Learning Arabic as a Second Language: An Exploration of the Efficacy of Arabic Subtitles by Netflix Viewers

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Abstract
The recent years have witnessed an increasing interest in subconscious language acquisition as an effective approach in foreign language learning contexts. This interest has been reflected in the development of different technologies that support subconscious learning processes. Due to the information technology revolution we are witnessing today, there is an unprecedented development of language learning technologies including mobile applications, websites, and multimedia. Subtitling, however, remains one of the most popular but under-researched language learning tools that is widely used to support language learning processes. Despite the prolific literature on subconscious processes and the use of subtitling in improving language acquisition in different languages including English, Spanish, and Chinese, similar research with Arabic has not yet been undertaken. This can be attributed to the fact that teaching Arabic as a Foreign Language (ASL) has long been carried out using traditional methods. There used to be a gap between teaching Arabic on one side and learning technologies on the other. With the development of new technologies that support Arabic subtitling, it is important to investigate the impact, if any, of these new technologies on improving the language acquisition of Arabic by non-native speakers. With this background, this study seeks to explore the role of Arabic subtitling provided by Netflix in the language acquisition of learners of Arabic as a Second Language (ASL). Towards this aim, data were collected through focus-group discussions and interviews with learners of ASL in three universities in Saudi Arabia and Egypt to explore their perceptions about the usefulness and effectiveness of Arabic subtitling provided by Netflix. Thematic content analysis was used for data analysis and interpretation. The findings indicate that Arabic subtitling was useful for the language development of the learners as it introduced them to the vernacular dialects of Arabic and improved their
motivation. Educators, educational institutions, and program designers of ASL are recommended to integrate language technologies and subtitling into the learning environments and teaching methodologies for improving the linguistic acquisition and performance of learners of ASL.

Keywords: Arabic as a Foreign Language (ASL) (ASL), Language acquisition, Netflix, Subconscious language acquisition, Subtitling

Introduction

In recent years, researchers and educators have stressed the importance of integrating language learning technologies into language learning environments for improving the language acquisition of second language learners (Becnel, 2019; Chapelle, 2003; Stanley & Thornbury, 2013; Zou & Thomas, 2019). The underlying principle is that traditional teaching methods are not effective in foreign language learning and these have to be replaced by more innovative methods that take into account the recent global changes and information technology advances (Gruba & Hinkelman, 2012). Many doubts have been raised regarding the usability, effectiveness, and reliability of traditional learning environments in second language learning. In this regard, technologies have to be integrated into language learning environments to support face-to-face instruction (Stanley & Thornbury, 2013; Stockwell, 2012).

In response, language learning developers and designers have been concerned with developing language learning technologies that address the limitations of traditional language learning classrooms and environments. One main concern of these developers and designers has been to create an attractive and motivating learning environment for foreign language learners (Kruk, 2018; Thomas & Schneider, 2020). Indeed, there are numerous examples of different language learning technologies including computer-assisted language learning (CALL) systems, language games (Kloo, Mindsnack, Scrabble, and Spot It), mobile applications (Busuu, Duolingo, Memrise, and Rosetta Stone), and subtitling that have been proved effective in learning different languages including English, French, German, and Spanish as second or foreign languages. Many of these technologies have been theoretically founded on the Subconscious Language Acquisition Theory developed by Stephen Krashen (1988). The underlying hypothesis of Krashen’s theory is that language acquisition is the product of a subconscious process very similar to the process children undergo when they acquire their first language. It requires meaningful interaction in the target language - natural communication - in which speakers are concentrated not in the form of their utterances, but in the communicative
act. Within the theoretical framework of subconscious language acquisition developed by Krashen, Galle (2020) argues, the majority of language technologies have been designed in a way that enables second language learners’ vocabulary and other language skills subconsciously.

Despite the effectiveness of integrating language technologies into language learning environments, teaching Arabic as a Foreign Language (AFL) to non-native speakers of Arabic disregarded the issue for many years. This can be attributed mainly to the lack of language technologies and online materials that support teaching and learning of Arabic. The recent years, however, have witnessed drastic changes regarding the availability of and accessibility to language technologies for Arabic as also the interest of non-native speakers in learning it due to the changing geopolitical equations as well as the multilingual nature of language learning systems. Duolingo, for instance, offers language services and courses for 19 different languages including Arabic.

For the effective integration of language learning technologies in learning environments, these technologies have to be evaluated. Unfortunately, there is a lack of literature on the evaluation of learning technologies with respect to Arabic. This study seeks to address this gap in the literature through investigating the impact of Arabic subtitles on improving the language acquisition of Arabic by non-native speakers. Towards this aim, interviews and focus group discussions were conducted with leaners of ASL in three universities in Saudi Arabia and Egypt. The study asks the following research questions:

1. What are the AFL learner’s perceptions about the subtitling effect on their comprehension of Arabic videos as compared to the traditional instructional method?

2. To what extent is subtitling effective in AFL learner’s acquisition of colloquial varieties of Standard Arabic (SA)?

3. How can subtitling be helpful in addressing challenges posed by the diglossic nature of Arabic?

**Literature Review**

The accelerating progress towards more established learner-centered education with the essential individualization of learning and the changes in the educational arena such as those caused by Covid-19, among other conditions, have made the introduction and the adaptation of the new technologies, including multimedia technology, an inevitable necessity in education.
The current manipulation of the multimedia technologies (e.g., TV, computers, networks, and video cassette recorders) in teaching second or foreign languages has made it possible to bring a nearly real-life situations to the language classroom providing contextually enriched L2 scenery that serves as a simulated learning environment. These technologies, which are virtually used in all foreign language teaching activities and through all levels, are especially beneficial in that they fulfill the necessary communicative aspects of language teaching. The accessibility of such media through the ICT tools and their inherent features of interactivity and dynamicity have rendered them an optimal pedagogical option that could meet the needs of language learners and guide their learning (Mustofa & Sari, 2020).

Instructional videos, as one manifestation of the multimedia technology, provide authentic language and serve as priceless linguistic resources rich in otherwise non-available cultural representations that breathe life in the language content (Masrai, 2019). One advantage of such videos with their authentic content is that they hold many entertainment oriented features making them appealing to learners (Azizi & Aziz, 2020). Sherman (2003 as cited in Masrai, 2019) noted that, “learners can benefit from viewing films in terms of understanding the L2, since they are presented with various kinds of voices in various kinds of situations, with the visual dimension being a particular advantage for comprehension and understanding the pragmatics of conversations” (p. 2).

However, authentic language featured in videos sometimes imposes high cognitive load on the learners in terms of vocabulary, structures or the pace of speech delivery. To lighten this load, captions and subtitles are used. Such on-screen texts serve as facilitating pedagogical tools that best fit when the audiovisual input is beyond students’ ability level and for adults’ autonomous learning of the language (Vanderplank, 2013). Captioning is widely used in EFL teaching and learning due to its accessibility and the ease with which it can be produced through the available software like Adobe Premiere, iMovie, or ViewPoint. Captioning can be seen as diversification of learning modes as it is a kind of enrichment of the presentation modality enhancing the audiovisual mode with the verbal-written mode (Abou Shaaban & Al Naami, 2020).

A wide array of research has highlighted the significance of using captioning in teaching foreign languages. Videos, especially captioned ones, are influential tools to produce relaxation and curtail the naturally occurring anxiety inherent in listening to a foreign or second language (Vanderplank, 2010). Hosogoshi (2016) argued that captioned videos are especially beneficial in improving the listening skill given that they present an authentic material with its everyday pace of delivery and without manipulation of the structuring of the content in terms of grammar and vocabulary. Captioning is also a tool to further enrich video watching by providing the best
watching recipe that appropriately integrates visual and verbal ingredients in suitable portions (Vanderplank, 2013). Masrai (2019) contended that subtitles help increase learners’ attention, improve processing, analyze language, and reinforce previous knowledge. Similarly, subtitling aids in analyzing the stream of the audio material and clarify the territory of the phonemic information (Dumlao, Alfonso, Paguirigan, & Subia, 2020; Selim, 2010). In addition, captioning is helpful in striking a balance between the affective and cognitive aspects of the video watching so that no one of them outweighs the other. Vanderplank (2013) examined this point and argued that the captions are the best option to achieve such balance since they represent “a cognitive counterweight” that compensates the affective appeal inherent in entertainment programs. However, she found that there are cases when captioning is not such a good option like programs featuring the natural world where the main focus is on the visual. Borras and Lafayette (1994) confirmed that subtitled videos can be seen as effective input-output pedagogical tools in the sense that they have the advantage of providing authentic lifelike listening materials that are likely to affect the aural skills of listening and at the same time help seamlessly and naturally produce oral and written language in a native like manner.

A unique feature of listening that makes it distinct from reading in terms of acquiring the second language is that adult learners find it more difficult to learn and decode phonological information while listening than is the case of orthographic information when reading and writing. This highlights the significance of captioning in teaching listening especially to autonomous adult learners. (Dumlao et al., 2020; Latifi et al., 2011)

On the other hand, on-screen texts may defeat the very purpose of improving listening by taking learners completely or partially away from listening and getting them to be overwhelmingly occupied by reading as the means of grasping the message. According to the basic attention hypothesis of the perceptual learning, a second language learner watching captioned videos might feel torn between the two competing tasks of attending to the subtitles reading and the audiovisual tracking of the video’s action which would virtually have negative effect on building the meaning. This is likely in all types of subtitling with variation resulting from the attention load imposed by each type (Dumlao et al., 2020). This argument of the possible distractive effect of captions has been refuted by a body of research that provided evidence that captioning is a driver rather than a hindrance due to the multiple representations it provides that make input comprehensible (Holobow, Lambert & Sayegh, 1984; Lambert & Holobow, 1984; Vanderplank, 2013). In her study, Vanderplank (1988) reported that participants were able to follow text, sound, and picture simultaneously without resorting to reading only.
Similarly, Bird & Williams (2002), and Price (1983) converged in that captioning has no distracting or harmful effect on listening. The scaffolding utilization of subtitles is underpinned on an array of theories. Paivio’s (1971 as cited in Hosogoshi, 2016) dual coding theory could be used to explain the prospective feasibility of the subtitles; the theory assumes that the addition of a graphic element to the meaning increases the likelihood of understanding the implied message. Transferring this to the application of subtitling reveals that the combination of the audiovisual modality and the written text increases the signals that convey the message leading to an enhanced ability to absorb the message and retain it while listening (Shabani & Zanussi, 2015). Other scholars like (Huang & Eskey, 1999; Vanderplank, 1988) theoretically underpinned the use of subtitles on Krashen’s (1985) input hypothesis which posits that second language is acquired when the input is comprehensible but imposes slight degree of challenge or, in other words, is a step beyond the comfort zone of the learner. The subtitles, as a mode that is intertwined with the audiovisual mode, alleviate the degree of difficulty inherent in listening and make the audiovisual input relatively easier and more comprehensible. In the same fashion, Chung (1999) presupposed that the bimodal input by itself provides ground for understanding and recognizing the content. Likewise, Frumuselu, De Maeyer, S., Donche, V., & Plana (2015) structured their experiment in line with three theories, namely Cognitive Theory of Multimedia Learning, Theory of Cognitive Load, and Bilingual Dual Coding. However, being theoretically underpinned does not mean that the mere utilization of subtitling is a guarantee of its effectiveness as other factors should be taken into account when considering subtitles as drivers for listening comprehension. Language of the subtitles, how much they are used and when to be used are potential mediating influences (Hosogoshi, 2016). For captioning to bear fruit, it takes strenuous and meticulous efforts from the teacher to select a quality video that addresses the learners’ levels of proficiency and provides the necessary conditions to achieve the balance between reading and listening (Vanderplank, 2013). Similarly, difficulty level of the language and speech pacing of the movie are points to be regarded by teachers (Azizi & Aziz, 2020). As for the best proficiency level for which captioning would be useful, studies provide mixed results; some studies perceive captioning as distractive to low proficient learners. Still others find captioning effective as neutral with respect to proficiency. But as a precaution, teachers are encouraged to make captioning less distracting by using key words or italicizing them (Winke, Gass, S., & Syodo, 2010). Vanderplank (2013) pointed out that watching videos needs to be intentional and aim-directed.
as watching without aim or strategy to guide the achievement of the aim produces little, if any, language acquisition. In Vanderplank’s words, there is no ‘free ride’ for learners.

The common types of subtitles that disperse across research can be classified according to Zanon (2006) and Thammineni (2016) into: (1) bimodal subtitling also known as intralingual subtitles, within-language subtitling, and same language subtitling in which L2 is the language of both the soundtrack and the subtitles, (b) standard subtitling also known as interlingual subtitles in which the soundtrack is in L2 and the subtitle in the learner’s mother language, (3) reversed subtitling which is the other way round of the standard subtitling. However, the standard and the bimodal types are more widely used (Abou Shaaban & Al Naami, 2020).

The direct positive relation between within-language subtitling and listening comprehension can be explained by many reasons. The association between vocalized system and the orthographic system helps learners develop and refine representative typical general rules shared by groups of speech chunks labeled as perceptual categories which, in turn, enhances the ability to decode the speech input. In addition, L2 subtitles enable learners to easily segment speech into its subsequent units as the subtitling helps clarify boundaries between the speech units; subtitling also helps identify commons across accents (Dumlao et al., 2020). In their study, Mitterer and McQueen (2009) came to a conclusion that intralingual subtitles are the optimal condition compared to the harmful interlingual subtitles. They argued that the perceptual learning through the exposure to audiovisual stimuli supported by subtitles is only possible in case of reading in same language as the listening material.

Masrai (2019) reported that few studies focused on examining the effects of L1 subtitles on L2 comprehension. As for intralingual subtitles, even fewer studies were concerned with the relation between L2 subtitling and L2 listening comprehension of non-native speakers of Arabic. In this regard, it is worthwhile to note that most studies that examined the correlation between captioned videos and ASL were carried out outside the Arab world, mainly in the USA and UK, with very few studies based in the Arab region (Selim 2010; Qasim & Yahiaoui, 2019), a gap that needs to be filled. Another captioning issue that seems peculiar to Arabic and adds to the significance of this study is that the orthographic system of participants’ mother languages is different from Arabic, a point which is rarely explored by the other studies in the foreign language arena. Given that substantial evidence exists, captioning is helpful in terms of improving listening and the other phonological aspects along with reading comprehension, an important aim of the study is to explore the effectiveness of captioning as for the two skills and go beyond to explore the mental processes involved in the attempt to comprehend subtitled videos. Therefore, the qualitative evaluation of the captioned films seems more appropriate
since it helps make the mental processes (information processing) involved in the up-taking and processing of the audiovisual input audible and readable.

One more point that this study will address, and which fills an existing research gap, is the diglossic nature of Arabic. Arabic is a diglossic language in that the standard language called Fusha, which is the mother tongue of no one, is the language of education and academia. It is the one used for formal communication. Beside this standard language, many mother languages called “colloquial” or “dialects” exist which substantially differ from the standard language; they are largely spoken phenomena. No one of the spoken variants is accepted as common means of communication between regions and there has been widening gap between the standard written form and the various spoken vernaculars. This necessarily means that non-native speakers of Arabic might be perfect in the standard written form of the language but still suffer in their everyday communication in the spoken variety of the language (Wahba, Taha & England, 2014).

Furthermore, teaching of Arabic to non-natives in the Arab region has not yet utilized the full potential of the multimedia technologies. It is not the mere use of technology that matters most, the point is to use it effectively. Utilization is constrained to the use of the presentation utilities like overhead projectors and the like. Videos as an ICT manifestation are used marginally, mainly for warm up activity or wrap up activities for the purpose of extension. Individualizing the manipulation of the instructional videos so that they target developing the specific language skills is mainly in its gestational stages. Moreover, even when employed, modern technological devices focus on teaching SA and on written language rather than the spoken language with scant, if any, emphasis on colloquial dialects which might be justified by the fact that most ASL learners approach the language for an academic purpose, the realization of which can be sought in the written literature of the language. Therefore, the aim of this study is to explore the impact of modern technologies, namely the captioned videos, on the development of the content comprehension of the non-native speakers of Arabic with special emphasis on reading and listening.

**Methods and Procedures**

This study is based on a case study design. Interviews and focus-group discussions were conducted with participants from three universities in Egypt and Saudi Arabia: Al-Azhar University (Egypt), Imam Muhammad Ibn Saud Islamic University (Saudi Arabia), and Taibah University (Saudi Arabia). The three universities have traditionally offered scholarships for non-Arab students from different Muslim countries including Ghana, Indonesia, Liberia,
Malaysia, and Nigeria. All three also have a long and established history in teaching ASL for non-Arabic speakers. Candidates are enrolled in different programs including Arabic Studies, Business Administration, Education, Engineering, Islamic Jurisprudence (Sharia), Science, and Social Sciences. A total of 72 learners of ASL who are studying in different programs volunteered to participate in the study.

Interviews and focus discussion groups are usually described as appropriate, familiar, and useful tools for data and information gathering in applied linguistics applications. Despite of criticisms of the two tools, Edley & Litosseliti (2010) asserted that both interviews and focus groups are legitimate and valuable research tools. For the successful implementation of interviews and focus group discussions, however, it should be noted that these are based on a dynamic interaction requiring a responsible and active interviewer and a responsive and willing interviewee (Prior, 2018).

For data analysis, thematic content analysis was used. The rationale is that thematic content analysis is an appropriate methodological framework for the analysis of the data encoded in interviews and focus group discussions. According to Damayanthi (2019), thematic analysis was first developed by Holton (1988) and has recently been accepted as a distinctive method with a clearly outlined set of procedures in social science. Thematic content analysis can be defined as an approach to data analysis that enables researchers identify the relevant and recurrent themes in a data collection and relate them to the research questions (Braun & Clarke, 2013; Braun, Clarke, & Rance, 2014). Thematic content analysis, Crowe, Inder, & Porter (2015) argue, involves systematically identifying, organizing and offering insights into the pattern of data. It helps to observe and make sense of collective meanings and experiences. It also focuses on identifying and explaining the common way of understanding an issue.

Damayanthi (2019) argued that one main advantage with thematic content analysis is that it enables researchers capture complex, messy and contradictory relationships that prevail in the real world through identifying the commonly recognized patterns and relationships to meaningfully answer the research questions of the study. Steps for doing the thematic content analysis, as thus, include coding the data, selective sampling, identification and representation of the themes, and sub-themes. Rosala (2019) explained that a thematic content analysis starts with coding qualitative data and through a systematic process of comparing segments of text within and between codes, the researcher arrives at themes, as shown in Figure 1.
Figure 1. Steps of carrying out thematic content analysis (Rosala, 2019)

To address the limitation of subjectivity that is always associated with thematic content analysis, this study adopts topic modelling methods for the identification of the key topics in the interviews and focus group discussion data. Topic modelling was primarily developed as a clustering technique for natural language processing (NLP) applications. However, topic modelling methods can be usefully employed in qualitative studies and applications (Sergey, Koltcov, & Koltsova, 2015). Accordingly, four main topics were identified:

a. Traditional teaching methods
b. The diglossic nature of Arabic
c. Netflix and the use of vernacular varieties of Arabic
d. Difficulties with decoding the orthography of colloquial Arabic dialects

Analysis and Discussions

This section offers an analysis of the data. It brings about discussions of the focus groups and interviews of the participating students about the two films they watched through Netflix. These films are ‘الخلية’ (The Cell) and ‘شمس المعارف’ (The Book of Sun). The translations of the titles have been provided by Netflix. As mentioned, this section focuses on four main themes that were inferred from students’ input concerning the impact of Arabic subtitles on learning Arabic through screen. These four themes are (1) the effectiveness of traditional teaching methods, (2) the diglossic nature of Arabic language and how non-native students handle it, (3) the use of vernacular varieties of Arabic in Netflix, and (4) the difficulties in decoding the orthography of colloquial Arabic dialects.
Traditional Teaching Methods

It is noteworthy that the regular instructional method AFL students are familiar with is that which they experience in the classroom in their systematic study in which SA is the medium of study. Generally speaking, participants from the three universities who watched the Netflix movies with intralingual subtitles agreed that the captions were of great help to them and that such a method is effective to their learning and content comprehension of the movies. They agreed that it is a good chance to be able to read the subtitles while listening to the Arabic dialogue. It was clear from the discussion that listening is the most influenced language skill to be developed, followed by reading. When asked which method they found more influential as an accelerator to the four language skills, almost three quarters of the students identified captioned films mode as especially efficient in developing listening and reading. Many students echoed that captioning made listening more controllable than ever. One of them said “with captions, many of the words or expressions which I used to wrongly recognize and naturally mispronounce have now become easy to grasp”. This is actually in agreement with a wide range of research which supports the direct correlation between captioning and enhanced listening and reading (Alabsi, 2020; Furaidah, Ngadiso, & Asrori, 2019; Hwang & Huang, 2011; Metruk, 2018; Napikul, Cedar, & Roongrattanakool, 2018; Yiping, 2016).

As for speaking, students reported another positive impact derived from the use of captioning. They reported that in the discussions and role-play that followed watching, they experienced a relative sense of control over their speaking fluency in addition to their acquisition and use of words mentioned in movies that they had never known or used before. This incidental vocabulary acquisition especially included words that represent standing phrases or words often repeated by native speakers like 'ماشي, تمام، كويس'. In the same oral wavelength, students agreed that the use of video clips in teaching had also been helpful in the way they pronounced words. The students’ perceived usefulness of subtitling for their oral accuracy and fluency is echoed in previous research (Ayand, 2019; Borras & Lafayette, 1994; Rokni & Ataee, 2014).

One thing that almost all students agree upon was the provision of a variety of words that they rarely got exposed to in classes with traditional teaching settings given that they were not part of the SA which is the language of the classroom. Students from the three universities expressed almost views regarding the usefulness of the contextualized words they came across during the session of watching the movies. They said that some words were engraved in their memories and they came handy in use during the discussions and role play that followed the movie watch. Indeed, this contextualized use of vocabulary on screen is made more powerful
by the image accompanying the word. Thus, subtitles can be deemed effective as they offer image, dialogue, and context to students. This is probably difficult to achieve, at least to this degree, in the traditional methods of teaching languages. Zanón (2006) confirmed that such use of subtitles helps store information in students’ minds in an active mode. This improvement in vocabulary acquisition and retention is due to the underlying rationale of captioning which argues that the multiplicity of input means contributes to facilitating comprehension which conforms to the dual coding hypothesis. Such memory enhancement has its research evidence (Bird & Williams, 2002; Birulés-Muntané & Soto-Faraco, 2016; Lertola, 2012; Masrai, 2019).

The interweaving of the different media in the course of learning is almost a crucial point in learning languages as students’ performance is deeply connected with teaching styles. The multimedia scaffolding, including audio-visual aids combined with the subtitles, has been proved effective to students participating in this study. Yahaya et al. (2019) argued that without the audio-visual aids and only reliance on textbooks as is the case in traditional teaching methods could cause students to “become passive” and hinder their interaction and communication in Arabic" (p.19). This view has also been touched upon in the discussions of the focused groups as a quite number of students expressed their opinions that they are encouraged to talk following a dialogue of a video clip in Arabic.

In their discussions, students remarked on what makes a difference in using subtitled films and how the suggested effect might be brought about. Some traced the effect to the fact that though movie scenes reflected everyday life situations, which they are likely to encounter in reality, still movie watching has the advantage of relieving stress of the face-to-face transactions with the saved emotional efforts directed to the purpose of comprehension. According to students, this simulation is important for them as it gives priority to learning without stress to get them well prepared to the actual interaction. Students also pointed out that the mere exposure to the culturally rich films enabled them to acquire more of the colloquial language even faster than it takes in learning SA with its many subjects that focus on the syntax and semantics of the language. This actually adds to the significance of language acquisition as compared to language learning. It is clear from the discussion that Netflix is a language acquisition-friendly tool unlike the traditional method which is a learning-based method.

A relatively great deal of the focus group discussions compared the traditional teaching method with which students are acquainted with the new method of subtitled videos. Comparisons were mostly geared towards three points that favourably distinguished captioning from traditional methods. The customized pattern of watching which gives learners the opportunity to replay
any part of the films when distracted or when they find difficulty decoding chunks of the speech was one aspect that, according to students, gave advantage to using the subtitled movie as compared to the traditional method. Another inspiring point uncovered through the discussion is that, with more practice in watching such custom-tailored instructional situation, students get more experience as to selectively, and perhaps unconsciously, resort to reading when just listening is not enough. Students indicated that the traditional method employed in the classroom lacks such beneficial aspect of selectivity. Experience with the colloquial language through films made students hoped that classical Arabic be delivered to them in the same way. The explanatory engaging feature of the instructional films is one additional characteristic students highlighted as a helpful inherent characteristic of the use of the multimedia tools which is not that present in the traditional method. This was indicated by one student who said “by the end of the movie, I didn’t believe that I had been watching for forty minutes, it passed almost like few minutes. Yet, I benefited a lot”.

To sum up this part, Netflix uses highly developed technological tools. Therefore, it is important to make use of such tools in teaching languages as the language of the cinema is a real representation of cultures. The results of the focused group indicate that students believe that the use of Netflix enhances the effectiveness of learning, and it was a productive experience to them.

The Diglossic Nature of Arabic

The second theme that this section handles is the diglossic nature of the Arabic language. Ferguson (1959) defined diglossia as “A relatively stable language situation in which … there is a very divergent, highly codified … superposed variety” (p. 336). However, diglossia simply involves the use or co-existence of two languages (Aboelezz, 2016). In fact, Arabic is a quintessential representation of diglossia. In each country of the Arab world there are at least two varieties that are used functionally in tandem. In ‘شمس المعارف’ film, for example, there were occasions of actors switching from SA to Saudi dialect and vice versa. This is also the case with the ‘الخلية’ film where the dialect used is completely different from both SA and the Saudi varieties of language. Students learning Arabic at the three universities under this study were, in fact, aware of such diglossic nature as it poses a real challenge to them. Students expressed their concern that universities teach and use SA in formal education in both the written and spoken forms and what they come across outside the university settings is another variety of Arabic.
The Arabic used in Netflix is to a certain degree different from the one that students encounter in their education. This is why this research encourages the use of audio-visual materials such as movies with L2 subtitles. Students surveyed in this research understand that they are faced with a diglossic setting of two dialects with no real dichotomy, though. One of the other problems of learning Arabic that students mentioned during the focus groups is the ‘code-switching’. For examples, students mentioned a number of words that they did not understand as they were borrowed from English but pronounced and written with Arabic spelling. They provided examples such as ‘فامبایرز‘ (social media), ‘دوايلايت‘ (twilight), ‘دودی افتر افکتس‘ (Adobe after effects), and ‘الکتر کورکشن‘ (color correction). In fact, this is a new phenomenon that is gaining use across Arabic dialects, and it has been under investigation by scholars of sociolinguistics and Arabic language. The technological developments in our educational systems gave way to such use. Arab students are now highly exposed to foreign movies, especially those in English, and seem to borrow some of their vocabulary for in their daily conversations. Focus groups have dealt with the phenomenon of using English words in informal colloquial Arabic. In fact, such code-switching can be said to be excessive in Netflix Arabic movies, especially where youngsters and teenagers are the stars. Aboelezz (2016) explained that dialects of Arabic language are part of the SA, though a dialect could be regional, it could also be quite different from SA. It has been noticed during the interviews that students studying in Saudi Arabia seem to be adopting the Saudi dialect as they converse; some words such as ‘أبغي‘ (want), and ‘مرة‘ (a lot or very) were used in the discussions. On the other hand, students studying in Egypt acquired the Egyptian dialect as they employed in their conversation words such as ‘أوي‘ (a lot), ‘كده‘ (like this), etc. In fact, this is not surprising as people will usually absorb the language available in the surrounding. However, our argument here is that Netflix and subtitles make these settings easily accessible and assist students in understanding and comprehending the dialects of the standard language they use. Students agreed that they can have more exposure through Netflix to the language or the dialect they were learning. Some students said that they resorted to Netflix occasionally as they could listen to other Arabic dialects that spoken outside the country of their residence – Saudi Arabic and Egypt in our case. The on-screen captions offered other benefits to students as they allowed them to compare the spoken with the written modes of language. One student from Egypt mentioned the word ‘هسيبك‘ (I will leave you alone). This colloquial Egyptian phrase means ‘سوف أتركك‘ in SA. Students were excited with the number of phrases the movies offered during the field work. The dialectal variations Arabic diglossia brings about increase
the vernacular varieties among them. This is the theme the following section of the analysis explores.

Netflix and the Use of Vernacular Varieties of Arabic

The language used in movies usually includes a wide range of vernacular expressions. Darwish and Ain (2020) demonstrated that Netflix’s Arabic production has shown use of foul language that caused controversy in some Arabic societies. In fact, each of the Arabic dialects includes vernacular variety(ies) that is / are, at times, different from their counterparts. The Saudi and Egyptian movies used in this study also exhibited diverse vernacular expressions. This type of variety usually poses a challenge for foreign learners of Arabic. However, we argue in this paper that the continuous and constant watch of different varieties of Arabic with on-screen subtitles helps in the process of subconscious language learning. During the discussions with the foreign students studying in Saudi Arabia and Egypt, they pointed out that there was a shift from formal variety to informal one at some scenes, with intralingual subtitles usually used as a strategy of explication or clarification. Thus, the translation/subtitles on screen seems to neutralize the language and flatten out those strong vernacular terms in the movies. This is because “there is a harmony between SA and the written mode of subtitles” (Mazid, 2006, p. 84). In other words, there is always a tendency to use SA in writing and the vernacular expressions and dialects are tended to be silenced to maintain the cultural values.

However, this is not the case with the Netflix movies where the subtitles are usually audio description rather than intralingual subtitles. Students took notes of some vernacular expressions used in both films. For example, 'شمس المعارف’ (Shams Al Ma’arif) movie entailed vernacular phrases such as ‘الفصة بنت كلب، أيش بک’ (the story is a daughter of dog). It would be a real challenge for foreign viewers to grasp that the speaker means that the story is ‘first-rate’ or ‘out of this world’ to indicate that they produced a high-class story. Another student brought in the term ‘خرة’ (garbage), which is a regional term that could exist in other dialects but with different pronunciations. Some of the other terms that were mentioned by students who watched ‘الخلية’ film include ‘خذ صاحبكم الحمار ده، وأطلع برة’ (take your donkey friend and leave), ‘بحشتحطنا’ (he will fire us), ‘زيه زي الحيوان’ (he is like an animal), and ‘يعني سحب على أمكم السيفون’ (he left you). The last phrase could prove very difficult to understand as it is used by the youngsters. It resembles the action of flushing toilets to drain waste, to get rid of things, and is used in the Arabic context as to ignore someone. These are only a few points that were raised during the discussions with the focused groups with regard to the third theme that handles the vernacular variety in learning Arabic by non-native speakers in Saudi Arabia and Egypt. The Focus groups in Al-Azhar
University have noted down expressions such as ‘لما أنت مش ناوي تتنيل تتجوز’ (when you are not planning to get married) – note the spelling of the word ‘تتجوز’, written as pronounced. It should be ‘تزوج’. This could be attributed to the fact that in vernacular spoken language the subtitler adopted the homophonic nature of the dialogue. Other vernacular expressions that were jotted down by students include ‘لو اتريق عليا كمان’ (if he picks on me again), ‘ما تبقاش عبيط’ (don’t be stupid), and ‘ده شغل عربيجية’ (this is barbarous).

The vernacular language is used and very common on TV and in real life. Given the fact that such language is rarely or never found in textbooks or classroom setting, students positively responded that subtitles widened their vocabulary repertoire. In fact, this is a social phenomenon that Darwish and Ain (2020) stated that the younger generations tend to adopt “antisocial linguistic behaviour’ in order to “claim more social power” (p. 86). Languages are usually learned at younger stages of life, thus, students at universities would always be asking themselves of the meaning of some expressions in the language they are learning. In this context, students acknowledged the fact that Netflix and You Tube installed in their laptops and mobile phones enriched their knowledge of vernacular expressions used in Arabic dialects. They stated that intralingual subtitles or speech transcripts significantly impacted their performance and competence in this area. Türkmen (2020) elaborates that mobile applications that support video streaming offer educational input to students studying other languages. Although this study focuses on subconscious language acquisition due to observed habits of students using technological applications in their educations process, it strongly agrees with Türkmen’s argument that “videos should be used consciously as course material” in language learning” (p. 460).

The use of subtitles allows students to orthographically follow what they hear. It is true that movies hone the listening skills; they also offer orthographic knowledge of the language on screen. In our fourth theme, we will have students’ input on the nature of understanding the orthography or Arabic dialects.

**Difficulties with Decoding the Orthography of Colloquial Arabic Dialects**

It goes without saying that learning a foreign language requires the ability to decode its written graphemic system. The input of our focused groups helped identify and elaborate on this theme. Table 1 below shows some of the orthographic difficulties that were raised during the discussion sessions.
Table 1.

*The Orthography of the Colloquial Dialects in Egyptian Saudi Arabic*

<table>
<thead>
<tr>
<th>Egyptian Arabic</th>
<th>Saudi Arabic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 دلوقي</td>
<td>طح طبيحة</td>
</tr>
<tr>
<td>2 هسبك</td>
<td>اهبدي</td>
</tr>
<tr>
<td>3 ماكلش</td>
<td>حيمشي</td>
</tr>
<tr>
<td>4 تتجوز</td>
<td>بفككم</td>
</tr>
<tr>
<td>5 هتحبس</td>
<td>طفشان</td>
</tr>
<tr>
<td>6 هعملك</td>
<td>حيشحتنا</td>
</tr>
<tr>
<td>7 هحلقهوله</td>
<td>طرطيبة</td>
</tr>
<tr>
<td>8 هفرتكلك</td>
<td>حترنفتا</td>
</tr>
</tbody>
</table>

This shows an important aspect of second language acquisition embodied in the orthography of the colloquial dialects. In fact, the decoding of such phrases could require someone who uses that dialect. For example, the word 'سَوْف أَحَلَّهٔ لَكَ' (I will shave it to you). The word 'سَوْف افْرَقَهُمَّ لَكَ' (I will pop – crack – it to you). The Saudi term 'حيمشي' means 'سَوْف يَذْهَبَ (he will go). Students agreed that in language learning one has to correlate between what they hear and read. Inability to understand the spoken text would result in decoding failure. The phrases in Table 1 have caused a serious challenge to students. This is not because of their colloquial orthographic structure but also their phonological structure. For instance, the word 'هعملك' is expected to be assimilated as 'حعملك' – (سَوْف أَعْمَلُ لَكَ – I will do it for you). Therefore, the perception of every single phoneme should match its grapheme, otherwise inaccurate understanding is mistakenly obtained (Saiegh-Haddad, 2005).

Indeed, Netflix, as students suggest, offers an excellent chance for learners to enhance their abilities to decode the orthographic colloquial expressions. At the end of the sessions of the focus groups, it was also suggested that before being able to decode the orthographic unit, it is important to build up an effective phonological reservoir that allows one to easily decode the orthographic system, more specifically, the colloquial one.

**Conclusion**

This study addressed the issue of integrating language technologies and, more particularly, subtitling into the learning processes of Arabic as a Foreign Language (ASL). The study was based on qualitative data derived from interviews and focus group discussions with selected learners of ASL in three universities in Egypt and Saudi Arabia. The analysis of the data was thematically handled arguing four points of traditional teaching methods, diglossic nature of
Arabic, use of vernacular, and orthography of dialects. The findings indicate that teaching Arabic as a Foreign Language (ASL) is still carried out through traditional environments where the use of language technologies is very limited. This definitely has negative impacts on the language development and acquisition of the learners. It also showed that the diglossic settings of Arabic is a challenge, but video streaming application helps in managing it. In fact, the use of subtitling, however, proved very effective in improving the learners’ motivation and enhancing their linguistic performance. The use of Arabic subtitles provided by Netflix provided the learners with opportunities to be familiar with the vernacular and colloquial dialects of Arabic which are always missing in traditional learning contexts. This suggests that subtitling can be usefully employed in addressing the challenges learners usually face in terms of the diglossic nature of Arabic. Although the study was limited to subtitling, the results have implications to the importance of adopting learning technologies in general in the learning environments of ASL. Educators, educational institutions, and program designers of ASL are thus recommended to integrate language technologies and subtitling into the learning environments and teaching methodologies for improving the linguistic acquisition and performance of learners of Arabic as a second language.

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References


Abou Shaaban, S. S., & Al Naami, F. M. (2020). The effectiveness of translated English videos into Arabic on enhancing Al-Azhar university English majors' listening comprehension skills. European journal of English language teaching. 5 (3) 31-41

Alabsi, T. (2020). Effects of adding subtitles to video via apps on developing EFL students’ listening comprehension. Theory and Practice in Language Studies, 10(10), 1191-1199. DOI:10.17507/tpls.1010.02


Galle, T. (2020). *Designing and using gamification elements to improve students’ user experience*


Vanderplank, R. (2013). 'Effects of' and' effects with' captions: How exactly does watching a TV programme with same-language subtitles make a difference to language learners?. *Language Teaching*, 49(2), 1-16


