

WhiteStone: A Tangible interactive device for revitalizing Qiang language and culture

Rao Xu
Chengdu University of Information
Technology
Chengdu, China
xurao233@gmail.com

Lingze Wu
Chengdu University of Information
Technology
Chengdu, China
wulingze@outlook.com

Qin Wu
1-Chengdu University of Information
Technology
2-The University of Auckland
Chengdu, China
xiduowawa@gmail.com



Figure 1: (a) Audible learning cards. (b) Qiang's Shibi Painting "Shuarile". (c) Game Interface. (d) System Architecture of WhiteStone.

ABSTRACT

The Qiang is an ancient minority in western China. However, the number of people who can speak the Qiang language is decreasing due to a lack of written text. Although the protection of intangible cultural heritage has been widely discussed, there is still a dearth of interactive design for the Qiang people's language and culture. This research aims to determine the efficacy of tangible interactive games to encourage Qiang people's interest in learning the Qiang language and increase their cultural awareness. To better understand the current state and challenges of Qiang language and culture, we conducted a three-day field investigation in the Qiang villages. Based on the field study's key findings, we created "WhiteStone," a tangible interactive projection device based on the heroic epic of Qiang. This poster examines the design opportunities for tangible interactive games to revitalize the Qiang language and culture.

CCS CONCEPTS

• Human-centered computing → Interaction devices.

KEYWORDS

Qiang people, tangible interaction, cultural heritage, ancient myths and stories, Chinese culture

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1 INTRODUCTION

Inheritance and development of indigenous languages is a vital means to protect intangible cultural heritage [Bedjaoui 2004]. The Qiang is an ancient minority that live in western China's hilly regions. Due to they lack a script, Qiang people can only pass on the Qiang language orally [Thurgood and LaPolla 2016]. The Qiang language has been on the danger of extinction in recent years, as fewer Qiang people are able to speak it. He et al. [Fangfang He and Wu 2018] proposed a mobile application that shows how digital technology might support Qiang language learning. Tangible Interaction was proven to be beneficial in the study of indigenous languages [Taylor et al. 2020]. However, the current research on protecting the Qiang language and culture by designing a tangible interactive game remains underexplored. This research aims to determine the efficacy of entity interactive games to encourage Qiang people's interest in learning the Qiang language and increase their cultural awareness. To gain an in-depth understanding of the challenges of the Qiang language and culture and the insight of the Qiang people on it, we conducted a three-day field investigation in three Qiang villages located in Li County, Sichuan. Inspired by the investigation findings, we created "WhiteStone", a tangible interactive projection device based on the heroic epic of Qiang. Through remote evaluation of young Qiang people, we received positive emotional feedback and valuable suggestions for our prototype.

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