Sayahi (2014) claims:

> "At the social level, competence in French is highly appreciated, and the ability to showcase it through extensive code-switching is tolerated if not expected in many contexts. In fact, because French is the de facto language of science and technology, better-off segments of the population are presumed to have an advanced knowledge of French that allows for high-frequency code- switching. The opposite does not only question competence in French, but also allows for predictions about the level of education and the speaker's socio-economic background. This is to such a degree that, at times, even less competent speakers may, at the risk of backfiring, insert isolated French token words in an attempt to access the socio-psychological benefits associated with the display of competence in French."

(Sayahi 2014, p. 95).

8.1.5. English

An important factor making English an attractive language for the Maghrebi population is the fact that it is the global language (Sayahi 2014, p. 54). The importance of English is noted in the field of education, as Sayahi (2014) claims: "Educational bilingualism is also the reason behind the rapid spread of English in the Maghreb. Many speakers have access to this language from high school on, and some are more interested in developing higher competence in English than in French or at least

they actively seek out both. With the consolidation of English in the educational system and its role as the global language, it is becoming increasingly present in the Maghrebi linguistic market." (Sayahi 2014, p. 74). Therefore it is understandable that English is gaining more ground in both the Moroccan and the Tunisian linguistic market. The new generations seem to be aware of its importance and regard English positively also in behalf of its neutrality; England never occupied Morocco, and nor does Morocco have any other connection to England nor English, compared to French and Spanish that are seen as signs and remains of colonial history and therefore political and cultural dependence (El Kirat El Allame et al. 2010, p. 337). Being aware of both these aspects – political freedom and international mobility and communication - Moroccans in general view English as a positive language to know (ibid., p. 337).

What is common for English alongside with French is that it is seen as a language providing better opportunities and a more prosperous future (Daoud 2010, p. 22). Daoud (2010) claims that apart from the positive attitudes among individuals English has recently been gaining more ground in the academia, where publishing in English enables a scholar to have a wider spread of publications; scholars publishing in English can be said to "receive greater recognition than those [who publish] in French" (ibid. 2010, p. 24). Moreover English has a small role in both printed and broadcasted media in the Maghreb; there are a few newspapers and magazines published in English, as well as radio programs (ibid., pp. 19-20).

8.1.6. Spanish

The Spanish Protectorate, that mainly ruled the northern parts of Morocco as well as Western Sahara, has led to a division between the colonial language in use in Morocco – in North Morocco and Western Sahara one is more likely to hear Spanish than French (Sayahi 2014, p. 48). The Spanish introduced a secular education for non-Muslims, which resulted in various different education systems during the era of colonisation (ibid. p. 48). Spain lost its strongest influence after the independence of Morocco in 1956, but the language is still being taught in schools, yet it lacks the same amount of prestige as French for instance (El Kirat El Allame, Hajjam & Blila 2010, p. 336-337). Yet the Spanish protectorate was a part of the history of Morocco and Western Sahara, the language has had an impact on the Arabic colloquials of the region in general (Sayahi 2014, p. 15).

Moreover, due to modern technology, broadcasts from other countries in various languages are available on satellite channels (Sayahi 2014, p. 20).

8.1.7. Diglossia

It is important to note that the diglossic situation that exists in the Arabic-speaking communities is hardly a new feature of our modern times; according to Veerstegh (1997) the linguistic landscape in the Arabophone world has since the pre-Islamic era hosted a diglossic situation between different varieties of Arabic that all have had their domain in the society (Veerstegh 1997, p. 41), and, despite the number of the various different dialects in relation to Classical Arabic, were used simultaneously (Ferguson 1959, pp. 50-51). Due to the presence of another prestigious language, French, the situation of diglossia in North Africa is slightly complex (Veerstegh 1997, p. 197). Myers-Scotton (2002) mentions a number of reasons contributing towards diglossia, which are: ''Military invasion and subsequent colonization''; ''Migration for social and economic reasons''; ''Education as a factor in bilingualism''; ''Spread of international languages'' (Myers-Scotton 2002, pp. 31-32) – all the reasons mentioned above are relevant and applicable for the situation in the Maghreb countries and have therefore contributed towards active usage of several languages among one community. She also mentions that ''All linguistic varieties in a community are rarely treated equally'' (ibid., p. 35) and that ''Those languages with the greatest capital are the language of government business and the medium of higher education'' (ibid., p. 35).

Bassiouney (2009) argues that the term 'diglossia' as Ferguson defines it does not cover the whole linguistic picture of the Arab world (p. 12), by claiming that ''in such countries [e.g. Tunisia, where French is spoken, apart from Arabic] the term 'diglossia' is too narrow for the type of situation which exists.'' (Bassiouney 2009, p. 12). Furthermore there seems to be little consensus regarding the Arabic varieties in the Arab societies as the amount of different levels of high and low varieties differs from scholar to scholar; yet it is necessary to remark that the definitions seem to try to differentiate between the varieties depending on level of formality as well as the socioeconomic position of the speaker (ibid., p. 14).

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