

A Cross-Cultural Analysis of MOOCs' Platforms Website Layout Design

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Abstract

This article aims at exploring and identifying the different strategies taken in designing MOOCs' platforms website by analyzing their visual communication, which is mainly expressed through the website layout, the use of videos, discussion forum, and written text. Edward T. Hall's, Edward T. Hall and Mildred Reed Hall's and Geert Hofstede's theoretical framework of high-context and low-context communication styles are applied into the analysis. After analyzing two MOOCs' platforms in high-context cultures and low-context cultures, it is found that MOOCs in high-context cultures prefer long videos, hierarchical structure of navigation on their website layout, whereas MOOCs in low-context cultures apply more text-based material, linear layer of navigation and discussion forums in their website.

Keywords: *MOOCs, visual communication, high-context culture, low-context culture*

1. Introduction

Massive Open Online Courses (MOOCs), initiated by George Siemens and Stephen Downes in 2008, represent new means of learning in an online environment and permit unlimited access to the online courses outside of the 'boundaries of learning institutions' (Kop et al., 2011; De Witt et al., 2014; Norman et al., 2014). MOOCs have gained a 10% increase over the years since the launch of the first MOOC (Toven-Lindsey et al., 2015). Within the recent four years, MOOCs have become international education resources for the world. This open education resources movement gets plenty of top universities and platform providers involved, for instance, Coursera, edX, Udacity, Khan Academy in United States, FutureLearn in the United Kingdom, unX in Spain. Among which Coursera, EdX and Udacity are some of the most notable providers of MOOCs (Alraimi et al., 2015). At the same time, MOOCs were introduced into Mainland China, great number of MOOCs platforms established according to their partnership, for example, xuetangx.com, the first MOOC in Mainland China, proposed by Tsinghua University partnered with Zhejiang University and Nanjing University, is one of the most notable MOOCs in Mainland China. Other MOOCs which partnered with some other universities are CNMOOC, University Open Online Courses (UOOC) and WEMMOOC. Other MOOCs founded by specialist organizations are PMPHMOOC.com and Shanghai Course Center.

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When comparing the massive online platforms, one of the classifications made based on the learning theory applied in the MOOCs: cMOOCs and xMOOCs. The former apply connectivist approach into them through getting learners involved in interacting with their fellow learners. The latter adopt a traditional behaviorist model by providing learners videos covering the course curriculum followed by evaluation in forms of quizzes and questions, learners could study at their own pace on the precondition that they should complete the course study within required weeks. With the great popularity of MOOCs all around the world, for example, according to the data provided by Education Technology (2016), 'five million people have signed up to study with social learning platform FutureLearn in just three years'. Three-quarters of these learners are from the countries outside of the UK, coming from over 190 countries around the world. There arises a question: MOOCs platforms are much more than a collection of texts, they are conglomerate of multimedia, interactive activities, and how do the MOOCs in different cultures differ from each other in their website layout to attract learners worldwide. This article tries to analyze two MOOCs platforms' website design from a cross-cultural perspective.

2. Previous research on website design from cultural dimensions

A number of researchers have conducted studies on the relationship between cultural dimensions and websites design. Such as, Marcus and Gould (2000) and Sheridan (2001) investigated the relationship between Hofstede's cultural dimensions and visual presentation on websites by analyzing commercial and non-commercial websites. Würtz (2006) approached the relationship between cultural dimension and commercial websites with Edward Hall's theoretical framework. Later on, some researchers extended the cultural dimensions into online learning. Swierczek and Bechter (2010) carried out a qualitative and quantitative study of East Asians, who represented a high context culture, and South Asians and Europeans indicated low context style of learning. Its qualitative study showed that 'cultural features have an impact on e-learning behaviors' (p.215). It was further explained that learners from low-context cultures tended to be individualistic, achievement oriented and perfect learning by induction, while learners from high-context cultures indicated high power distance demonstrated by a teacher centric focus. Additionally, learners from high-context cultures preferred starting the lessons by theory and being more involved and active in e-learning than their counterparts. Westbrook (2014) explored how the low-context communication affected those students who came from high-context cultures on their online learning by investigating Hall's definitions of contexts and Hofstede's (1980) cultural dimensions. This paper attempts to take Hall's (1976), Hall and Hall's (1990) and Hofstede's (1980) description of cross-cultural communication styles to analyze two MOOCs' platform website design which are FutureLearn in UK and UOOC in China, one course is taken from the two MOOCs to represent their website design in the following analysis.

3. Theoretical framework for high- and low-context cultures

In this article, the theoretical framework are based on anthropologists Hall's and Hofstede's findings on cultures, such as preferred message speed (Hall, 1976) and collectivism/individualism (Hofstede, 1980). Hall (1976) introduced the concept of high and low context cultures and list the people in the continuum in Hall and Hall (1990) in

Figure 1. It is conveyed that Chinese and British have opposite preference in the continuum, it seems to show that Chinese belong to high-context (HC) cultures while British tend to be one of the low-context (LC) cultures. In the HC cultures, communication involves ‘more of the information in the physical context or internalized in the person’ (Hall, 1976, p.79). It is likely to mean that communication in HC cultures is mostly implicit, non-verbal communication is supposed to be more important than the verbal aspects. While communication in LC cultures was described by Hall as ‘just the opposite, i.e. the mass of information is vested in the explicit code’ (Hall, 1976, p.79). Communication messages are mostly expressed by explicit verbal words, less physically non-verbal behaviors are needed in the conversation. Therefore, the following cultural variables will be considered in this paper.



Figure. 1 Low-context/high-context cultures

3.1. Collectivism versus individualism

Hofstede (1980) proposed his cultural dimensions after investigating IBM employees in more than 50 countries. The four cultural dimensions he initially proposed are power distance, individualism versus collectivism, masculinity versus femininity, uncertainty avoidance. The collectivism versus individualism category was regarded as an alternative to the HC/LC culture dimension. They correlate with each other as the following: the HC cultures tend to be collective communities, while the LC cultures are prone to be individual groups. The HC cultures prioritize the interest of the collective group over the interest of the individual, and how an individual seen is partly dependent on his/her family’s history, whereas his/her personal achievements play a minor role. Members in HC cultures tend to be interdependent with others and establish strong social ties and relationship. Whereas, LC cultures tend to be individualistic, the interest of individual is emphasized more than the interest of group. The individual in LC cultures is acknowledged by his/her accomplishments and encouraged to be dependent on oneself.

3.2. Power distance

Another cultural dimension of Hofstede’s (1980) is power distance, which refers to the degree of inequality that exists or accepted between people with power and people without power. The HC cultures tend to accept high power distance and are characterized by an unequal, hierarchical distribution of power, people know ‘their place’ in the society. On the contrary, LC cultures are characterized by shared and widely dispersed power, members do not accept situations where power is distributed unequally.

3.3. Time conception: polychronic vs. monochronic

Hall (1976) made a distinction between cultures where people tend to approach time. He identified different cultures' perception of time lie between the spectrum of monochronic time and polychronic time. Monochronic cultures view time in a liner way, only one thing could be done at a time. While polychronic cultures believe multiple things could happen at the same time, people in this culture are multitasking. LC cultures tend to be monochronic and HC cultures are polychronic.

3.4. Message speed

Another cultural dimension, proposed by Edward Hall and Mildred Reed Hall (1990), is message speed, i.e. how the people in certain cultures process messages. Messages could be classified as fast messages or slow messages. The former refers to the messages are decoded and acted on quickly and easily, such as, headlines, cartoons, TV commercials, and prose. The latter take more time to decode and act on, which include books, TV documentaries, and poetry. HC cultures prefer fast messages while LC cultures prefer slow messages.

4. Research method and results

4.1. Method

In order to explore different characteristics of two MOOCs platforms' website design, the two MOOCs platforms analyzed in this article include FutureLearn from United Kingdom, and UOOC from China. According to Hall and Hall (1990)'s classification, in the spectrum of HC/LC culture, China tends to be a representative of HC cultures, while UK represents LC cultures. Two English cultural courses in FutureLearn and UOOC are accessed and studied by the author on her own experience. A tentative analysis of the similarities and differences between the two MOOCs platforms' website design will be analyzed from the cultural dimensions proposed by Hall and Hofstede in the following paper. This analysis focuses on visual communication, which is mainly expressed through the website layout and the use of videos, discussion forum, written text, dealing with the website design. This tentative study examines how LC cultures and HC cultures differ in the use of the visual communication tools in their websites layout. This study is conducted between October 28, and December 20, 2016.

4.2. Results

The following explanations illustrate the different ways in which cultural differences' impact on MOOCs' platforms website layout. By comparing and contrasting the two platforms, certain characteristics could be conveyed through the following detailed analysis.

Although no common pattern is shared between the two MOOCs' platforms, both courses provide various and qualified material for the course. In FutureLearn, six-week-long course is divided according to different topics about British cultures, such as English as a global language for week one, British music for week two, the British countryside for week three. Most of these units are divided into smaller sections alternate with video, discussion, article and quiz to make sure students could understand all of the information. Each section is scheduled to be finished within one week. But there is no strict schedule required, students can visit the website and start their class

whenever they have time. While in UOOC the course is divided into eight chapters according to each topic, for example chapter one deals with the introduction of culture, its definition, origin, conflicts and interaction etc. There is no specific schedule for each chapter, what learners should do is to finish the course before its deadline. In each section, a nearly ten-minute video lecture is included and an after-lecture assignment and question attached.

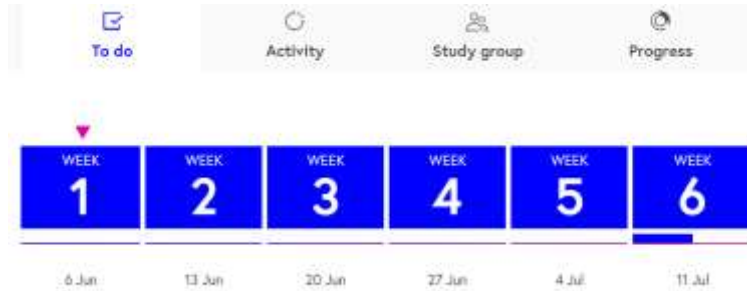


Figure.2 FutureLearn's Content Organization (from <https://www.futurelearn.com/courses/explore-english-language-culture/5/todo/5070>)



Figure.3 UOOC's Content Organization (from <http://mooc1.chaoxing.com/course/80434459.html?edit=false&knowledgeId=80432925&module=2&v=1484484588065#content>)

As for the user experience, both of the courses provide distinctive introduction of the content for each section, while the differences lie that the FutureLearn in Figure 2 provides all the information for the students to access, for example activity, study group and progress, it could be seen that the course is learner-centered from its web site design. On the contrary, UOOC provides all the information about the teaching staff, teaching method, teaching effects on the top. Only information for each section is laid on the left column. It seems that the course is less learner-centered, or probably it is more teacher-centered design. Moreover, as a learner in the course, FutureLearn provides clear identification of finished contents and material needs to be finished, even progress in the course are shown on the content by

underlining the finished session as in Figure 2. while UOOC gives no such information, what students have to do is track their record of their own progress in the course.

4.2.1. Use of Multimedia: MOOC as the modern means of learning online, the new technology ensures the class could carry on with less rely on text as a main way of delivering knowledge to class attendants, and other forms of new interactive teaching could be embedded into the course. The effective use of multimedia and interactive teaching appeal to the new generation of learners. Apart from the list of plain texts and articles, both FutureLearn and UOOC employ videos embedded with transcript in the course. The prominent differences clearly lie in Figure 4. In HC cultures UOOC platform, video lies at the center of the website layout, while the LC cultures FutureLearn attaches great importance of the texts to the platform website layout. UOOC website tends to apply more images of people, especially groups of people or images of things see Figure 5. into the video, while FutureLearn in UK, LC cultures prefer more written texts.

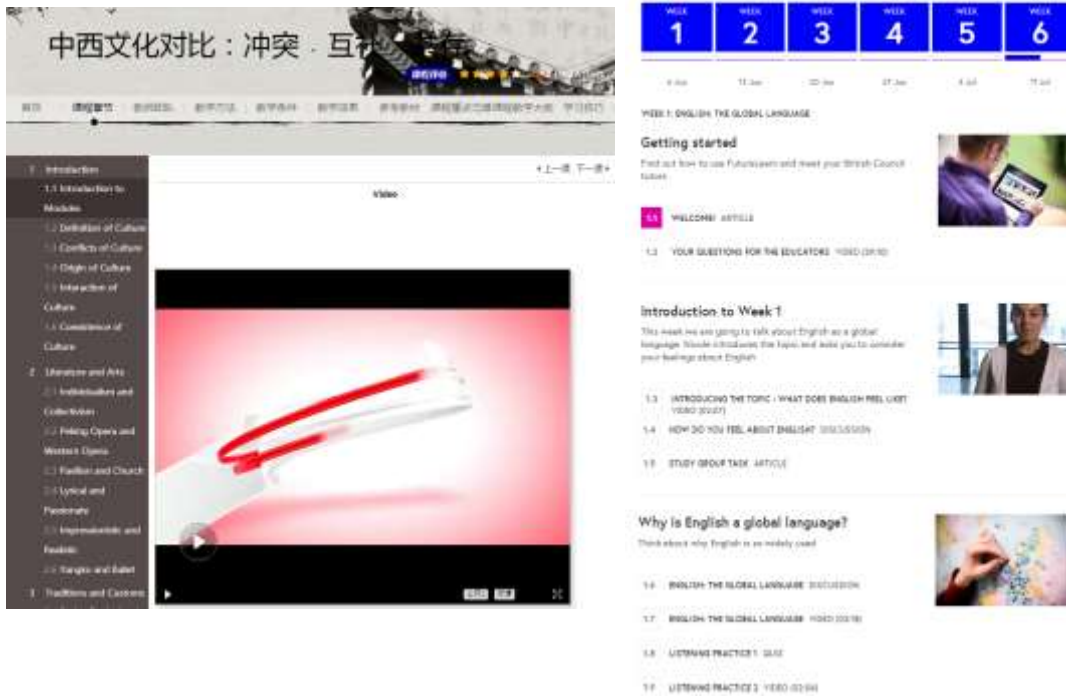


Figure 4. Website Layout of UOOC and FutureLearn (from the same website as Figure.2 and Figure.3)

4.2.2. Linear or Parallel Navigation: In Figure 4., it can be seen that layer-upon-layer approach is conducted in HC culture UOOC navigation, more illustrations and links are shown on a new page underneath the main menu item, all of these links have to be open in a new browser window. While LC culture FutureLearn prefers showing nearly all the information on one page side by side, only the detailed sub-items have to be open in a new browser window. This characteristic of the MOOCs website layout is consistent with those similar research results done by Bucher (2002) and Würtz (2006). It is indicated that HC cultures adopt hierarchical distribution of information, on the contrary

LC cultures select equal distribution of information. FutureLearn holds another advantage of segmenting the videos into smaller components and united with the questions and discussions and quizzes for that part, this arrangement facilitates the learners to digest the content in the video, and students could make use of their broken pieces of time to finish each section. While UOOC applies comparatively long, nearly ten-minute videos in the course followed by quizzes afterwards. This could probably bring confusion to the course learners who have to memorize what they have learned in the video and then finish the quizzes later. Even the learners could pause and replay the video whenever they want, the fact that the comparatively long video gives no chance of making use of learners' tiny piece of time to finish. Indications are that HC cultures prefer over-flowing message conveyed in video, whereas LC cultures tend to acquire information in written texts, a comparatively slow message.

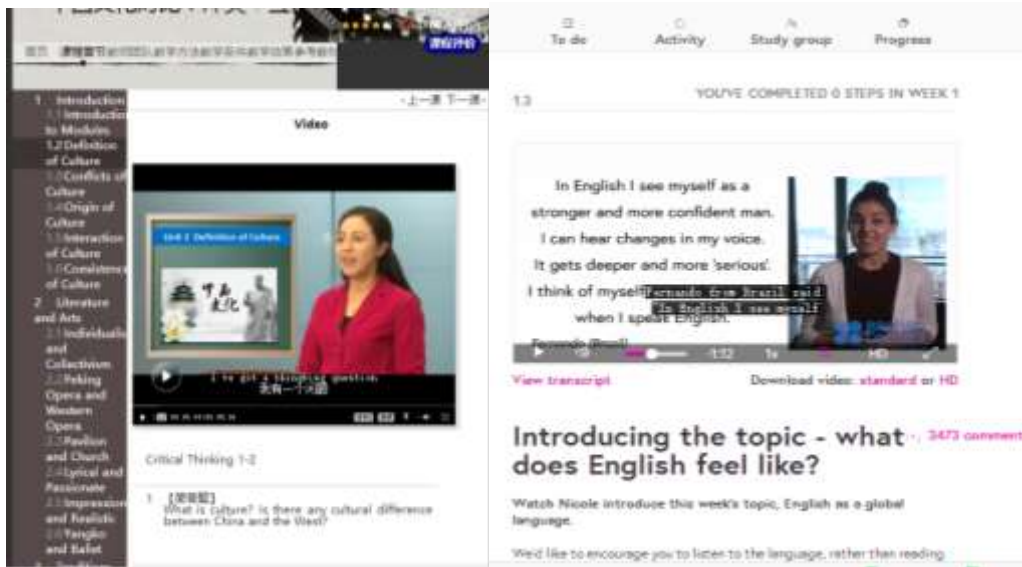


Figure 5. Different Insertion in the Video of UOOC and FutureLearn (from the same MOOC courses)

4.2.3. Discussion Forum or Not: Communication is comparatively important for online study, it could make sure students are fully engaged in the class, moreover, their discussion and statement in the group work could help them fully understand the information provided about the course. For online learning it is the only way to supervise the students' learning and understanding from their peer group and teacher feedback. FutureLearn makes use of the web forums to facilitate its communication among students, students' peers and tutors. Each discussion in the week's work has its own discussion forum to post the learners' personal idea about the topic. For example, in week one's class there are four discussion questions are provided to activate the students to think, reflect and express themselves in English. Each video followed by a quiz to test students' understanding and study. On the contrary, no discussion forum is provided in the UOOC present course. It is noticed that the recent courses in UOOC provide discussion forum for learners.

5. Discussion and limitations

The two MOOCs platforms' website layout present evidence that the web sites in HC culture MOOCs platform differ from their counterparts in LC culture in various ways, four of which have been discovered in this study, there probably will be more discovered. It is likely to be seen that the differences between HC cultures and LC cultures on MOOCs' platform website design are affected by their communication styles.

The collectivism versus individualism dimension is apparent that MOOCs learners from HC cultures prefer collective activity whereas their peers in LC cultures tend to enjoy individual activities. On the two MOOCs platform layout, the reason why UOOC designers leave no chance for their users to post their own ideas on the web discussion platform mostly lies in the fact that learners from HC cultures tend not to show their ideas openly. While the discussion forum on Future learn is a heated chatting place for learners from LC cultures.

The Power distance variable obviously lies in the linear and hierarchical layer of the navigation. The high power distance seems to apply hierarchical structure of navigation by opening more links in new browser windows, while low power distance tends to put all the information on one page. Another aspect of power distance implied in the information shown on the main menu, high power distance post all the information about the teaching staff, who has more power than the MOOCs learners. On the contrary, the low power distance shows all the information learners need to find their study progress, discussion forum, and activity.

The time conception dimension is obvious firstly in the choice of the multimedia, HC cultures tend to finish multitasks at the same time which is shown by the arrangement of long time video playing, questions and quizzes for the video. While LC cultures tend to be monochronic time by laying out all the tasks in a linear way. Secondly, this dimension is apparent in the navigation. HC cultures prefer hierarchical structure, while LC cultures tend to use linear layer in their website design.

The Message Speed variable is obvious in the layout of the MOOCs' website, implying that HC cultures prefer videos teaching to decode the information in the lecture, while LC cultures tend to rely on text-based material to understand the content of the lecture.

Limitations of the present study unavoidably lie in the fact that there is great disparity of popularity between the two courses chosen as the subjects. As a good example of cMOOCs, Exploring English: language and Culture achieved its popularity of nearly 122000 people registered for it, it was regarded as the most popular course in FutureLearn. While the course Comparison between Chinese and Western Culture: Conflicts, Interaction and Coexistence stands as one of the frontiers in UOOC, it could stand for the characteristics of xMOOCs in Mainland China. Additionally, this study is done from descriptive analysis of the MOOC's website layout design instead of the MOOCs learners' acceptance of the website design and its influence on their learning efficiency, which will be probably the direction for future research.

6. Conclusion

MOOCs as the fastest growing international online learning should meet the cultural differences among all the learners in the world. From the perspective of cross-cultural communication style, this paper compares two MOOCs' platforms, it shows that

MOOCs from HC cultures use instructional videos in the courses while those from LC cultures take text-based materials. Moreover, cultural differences even shown on MOOCs website design, such as in HC cultures hierarchical structure of navigation bar set while in LC cultures linear way of navigation designed. For discussion forums, learners from HC cultures are not prone to post their ideas on the discussion forums on their website. On the contrary, learners in LC cultures enjoy individual activity on the discussion forum, discussion forum is a heated learning place for learners in LC cultures. This issue of MOOCs website design from cross-cultural communication is worth further exploring about learners' acceptance of MOOCs' website design.

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