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The Development of Minority Dictionary via Digitalization: A Case Study of Uighur

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Abstract

With the prevalent of Mobile Internet, many challenges and opportunities have been brought to the development of minority dictionary. When people encounter language barrier, they can quickly use dictionary APP to solve these problems, and learn the knowledge of minority culture by using mobile phones. This is one of the important factor that promotes people to use modern digital dictionary to learn. At the same time, it is also an opportunity to promote the transmission of minority language and the local culture. China is a multinational country, and there are some barriers in the development and inheritance of minority languages because of the language and cultural assimilation. With the rapid development of Internet technology, the corpus of the dictionaries and the compilation system are becoming more and more mature, so the application of the dictionary should focus on the innovation of technology and service. This paper aim to reveal the development tendency of minority dictionary through researching and analyzing the development of Uighur digital dictionary. There are three parts in this paper. Firstly, through using new media technology, how to enhance the interaction of dictionaries to attract more users, and how to provide personalized customization of dictionaries to help them learn easily are discussed. Secondly, how to facilitate the joint development of minority dictionary and culture through digitization technology will be answered. Finally, how to exploit the advertising market of minority dictionary by digital innovation, and make the advertising profit become the support of the dictionary innovation is going to be analyzed.

Keywords: *minority dictionary, digitization, Uighur*

1. Introduction

With the development of society, all kinds of modern civilization and modern

technology have a great influence on minority culture. Thus in the process of intercultural communication, there have been cultural vacancies and cultural conflicts, which affect the cultural transmission of ethnic minorities and the communication between different people. The text of Chinese minority language is a special cultural symbol, which is an important symbol of ethnic minorities and also a bridge between ethnic groups. A dictionary is a reference book that provides phonology, meaning explanation, example sentence, usage, and so on. It not only helps the language learning of the minority region, but also promotes the protection and inheritance of the minority culture.

As one member of the Chinese nation, Uighur has a long history and splendid culture. However, with the development of modernization and the continuous influence of various cultural style, the protection and inheritance of the language and culture that the Uighurs have accumulated over a long period are facing many difficulties. As we all know, rote learning is unable to master a language, and most of the traditional Uighur learning tools are printed dictionary. Therefore, there are few smart tools for learning on the computer and the Internet. According to some education data statistics, there is a positive correlation between the degree of cultural identity and the contact frequency of cultural and recreational media for non-professional people. Thus the text of Chinese minority language can help to enhance the local people's cultural identity. With the “The Belt and Road” policy as well as the expand influence of the new media and digital technology which can be put on Uighur, it has attracted more and more people to learn and use the Uighur language, which has a great role in promoting the development of Uighur dictionary and its culture.

With the rapid development and popularization of smart mobile terminals, Uighur APP has been developed as a new style of Uighur Dictionary. Therefore, based on the background of mobile learning in this research, some suggestions will be proposed for the development of minority dictionary from the following aspects: analyzing the features and demands of the dictionary users, synthesizing the transmission needs of promoting minority language and culture, combining the advantages of the current media integration in resource and platform.

2. The service of Uighur electronic dictionary in PC and mobile terminals

2.1 Digital dictionary based on PC terminal

In September 1987, CANET in Beijing Institute of Computer Application Technology officially built China's first Internet e-mail node. And in September 14th, they issued China's first e-mail: “Across the Great Wall we can reach every corner in the world” which opened the prelude of the use of Chinese Internet. Since then, the network dictionary industry has also been attracted a wide range of attention. The network

dictionary covers a wide range from the initial simple machine-readable dictionary to the current digital dictionary and dictionary APP. This section focuses on the PC terminal of Uighur-Chinese online dictionary.

According to “Statistics Report of the 39th China Internet Development”, the number of Internet users in Xinjiang is about 13 million by the December 2016 and the popularizing rate is 54.9%. According to the data, people engaged in academic research and civilian work are the main consumer groups in the dictionary market. And those people who have the higher level background of culture and education are also the mainstream consumer groups in the dictionary industry. In addition, the Uyghur college students are also the main consumer groups of the Uighur digital dictionary in PC terminal. Internet provides more opportunities for Uyghur cultural dissemination, and in the meanwhile, the network has promoted the development of Uighur dictionary in PC terminal. In recent years, the developmental trend of new media is diversification, and personalization. And the related portal website continues to be revised to strive to close to the life of the users, such as the Xinjiang news website “Tianshan Web” network which utilize the timeliness and interactivity of the new media to integrate videos, audios, pictures and other services into their platform. In the process of cultural communication, digital dictionary can provide rich and detailed explanation to users who do not understand the characteristics of the Uyghur culture conveniently, and then push the relevant language and cultural content and other personalized services to these users.

Different from the printed dictionary, digital dictionary is always not so authoritative, normative, scientific and practical. But some popular Uighur digital dictionaries, like “izda”, “Atila”, are basically based on “Uighur-Chinese Dictionary” as the reference. And these have been able to meet the needs of the vast majority of users, especially some personalized services are warmly welcomed by online translation customers. The digital dictionary of minority is not only to promote their own applications, but also to promote minority culture and the cultural integration between the various national cultures. The compilation and development of dictionaries is the standard and norm of the language cognition, and it is also the record of human development and cultural inheritance. But when Uighur digital dictionary appears, it not only becomes the tool to help people to learn, but also becomes the carrier of cultural information.

2.2 Digital dictionary based on Mobile Internet

2.2.1 Opportunities of digital dictionary based on Mobile Internet

According to the data of “Statistics Report of the 39th China Internet Development”, the scale of China's Internet users has reached 731 million until December 2016, include 695 million people who use the Mobile Internet. And the proportion of Mobile

Internet users increase from 90.1% in 2015 to 95.1%. The development of Mobile Internet makes people more convenient in communication, making friends, entertainment and learning, which makes it possible for people to build up their social circle in various fragments time, thus making life more exciting and creative by Internet.

Mobile Internet is becoming more and more important for cultural communication. And online video has become an important tool for the transmission of minority culture with the popularization of smart mobile terminals. China's online video users have reached to 545 million by the end of December 2016, and online video user usage was 74.5% according to the data from “Statistics Report of the 39th China Internet Development”. Among it, the scale of the mobile video users is close to 500 million. Mobile Internet video usage was 71.9%, which is increasing by 6.5% compared to the end of 2015. Minority culture and language communication on the Internet can increase the usage requirements of minority digital dictionaries, which become an important turning point in the development of the minority digital dictionary in mobile terminals.

2.2.2 The Current Situation and Problem of Uighur dictionary APP

According to statistics, there are about 400 Uighur mobile APP in iOS system and Android system up to March 2017. In these APPs, the amount of Uighur dictionary APPs (not including input method APPs) is nearly 10. There are two main types of Uighur APPs: (1) The traditional translation type, such as Uighur- Chinese dictionary, Uighur- Chinese bilingual dictionary and Uighur dictionary, which can complete the basic functions of Uighur learning, including Uighur translation, pronunciation, words explanation and so on. (2) Search type, such as “Bilkan Dictionary” and “izdax search engine”, which increases the search and translate functions of Uighur website in the mobile phone.

Although the related APPs of minority culture and education continue to emerge, the update frequency of some Uighur APPs, like the Uighur Dictionary APP, is less than the Chinese dictionary, English-Chinese dictionary, and Oxford Dictionary. The less update frequency makes Uighur Dictionary APPs have many problems to solve.

(1) The theme and the content is monotonous

Until now, the learning content of Uighur Dictionary APP is monotonous without any culture pushed or introduced.

(2) Lack of enough information

Although the Uighur dictionary APP can translate the Uyghur website easily, there are only words introduction without pictures, animations, videos and so on. There are few

learning resources and materials on the Uighur dictionary APP, and the update speed is also very slow.

(3) Poor interaction between users

APPs can make the interaction between dictionary and the users, and also between the users and the users, but there are few users who write and share comments and reviews in the interaction function set up by Uighur- Chinese dictionary.

3. The Countermeasures for the development of digital innovation in Uighur dictionary

3.1 The Countermeasures for digital dictionary and new media innovation service

Since the implementation of “The Belt and Road” strategy, Uygur in Xinjiang has become the core area of the Silk Road Economic Zone; the digital innovation service of Uighur dictionary APPs can effectively solve the communication of Uighur people with the outside world, and exploit economy market of “The Belt and Road” and promote the cultural transmission and inheritance. The innovation development of digitalization and new media on Uighur dictionary can be implemented from the following aspects.

(1) Enhance sociability

It is difficult to find like-minded people who like to learn minority languages or who need to learn to do economic trade and other things. Therefore, the social service should be strengthened in the minority dictionary. At present the social function in Uighur APP hasn't performed its role effectively because of few user who often use interaction function. So, Uighur dictionary should strengthen its social interaction to make users quickly get to know each other through the APPs and communicate with each other on the Internet or in real life. At the same time, users can carry out the corresponding social activities based on the theme of language learning, which enhance the mutual learning experience and enrich the exchange experience between these learners.

(2) Gamification

Traditional dictionary can meet the user's need of translation and interpretation, but the APP can provide learners with a relaxed and pleasant learning environment through playing to learn. Using early childhood education APP for reference, some small games can be added in the Uighur APP. For example, users can fill in the correct words

according to Uyghur characteristic pictures; it not only add the interesting of the Uyghur language to learn, but also can show and spread the Uyghur culture through these pictures.

(3) The integration of digital dictionary and the media

The dictionary is a tool for language learning through providing phonology, meaning interpretation, and example sentences; Bilingual dictionary is not only as a tool for learning language words, but also carries the communication and spread of two national languages and cultural. But learner can hardly understand their culture when dictionary just provide a translation, especially one as Uyghur whose living environment, living habits, national culture, religion and so on are different from other nationality. In recent years, with the rapid development of media integration in China, some curriculums of various colleges and universities in the open classes and quality classrooms have a very in-depth introduction of the language and culture. If the user can use the dictionary APP to watch these courses, their learning effect may be greatly improved. For example, the professor live-transmission classroom of Zhejiang University has attracted a lot of attention in these years. Although the professor taught the curriculum “calculus” online, it can be seen that the teaching quality of classroom can bring better learning experience to learners. Therefore, it may be bring better learning experience and learning effect if the Uyghur digital dictionary can strengthen the functions of live web casting or online excellent course.

3.2 The Countermeasures for personalized learning in dictionaries

Personalization is very important for dictionaries because each user has their own learning style, cognitive structure and thinking pattern. The best way to use the dictionary APP is to present the content to different users and provide personalized information flexibly. And then, users can get a comprehensive and personalized language information. In a word, digital dictionary can provide users with a wide range of personalized needs.

The procedure of personalization is to collect the individual's interest, and then to generate the personalized information. Different from the other APP which find user's needs and interests from a variety of advertising, promotions, news and other information, the personalization of minority dictionary APP is mainly reflected in the learning mode and strategy, and the cultural interest and so on. Some countermeasures will be proposed as follows.

(1) Independent choice

Independent choice is reflected in two points: First, selecting words and cultural content to learn. Consumer can freely search and translate text, or select voice

broadcast news through the function provided by the Uighur APP, which is more simple, convenient and time-saving for user. Second, selecting proper time to use APP. At present, most types of APP have a reminder function, for example, “BaiCiZhan APP” can set a fixed time for language learning. It will automatically remind the users every day when the time is coming. As mentioned in the above section, the integration of the dictionary APP and media can also be used for reference. The minority dictionary can be combined with classroom teaching. In addition, remind function can be combined with Internet broadcast and remind users to watch. In terms of Uighur dictionary, when the user chooses to watch the program of Uighur song, dance and costumes and so on, it is also a good opportunity to spread local culture.

(2) Interested information push

On the one hand, personalization can give users a more comfortable experience and lead to the concentration of information. On the other hand, it is difficult for users to find other topics other than interest, which is unfavorable to the study of language and culture. The user of the minority dictionary is a person who is interested in the language and culture of the nation or a student need to learn, so they may have little understanding of minority culture, or only a certain understanding. Take Uighur as an example, most people are only interested in exotic clothing, dances, and delicious food, but do not know the others. So, in the course of the use of the minority dictionary, not only to delivery what the user used to find, but also to push other information which the user may not select but important. Only the comprehensive study of language can promote the communication of language.

(3) Cultural pushing in dictionary application

Some digital dictionaries have expanded the amount of cultural information, strengthened the pushing functions. Especially in recent years, the combination and integration of dictionaries and media can effectively break the barriers between different ethnic groups. For example, when looking for wedding in the Uighur dictionary APP, it can push the Uighur’s wedding video, which not only allows users to understand the related words in the dictionary more easily, but also promotes the transmission of national culture through showing the Uighur culture to the users. At the same time, completed personalization may cause the knowledge of the narrow-minded on the minority language and culture learning. When users search for words and other information, dictionary can push Uygur national culture in an all-round way for a comprehensive collection of words. It is not only to enhance the user's understanding of national culture, but also play a role in the protection and promotion of national culture heritage. Therefore, it can be seen that the minority digital dictionary can promote the exchange and development of culture and economy. At the same time, the progress of science and technology also has stimulated the continuous development of

minority dictionaries.

3.3 The Countermeasures of advertising marketing for dictionary

The development of dictionaries depends on the talents of compilation and technology. So, cultivating excellent talents needs the support of funds. As mentioned above, these functions, for example social, media integration and cultural pushing in the minority dictionaries, can be used to get the benefits from advertisements. The advertisements income can also promote the development of minority dictionary.

Taking Uighur as an example, the Uygur nationality has its special characteristics, including Uygur diet, clothing, dance, music, agriculture and so on, which can be used as a good resource for advertising marketing. When the users use the dictionary to check the Uighur words, the interpretation with text, sound, image, and video can help their learning in the dictionary APP. In addition, the image and video can add advertising as marketing. For example, when look up “grape” in Uighur APP, it can display some pictures or videos which can push some grape products of the local companies to make a profit.

Whether the digital dictionary is in the PC terminal or mobile terminal, it is an effective method to improve the added value to make profit. Minority dictionaries can promote the marketing products by means of their own cultural and creative industry elements. With the implementation of “The Belt and Road” policy, the demand of Uighur language learning is increasing because of the cultural exchange and trade exchange. Therefore, Uygur region, as the economic core area, is feasible to increase the advertisements in the dictionary to get the benefits.

4. Conclusion

Internet is the first real sense media in the history of the world. It makes the study and exchange more conveniently without the boundaries of time and space. The development of information technology has promoted the progress of digital dictionaries which can provide a convenient platform for language learning and cultural communication, and can make people learn and communicate better.

Along with the further implementation of “The Belt and Road” policy, Uygur region in Xijiang is to become the core area. The development of Uighur digital dictionary is very necessary for the economic and cultural communication. If Uighur APP can strengthen some functions include group social interaction, personalized learning, culture and advertising pushing, it can not only help the development of the minority dictionary, but also promote the cultural and economic development of minority areas.

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References

- CaiLiwen. 2014. Frame Construction of Export-oriented Chinese On-line Dictionary. Master Thesis, Jinan University, Guangzhou, Chinese.
- HuangLi. & QianLong. 2016. Cultural Symbols and Ethnic Identity in Tourism Context - A Case Study of Uygur Hui Township in Hunan Province. *China Three Gorges Tribune*, 2016(06), 81-84.
- LiuDan. & HuWeixing. & LiYubing. 2016. Research status and application problems of mobile education APP. *e-Education Research*,
dio: 10.13811/j.cnki.eer.2016.08.007.
- LiZhiyong. 2016. The mode and strategy of personalized learning of high school English based on “box fish” App in the information environment. *Education Teaching Forum*, 2016(46), 233-235.
- LuoLi. & LuoBin. 2016. The influence of new media on Uygur culture in Xinjiang. *Journal of Hunan Mass Media Vocational Technical College*,
dio: 10.16261/j.cnki.cn43-1370/z.2016.05.006.
- LuXiaohua. 2016. Uighur's network expression and identity opportunity under the new media environment. *Youth Journalist*, dio: 10.15997/j.cnki.qnjz.2016.15.044.
- MaJiayue. 2016. What is the customization information for us? - Take the “headlines” APP as an example. *Journal of News Research*, 2016(06), 131.
- RenYili. 2008. Minority Language Education and Protection and Inheritance of Minority culture studies. Master Thesis, Shihezi University, Shihezi, Chinese.
- YangFei. 2010. The Research on Chinese Online Dictionary Under The View Of Internet Communication. Master Thesis, Anhui University, Anhui, Chinese.
- ZhangXiaogang. & ChuiWei. & YushuPukedier·TuerSun. 2016. An empirical study of Uygur College Students' media contact frequency and cultural identity. *Youth and Adolescence Studies*, dio: 10.16399/j.cnki.qsnj.2016.06.001.