

## Research on the Application of Computer Digital Technology in the Protection of Security Language

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**Abstract.** Making full use of computer digital technology to carry out machine translation research, will realize the language variety conversion between national language and document information, and make the security language language realize the communication goal with no limit, it also lays a good foundation for the protection of security language and writing information and the construction of barrier-free national cultural exchange system. Based on the analysis of the current situation of the security language and characters, this paper probes into the concrete methods of protecting the security language and characters by using digital recording technology, Digital Image Processing Technology and other computer digital technologies.

**Keywords:** Computer, Digital technology, Security language, Language protection, Applied research

Discussions and social practices related to the protection of linguistic and cultural heritage conform to internationally accepted cultural concepts, basic norms and working norms on intangible cultural heritage protection. In recent years, most of the arguments against the protection of dialects are based on the view that language is first and foremost a means of communication, and the importance of its cultural value is not fully understood. Scientific and appropriate conservation strategies should be formulated on the basis of full recognition of the great conservation value and particularity of the linguistic and cultural heritage, we should properly handle the relationship between the protection of vulnerable languages and the respect for the language holders' independent choice and their interests of survival and development.

### 1 APPLICATION BACKGROUND OF COMPUTER DIGITAL TECHNOLOGY IN LANGUAGE AND CHARACTER PROTECTION

The language ecological environment is a complex body composed of three aspects: the region, society, economy, cultural environment of language use, the interlanguage relations of related languages, and the emotion and attitude of language users. The most remarkable feature of the language ecosystem is the variety and dynamic balance of languages. The variety and dynamic balance of languages restrict and influence each other, and promote the relative stability of the language ecosystem.

The concept of language ecology is the concept of language diversity, and the crisis of language ecology is the crisis of language diversity, the endangered and extinct of language. The main manifestations of the current language ecological crisis are as follows: the acceleration of the process of strong language nationalization and internationalization; the integration of Internet lingua franca; The marginalization and disappearance of dialects; the decline and disappearance of bilingual communities and bilinguals; the active abandonment by young people of non-common mother tongue and native cultural expressions; the decline and sinking of language islands and dialect islands; A dystocia or diminution of a hybrid or hybrid language.

Most of the existing national cultural information is "data storage", which has not played its role of dissemination and information sharing, forming "Information Sharing Database". With the development of society and the progress of Science and technology, the traditional folk songs and dances, national costumes, national customs and the inheritance mechanism of their customs are disappearing intangible cultural heritage, it has become a trend to understand national culture conveniently and intuitively.

The cultural undertakings and cultural industries in ethnic areas still need to be strengthened. At present, the rich information of national folk culture has not been shown through the cultural industry to give full play to its advantages and core competitiveness of national folk cultural resources. The lack of cultural talents in ethnic areas restricts the development of cultural informatization at the grass-roots level. For a long time, because of the system and policy orientation and the problems of cultural enterprises themselves, many talented people can not be arranged to work in the cultural industry.

The grass-roots culture information resources lack of integration, information sharing system is not sound. At present, some departments are strengthening the construction of informatization, but most of them only attach importance to the construction of hardware, ignore the construction of software, the collection of information and the development of resources, and fight their own battles, lack of unified standards and repeated construction, resulting in the waste of information resources and idle.

## **2 STATE OF LANGUAGE AND CHARACTER PROTECTION OF SECURITY LANGUAGE**

Bao an language is an important means of communication for the people of Bao an ethnic group, but Chinese Linxia dialect is widely used in most of Bonan People's foreign relations. Altaic languages Mongolian language family, with the same language family of Dongxiang, Monguor people, Eastern Yugur language, Daur people, Mongolian language family is a unique language. Baoan dialect is divided into two dialects, Dahejia dialect in Gansu province and Tongren dialect in Qinghai province. Dahejia dialect is mainly used in the villages of Dadun, Ganhetan and Gaoli in Jishi Mountain County. There are slight differences in the pronunciation of some words among the villages, but the differences are very small, and most of them are known to each other.

Baoan dialect (represented by Jishi mountain dialect) has 11 vowels and 26 consonants. Its main features are: phonology, the existence of the word with the medieval Mongolian word head [h] corresponding to [F], word ends retain more short vowels. The drop of the initial vowel and the initial syllable of a word is quite prominent, and the drop of the consonant at the end of a syllable or in the whole word is also quite common. It is the only language known in the Altaic languages to have no vowel harmony. In terms of vocabulary, Bao 'an language retains some of the old words used in Mongolian in the Middle Ages, which are no longer used in modern Mongolian words or continue to be used only in certain dialects and dialects.

The vocabulary of Bao 'an language is influenced by Mongolian, Chinese, Arabic, Persian and Tibetan. Fifty percent of the vocabulary comes from early Mongolian, Chinese vocabulary, Arabic vocabulary and Persian vocabulary account for 40% , while Tibetan vocabulary is quite large. Baoan vocabulary consists of inherent words and loanwords. Inherent words include words of the same origin as the Mongolian language or other languages of the Mongolian language family, words that are unique, as well as derivatives and compounds based on these words, the ending short vowels retained in the inherent words of Baoan language are consistent with Mongolian written language, Monguor people language and Dongxiang people language, but different from modern Mongolian spoken language and Daur people language. The number of loanwords is the largest in Chinese, and the number of loanwords in Tibetan is the second. The emergence of these loanwords is closely related to the migration and life of the Baoan nationality. For example, most of the loanwords in Tibetan are words related to daily life, the vast majority came from Bonan People's close association with the local Tibetans while living in Tongren Bao'an City in Qinghai province, which has seen a relative decline in such borrowings after the Bao'an people moved to their homes in Jishi Mountain and river. Bonan people lives in Islam, therefore, there are many Arabic loanwords related to religious activities.

The vocabulary of Baoan dialect is divided into 10 categories: nouns, pronouns, numerals, adjectives, verbs, adverbs, postpositions, conjunctions, modal particles and interjections, they are subject, predicate, complement and modifier. There are single sentences and complex sentences. But Baoan language has no written language of its own. People use Ningxia dialect in their communication.

Bonan people dialect is divided into Jishishan dialect and Tongren dialect. The dialect of Jishi Mountain refers to the dialect spoken by the security people of the village of Gaoli, Sibaozi, Xiao Jia and Gaji, which are separated from the two villages by Jishishan Bonan, Dongxiang and Salar Autonomous County and Dadun. The most obvious difference between it and Baoan Tongren dialect is that it is influenced by the surrounding Chinese and absorbs a lot of Chinese elements. There are also subtle differences between Ganhetan dialect and Dadun dialect, it reflects that some native language differences existed before the residents of Baoan ethnic group and Dadun Baoan ethnic group moved from Baoan Xiazhuang and Gaosar villages in Tongren County, Qinghai province. There are no long vowels in Ganhetan security dialect and Dadun security dialect, which is the biggest phonetic difference between Jishishan dialect and Tongren dialect, it is also one of the main phonetic features different from all other languages of the Mongolian language family except Dongxiang, Monguor people and dialects.

Bonan people is a nation with a spoken language but no written language. The Baoan language is the native language of the Baoan people. The Bao'an language belongs to the Altaic languages, most of the Bao'an people speak both Chinese and the common Chinese language. At present, fewer than 10,000 people speak the native language, and most of them are over 40 years old, the number of young people under the age of 20 using the security language, which is an endangered minority language, is low. Security language is divided into three dialects, namely security language Tongren dialect, security language Jishishan dialect and security language Kangyang dialect. There are more Tibetan words in Tongren dialect, more Arabic and Chinese words in Jishishan dialect, and more Tibetan and Arabic words in Kangyang dialect. In order to adapt to the needs of social development, the people of the Baoan ethnic group, who knew only a small number of Chinese characters and used the Chinese language, have been interacting with the Han people more and more frequently in Bonan people with the change of their living environment, Chinese loanwords have greatly increased in the Baoan dialect, and Chinese is widely studied and used by the people of Bonan people. Almost everyone speaks Chinese.

There are quite a few of the Bao'an people who can not speak the language, but almost all of them can communicate fluently in Chinese. The main reasons for the decline of the security language are: the gradual deepening of the strong language Chinese, gradually become the mainstream language of communication, resulting in the gradual decline of the security language. According to documents, field surveys and government documents, in addition to the minority language office of the Gansu Provincial Civil Affairs Committee and the Language Office of the Education Department, in Gansu province, the Jishishan Bonan, Dongxiang and Salar Autonomous County has not set up any specific language office or other language management and Protection Organization for the Baoan language, and the Jishishan County Cultural Bureau is responsible for language protection, however, there are no policies and measures for the protection of the security language, no scientific research projects related to language protection and inheritance, and no supporting funds.

### **3 APPLICATION SUGGESTION OF COMPUTER DIGITAL TECHNOLOGY IN LANGUAGE AND CHARACTER PROTECTION OF SECURITY LANGUAGE**

In the digital age, language needs tend to be diversified and multi-layered, and the digitalization of language and characters will have greater application value and development space. The construction of digital language should be

demand-driven, serve the overall development of the country, meet the needs of people to learn and use language and improve scientific and cultural quality. For example, relying on digital rural construction and Language Science and technology empowerment, to improve the quality and level of universal language and writing, and promote balanced education. The construction of digital language and writing should give priority to practical application, pool and connect high-quality resources, and make full use of distributed, shared, scene-oriented and personalized digital service mode, to build a language learning platform with extensive influence, and provide the digital services and resources that can be used and used by the society. It also needs to establish a digital language service system that meets the needs of the public, make full use of new digital technologies and build a language-information-free society, and actively promote the opening and sharing of language resources, to provide support services for the construction of a ubiquitous learning environment and the realization of lifelong learning for all; at the same time, to serve scientific decision-making, and to take the digital construction as an opportunity to improve the monitoring system of language life, we will strengthen the building of a national language and writing think tank and promote the modernization of the language and writing administration system and capacity.

It is impossible to imagine the changes brought about by the integration of digital media art into the language and culture of the border nationality, and the help to the study of the language of the border nationality is inevitable and undeniable. The involvement of digital media art allows digital video to be added. Digital video will provide learners with direct and vivid visual experience. The pronunciation of the voice of the manner, dynamic, mouth shape will be with a vivid presentation in front of the learners. For polysemous words, or words whose individual meanings are difficult to explain, a video clip can be used to show how the words are used, and the use of the external conditions, the dialogue environment, the mentality of the characters, body language complete record. It is believed that this will provide more direct and effective protection measures for the protection of Yunnan border ethnic languages and cultures. It is believed that this will provide valuable digital media materials for the language and culture of Yunnan border ethnic groups.

Paper as the most classic human cultural records, dissemination, diffusion, reading and dissemination of the way is beyond doubt. For a long time, the paper thin body to bear the role of not only words and language so simple, bearing the fate of the entire human race. The rapid development of digital media art is not accidental, it inherited almost all the advantages of paper. The involvement of digital media, will break the past only audio recording of the status quo. Digital video as fresh blood into linguistics, to provide fresh nutrition for linguistics.

Based on the survey data and related materials on the mother tongue and lingua franca abilities of different ethnic groups in the ethnic areas of China, we should sort out, compare and classify them, classify different mother tongue resource retention types and lingua franca capabilities, and develop a master plan for relevant language emergency services. The above-mentioned survey materials and related data may provide some important information for this, but more extensive investigation and verification are needed. In addition to classification planning, the classification of emergency services to develop specific programmes should be the top priority. It is necessary to fully consider the differences between the language vitality and the common language ability caused by the imbalance among different languages and dialects, so as to make the language emergency plan adaptable to many different factors and to enhance the accuracy of its service. The planning and mechanism construction of language emergency services need to be transformed in concept and method, and the related minority language discipline construction and theoretical discussion should be followed up in real time.

#### 4 CONCLUSION

Security language digital construction, can be understood as the introduction of big data, cloud computing, artificial intelligence, blockchain and other cutting-edge digital technologies into language applications, forming products, processes or patterns, providing language services through various digital terminals. The digitalization of language and characters is gradually transforming the static potential energy of language and characters resources into the momentum of high-quality development of language and characters cause.

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