The Effect of Mobile Application Usage on Dialect Perception

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Abstract. The extent of mobile application usage roles in language dialect retention has roused curiosity and called for research. The fast-paced world that we are living in today has resulted in many effects with regard to the use and retention of a subject including how dialects are used. This concept paper talks in general about the significance and effect of using mobile applications on dialect and language. The use of mobile applications in most cases has become a very handy tool for every business. We have to admit that it is a time-saving, financial, and information-sharing system that makes things go faster and travel more efficiently. The study of mobile application in many parts of the world involves the use of qualitative and quantitative methods so that more accurate and scientific results can be extracted. Our goal is to look at the impact and importance of using mobile applications to retain the dialect used in particular and the use of language in general. The findings of the study have brought us to two conditions with good and bad consequences on the use of both dialect and language. The vast education system that we have in particular has demonstrated the significant use of mobile applications. As everything requires a very efficient and efficacious financial system its significant is irrefutable. The results shown here will boost the improvement in language learning and dialect retention via a multitude of mobile applications. The use of both methods in carrying out mobile application review have been getting some very good responses.

1. Introduction

The use of mobile applications (apps) in various aspects of life has become the part and parcel for almost all individuals or organisations. As computers add in more functions and ironically are seemingly shrinking in size, new, wearable, and pervasive computing applications are rapidly taking over, providing people much easier access to online resources wherever they go and in whichever time[1]. Our current work scrutinises the perceptual dialect classification performance of four groups of listeners aided by a six-alternative forced-choice categorization task [2]. As the mobile technology is effectively enhanced in the present day's world of education, this propels, or in a more positive note, motivates educators and English language teachers all over the world to focus on the potential of mobile learning as a pedagogical move to teach language, including as a tool to assess their students' grammar proficiency. The study sheds
light on the need for mobile application in the language classrooms.

The research concentrates on studying how mobile technology brings the space exploration up a notch. The highlight of the day lies in the method of tourists who have smartphones with advanced applications to search for places. To study this digital use of mobile technology, researchers have done a survey methodology that generates digital traces (Global Positioning System (GPS) records, browsing history) and also scrutinises the users’ words (semi-directional interviews)[3]. The authors have stressed that the benefits of mobile technology can go as far as having programming classes. The use of Android-based mobile devices in the programming class will promote the awareness of E-Learning concepts, simultaneously improving the efficiency of programming teaching processes in school or learning institutes[4]. All in all, the use of mobile apps is very important in both business and education. Hence, the use of the search and the use of dialects must be progressing.

2.0 Literature Review

A study on the mobile application usage among Karelian speakers in Finland and Russia reported that there are about 5,000 Karelian speakers in Finland with a whopping number of 20,000 people being able to understand the dialect. Meanwhile, according to a census conducted in 2002, there are 53,000 Karelian speakers in Russia. In Finland and Russia, the elder people are the main speakers of the dialect. A game based on “Let’s Learn Karelian” application was designed for the learning of this dialect. The development of this application makes it possible for English and Finland users to learn and enjoy themselves as it is a simple, creative and easy-to-use visual gaming prototype, and able to entertain users. The study stood as a new discovery in the form of gamification development as part of the dialect retention effort. The research findings show that it is important to develop various tools and designs to retain and revive dialects, especially the Viena Karelian dialect[5].

Another study done on the use of dialects is the regional dialect in China. The purpose is to facilitate the academic and the dialectician in their research. The use of SELL-CORPUS, tactical conversations for L2 English learning in China, aimed at potential research of different gradual acoustic models, mispronunciation detection and pronunciation ratings for oral English tests nationwide. The research corpus contains hours of speech contributed by hundreds of voluntary respondents. The research corpus covers seven major regional dialects and offers the foundation for the Chinese multi-language automatic speech recognition system. The author published a corpus of author writings to the public for academic research. To explain that they are the best, it is the first open-source English corpus of speech that contributes to the accents of all major Chinese regional dialects [7].

Other studies that have to do with the use of modern applications in communication for measurement of dialect use are to use Light GBM (the efficiency of grading based on tree results) to the softmax based features of the deep nerve networks. The researcher system achieved some degree of accuracy in five dialect areas using one sentence and even higher accuracy using 23 words. The findings represent a reduction in almost 50% of the baseline system based on HMM / GMM and forced alignment. The author pointed out that the boundaries of modelling and vocal phone limits produce a relative error reduction, with phone boundaries becoming more useful than vowels and consonants. Additionally, as far as the classification model is concerned, Light GBM is very workable in this task so further studies might be able to benefit from this [6].

The perceptual dialect (PD) is defined as a sociolinguistic branch that conducts the perception of ordinary people (not linguists) about different dialects in the language communities they live. Most PD research are of benefit in Europe or America with little attention given towards China, a country well known for its multiple dialects. The use of Preston's tools (1981) for PD study includes draw-a-map tasks of which the study analyses dialect maps taken from several respondents who happen to be college students from Guangdong province, China; it aimed to find out how the Guangdong people use Chinese
dialect. There are three main findings from the study and they are: (1) respondents adopt the territorial boundaries to distinguish the dialect areas but disagree with their distribution; (2) Yue dialect and Wu dialect are considered more fun and (3) respondents have this issue with the economic influence on dialect and dialect protection [7].

Another study was conducted to investigate the effects of dialect awareness programs on the dialectical attitude of English pre-service teachers in Turkey. This study adopted pre-test and post-test designs in two different classes. The experimental group received dialect awareness training supported by WhatsApp while the control group did not receive training. Data was collected through oral tests to examine the attitudes of Russian, English, Turkish, American and Arabic participants on English. That the results revealed that dialect awareness training promoted positive attitudes towards all dialects with English receiving higher marks before treatment with special regard to solidarity, power and speech quality. It has been shown then, that language teacher training in linguistic variants has the potential to empower teachers where they can appreciate and tolerate non-standard dialects also long-term standardised dialect[8].

This paper highlights the evolution of mobile game applications, looking into how people who play or interact with mobile games represent social agencies and behavioural changes. It involves Bandura's social cognitive theory to justify the context of socio-cultural change of usage patterns of mobile game applications. To add, it also employs the Heideggers phenomenology method to explore how digital technology makes use of the epistemic implications that go beyond technological use[9]. When viewed in general, the use of this mobile app affects the user positively and negatively.

Studies linked with the left-hemispheric language dominance as suggested by observations on patients suffering from brain damage was started as early as the 19th century and has since been confirmed by modern behavioural techniques and brain imaging. That said, most studies have been conducted in small samples with main Anglo-American background so it limits the announcement, and the possible differences between cultural and linguistic backgrounds may not be very clear. To overcome this limit, the author carried out a global dichotic hearing experiment using a smartphone app for remote data collection. Results from more than 4,000 participants with over 60 different language backgrounds indicate that there is nothing new about the domination of the left-hemispheric language. However, the degree of lateralisation seems to be modulated by linguistic backgrounds. These results have highlighted that more emphasis should be placed on the specific cultural / linguistic psychological phenomena and the need to gather more samples[10]. It can be summed up that the use of the app is needed in a study especially those involving distant respondents, in order to obtain data pertaining to whether different cultural and linguistic backgrounds are crucial.

There are other studies highlighting that the use of mobile apps also involves some limitations. It has been noted too, that there was a waste in terms of higher maintenance costs. The author highlights the current trends in developing mobile platform across the app. Researcher's analysis has concentrated on three areas. Firstly, the author simultaneously clarified the development landscape by going into the types of applications across significant platforms, namely the web applications, hybrid, interpreted and generated. Secondly, the main issues for each app-type were presented and comparison analysis implemented to give an emphasis on both the advantages and disadvantages of each type. Thirdly, considering the current status in mobile application development across platforms, authors have recognised the types of promising cross-platform apps and studied their effectiveness. Last but not least, the authors concluded about the mobile application development across the platform and listed recommendations that can be of use for further research in this area[11].

Forty-one residents of the Detroit area had to take part in a perception test where they were asked to confirm that they could not beat those who spoke their language. Some respondents were informed that the speaker was from Detroit, where the other half were told that she came from Canada [12]. To find out
more about the difference in dialect, the usage of certain app can help unravel the social information of the
speakers of a language society.
It has been acknowledged that the minority and indigenous languages have these intricate relationships
with the contemporary communication media. Social media, in particular, not only offers a new place for
to use the platform for language use and recovery, but also for minority language to avert and withstand
technological and social pressures. This study helps relevant people to understand better the use of social
media and dynamic language through an Irish language user survey analysis (n = 617) and their socio-
technical context. The typological social, language and technical typologies that we used provide a strong
theoretical and analytical basis for future works. The interaction between social and technical factors has
somehow impacted the use of minority languages in social media thus we suggest that there should be a
potential interaction design strategy for language and technology activists to endorse more effective
engagements[13]. Suffice to say that the use of the app in language studies on the use and restoration of
minority languages or dialects is highly relevant.

Our concern is to describe the design and development of systems that help language learning from a
combination of interactive television (iTV) and mobile phones. There are some requirements to be met for
technology to support informal language learning based on the language learning theory, formal and
informal learning theories, self-study of adult language learners and iTV’s ability as a medium to support
the learning process. The researcher mentioned that TAMALLE (a Language and Learning System
Assistant Language Learning System), is a prototype system that leans on these requirements and it
tackles some user interface design issues that have arisen in cross-border device systems for learning
everywhere [14].

In linguistics, applications for creating pronunciation dictionaries, training acoustic models, and
archiving endangered languages have been created and developed. This paper concerns with the first
account on how the app can be used to collect the right data to document language changes: we create
applications, Dialäkt Äpp (DÄ), which predicts user dialects. Equipped with 16 linguistic variables, the
user can choose a dialectal variant from the drop-down menu. DÄ then places a user dialect
dynamically by recommending a list of communes where the dialect variant that happens to be the
closest to their choice is used. According to this forecast, there are 16 maps from the German-speaking
German historical Atlas Linguistics, indicating the linguistic situation back in 1950. The findings are
thought to be intriguing but to serve as quality control, it is stated that traditional dialectological methods
have exposed some trends similar to those found by their applications. This has hinted at the potential
validity of the crowdsourcing method. Currently, the architecture of DÄ into other languages is undergoing
evolution [15].

Other studies with respect to the language with the use of mobile applications is Java learning and
multimedia android that detail the Javanese scriptures’ history. The authors stated that Javanese characters
from different characters, pairs, strings, voice letters, characters, numbers, with both prose and letters in
each word and distribution terms in each letter. Java-based learning applications and multimedia
functionalities that work in android smartphones help anyone get familiar with Javanese characters and
help them try writing easily. This application can help measure their ability to comprehend Javanese
Characters through the quizzes provided. The interesting part is that the usage of interesting text, audio
and visuals is combined. The self-learning applications can be accessed individually any time at all [16].

3. Result and Discussion

3.1 Mobile Use In Various Sectors
Literature has outlined a very important role for mobile application on dialects. Various studies are
conducted in so many fields of endeavours.
3.2 Effects on Application Usage
It can be said that all in all, there seems to be some evidence of application usage for dialect or language. Generation Z (Gen Z) or also called i-Generation, internet generation or net generation, is seen as a modern language user in this globalised era. With this premise, the quality of Malay originality has been marginalised steadily. The aim of this work is to properly acknowledge the various new words created among Gen Z which include viral, selfie, hipster, hashtag and more [17]. The study respondents were students of Kuala Langat Community College, Banting, Selangor. Our methodology leans on the study of literature, interviews and observation of the researcher on the intercourse and respondents’ conversation that has taken place in the study. The final outcome is to create awareness among Gen Z on word use accuracy as used in their everyday life. In another study that looks into the effectiveness of mobile application usage, this app was able to highlight another medium in the decision-making process to allow for a complete information delivery, follow-up and better productivity [18]. Briefly put, the application usage will become advantageous to the dialect retention process. Efforts for retention and use of dialects are expected to be retained [21].

3.3 Methods in the study of mobile application usage on dialect
To achieve the research objective, multiple research methods were adopted by researchers. Qualitative and quantitative methods are used to help unravel the use of apps for dialectical studies. In Malaysia, many dialect studies have adopted the qualitative methods. In addition to other pieces of literature concerning the use of mobile applications in dialect studies, there are other uses of equipment mentioned, such as GIS [23]-[24]. The overall conclusion of the use of mobile applications is that it can facilitate the research efforts in various fields. In addition, mobile apps can retain the use of dialect in the dialect community itself. Most researchers state that mobile applications have contributed towards retaining, using and learning the dialects [26].

4. Conclusion
Mobile application is for a current and an up-to-date tool so it is a very good facility to have. The use of the app in daily life has been the mainstay of research [17], daily business, education, health, business, culture and history [19]. In short, mobile application can cater for all aspects. This concept paper dedicates itself towards highlighting most of the community’s daily activities which also include dialect studies. It is hoped that everyone will be able to pursue research related to the app either in linguistic aspects or in many other aspects of our lives.

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