

ELEMENTS OF A CHINESE LANGUAGE GAME

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ABSTRACT

In this paper, we elaborate on work presented at the Dutch crossmedia PICNIC festival, in a special symposium entitled: the *China Language Bridge*. We will discuss a number of online resources, including games, for learning the chinese language, including chinese characters which are also used in japanese. After a brief digression on potential pitfalls in using online translation services, we will present some ideas, and indicate in what way these ideas might be realized using the XIMPEL interactive video platform, developed on top of the open source flex/as3 SDK. Such an approach would cover both the need to introduce appropriate context to stimulate language learning, as well as the unavoidable repetitions, which often proves to be one of the main obstacles for effective language learning.



INTRODUCTION

引言

At the PICNIC crossmedia festival¹ 2007, Chinese Radio Amsterdam², currently also known as CRTV³, a local media organization for the chinese community in the Netherlands, organized the *China Language Bridge*⁴, a symposium with a great variety of speakers, from a commercial as well as educational background. Topics covered by the symposium included: city and language guides on mobile phones, automatic translation of incoming and outgoing emails, and chinese language games.

There are multiple reasons to be involved in developing chinese language games, when looking at the chinese language in terms of global impact and the complexity,

or for that matter intriguing nature of the language, especially from a western perspective, Ross & Ma (2006). Also, it should need no argument that games are an effective way to learn, Eliëns & Ruttkay (2009), or at least support the learning of a language, taking into account that many elements are, in principle, available as online components, including grammar definitions and vocabularies. In addition, however, I must confess to my personal motivation to learn the chinese language. And, I must admit, it was much more difficult than I expected, giving me another reason not to give up. Learning to read, write and speak chinese, may the least of it considered to be an interesting challenge. And as such an excellent topic for game play!

structure The structure of this paper is as follows. We will first look at what constitutes a chinese character, and then briefly look at what online resources are available for (learning) chinese. As a digression we will present an online translation example, humorous in itself, but nevertheless a warning for potential pitfalls in this area. We discuss a simple language game, and introduce what in our opinion are core elements of a language game: play, learn and explore. Then we will propose a platform for the realization of (serious) language games, and present initial ideas for scenarios to be worked out in the future, after which we will draw (preliminary) conclusions.

By way of acknowledgement, all help in translation (帮助 in 翻译) is by google translation service⁵.

WHAT IS IN A CHARACTER?

什么是一个中国人的个性?

For a western person, chinese characters are deeply intriguing, whether on the billboards of Shinjuku (Tokio) or the shops of Shanghai. Due to their shape and the implied meanings of the characters, chinese writing is significantly distinct from western writing, leaving the uninitiated spectator utterly puzzled. An interesting approach to teaching westerners the construction rules of chinese characters is taken by the artist Xu Bing, who showed, and demonstrated in workshops, how to

¹www.picnicnetwork.org

²www.chineseradio.nl

³crtv.nl

⁴www.picnicnetwork.org/page/5684/en

⁵www.google.com/translate_t?langpair=en|zh-CN

create words in western alfabet using elements and construction principles from chinese writing, as illustrated below, showing a possible logo for *chinese radio*.
www.xubing.com / 华语电台.nl



When learning chinese characters, above all, it seems important to understand the significance of the individual elements of which the character is constructed, and the rules of composition, that is the way meaningful combinations are made.

genealogical chart(s)⁶

1. pictograph(s) – e.g. 木 = *tree*
2. ideograph(s) – abstractions, e.g. 一 = *one*
3. logical aggregate(s) – e.g. 安 = *peace* (roof, woman)
4. phonetic complex – e.g. 忠 = *loyal* (center, heart)
5. associative transformation(s) – concept extension
6. borrowing(s) – unrelated, similar pronunciation

In addition to an explanation of the meaning of the elements and rules of composition, most textbooks dealing with chinese characters suggest the reader one or more metaphors to help memorizing the characters, which is, for example, easy to find in the character for *peace*. Cf. McNaughton (2005), Wang (1993).

RESOURCES FOR CHINESE

中文资源

There are ample online resources for chinese, including dictionaries⁷, tools for reading and writing⁸, the already mentioned google translation services⁹, as well as overviews of learning resources¹⁰. Interestingly, many of these online resources can be accessed as a web service using a simple REST API, an explanation of which falls outside the scope of this paper.

With the rise of the mobile phones, gadgets such as the iTravel¹¹ are increasingly being replaced by applications for the mobile device. In particular, one of the technologies that may have a significant impact on mobile city and laguage guides is the *augmented reality* browser for iPhone and Android from Layar¹².

⁶zhongwen.com

⁷www.mdbg.net/chindict

⁸www.mandarintools.com/dimsum.html

⁹www.google.com/translate

¹⁰www.chinapage.com/learnchinese.html

¹¹www.ectaco.com/products/ECTACO-TL-2EuAs10

¹²layar.com



Fig. (1) iTravel: handheld translator

As a note, a reference worthwhile for the ardent L^AT_EX/TeX users is provided in the instruction pages for the CJK¹³ package.

an exercise in online translation To illustrate potential pitfalls of automated translation, look at the fragment(s) below.

daft punk – technologic

Buy it, use it, break it, fix it.
Trash it, change it, melt – upgrade it.
Change it, point it, zoom it, press it.
Snap it, work it, quick – erase it.
Write it, out it, paste it, save it.
Load it, check it, quick – rewrite it.
Plug it, play it, burn it, rip it.
Drag and drop it, zip – unzip it.

Translating this into chinese, omitting the last 4 lines, gives us:

chinese version

买它,使用它,突破它,把它修复.
垃圾它,改变它,融化-升级.
改变它,它一点护着它,它的新闻.
折断它,它的工作,快速-抹掉.

Now, translating it back to english brings distortions to the surface which, humorous in this context, might be devastating in a more serious application.

after translation

Buy it, use it, break it, fix it.
Refuse it, change it, the melting – escalation.
To change it, it is 1:00 and protecting it. it is the news.
Breaking it, it's work, fast – erase.

Admittedly, this is not a representative example, and, to be honest, I am impressed by the overall quality of translations as provided by for example the google translation service. However, such errors may also be used in a language learning game, as a (language) mini game about ambiguity of meaning, in particular in chinese where for example mispronuncations, which are quit common due to the unfamiliar tonal character of the language, may lead to widely divergent meanings.

¹³www.math.nus.edu.sg/aslaksen/cs/cjk.html

ONLINE LANGUAGE GAMES

在线游戏语言

A simple selection game, for memorizing kanji (chinese characters used in japanese) can be found in the *online kanji game*¹⁴, which allows to switch between all combinations of english, kanji and kana (the native japanese characters). A prototypical language learning game is *knuckles in china land*¹⁵, also for japanese, which takes the player through various rooms and requires the player to answer (in a very simple way) to particular situations and challenges.

To support a television program for learning chinese, the dutch educational broadcasting society provided a website with additional online games¹⁶, mainly consisting of images of situations or room, where the player must guess, after some training sessions, the meaning of objects, by selecting the appropriate chinese word.



Fig. (2) I go to Shanghai for ...: 我去上海出差

In a similar way, many chinese learning tools provide scenarios, in which the user/player takes a particular role in a prototypical situation, as indicated in figure 2.

PLAY, LEARN, EXPLORE

游戏内容-玩,学习,探索

To communicate in a foreign language, in particular for young children, nor grammar nor an extensive vocabulary are important. Most important is that a limited set of words can be used in an appropriate context.



Fig. (3) Learn by Play

¹⁴www.msu.edu/~lakejess/kanjigame.html

¹⁵www.kicl.info

¹⁶www.teleac.nl/chinees

Figure 3 illustrates a simple game to learn the words for the various colors, simply by stepping on the right spot on the (color) mat. Either in real life or by means of video, such situations may be helpful to acquire intuitive mastery of such canonical vocabulary as colors, or for example, greetings, or even table manners.

Such games provide a suitable context, as well as a task that is entertaining in itself, thus motivating the player to repeat, that is to jump to the right spot whenever a new color is called for.

In general the (game) mechanics underlying such interactions may be summarized as:

game(s)

- play – turn-based, score(s)
- learn – simulation model, target(s)
- explore – interactive video, mini games

Such (game) mechanics, as illustrated in figure 4, allow for dealing with the various elements of learning a language, that is: providing a natural context with proper challenges, well-defined tasks and repetition, repetition, repetition.

SERIOUS GAMES PLATFORM

一个平台,为严肃游戏

In Eliens et al. (2008) we have described a platform, originally developed in the context of a climate game, Eliens et al. (2007), that allows for a seamless integration of the various elements of a (chinese) language game, as indicated above. See figure 5.

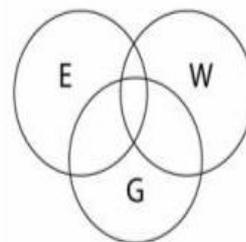


Fig. (4) Game Play, Simulation, Exploration

Technically, the characteristics of XIMPEL may be summarized as:

XIMPEL¹⁷

- ajax – dynamic update(s)
- flex/as3 SDK – XML game description template(s)
- (flash) video – interactive video, mini game(s)

However, more importantly is that XIMPEL has proved itself to be a viable platform for media productions that fall anywhere between interactive storytelling and gameplay, and also allows for tracking choices of the user/player to provide a meaningful interpretation of the score, Eliens & Ruttkay (2008).

¹⁷ximpel.net

STORY & GAME SCENARIOS

故事和游戏场景

Having taken an active interest in learning chinese, and chinese culture, I would also like to suggest particular topics around which chinese language games could be developed.

One (obvious) topic is kung fu, written as 工夫, the literal translation of which is *hardworking men*, not excluding women by the way. The literature abounds with stories and myths of practitioners of martial arts with superhuman powers, in search for missions to prove their mastery and solve human problems. Cf. Liang & Wu (1964).

Another line of stories may be derived from *Wei Cheng* (围城), the famous novel of the writer and scholar Qian Zhongshu (钱钟书), which relates about the home coming to Shanghai of the main character Fang Hongjian (方鸿渐), who will later leave Shanghai for an eventually failing career at a university in mid-China (三闾大学). The opening sentence of this novel (in the learners edition) reads:

围城

红海早过了，船在印度洋面上开驶着，但是太阳依然不饶人地迟落早起，侵占去大部分的夜。

Apart from being an excellently written novel, the life of the main character bears some resemblance to my own life. Moreover, the background of the story, Shanghai in a period of global turmoil provides an excellent stage for in some sense the anti-hero Fang Hongjian, thus allowing for a range of quasi-dramatic interactions and plots. Even in modern times, this may lead to compelling cinematic games, with questions such as *what are you going to do in Shanghai* (figure 2).

CONCLUSIONS

结论

In this paper we have investigated some of the possible elements of a chinese language game, both from a personal interest and technical interest, and, most importantly, from a more general interest in game development as well. Written from an entirely western perspective of chinese language learning, it may nevertheless give the inspiration and some insights of how to develop a chinese language game, making use of online resources and web services as they become available.

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