Cultural Translation in Massive Open Online Courses (MOOCs)

This paper discusses how courses are made relevant to students in their respective cultural settings. Practices that enable such contextualisation, or cultural translation, are investigated in five Coursera Massive Open Online Courses (MOOCs). I collected data from lecture videos, quizzes, assignments, course projects and discussion forums, using a cultural translation observation protocol I developed for this study. I found that cultural translation was enabled in the course design of two courses and in the forum discussions of all five courses. The course design that enabled cultural translation included activities, tasks, assignments and/or projects that are applicable to students’ own settings and gave students freedom to choose the setting of their projects and people with whom they worked. As for forum discussions, students in the five courses created informal study groups based on geographical locations, languages and professional disciplines. Findings in this study can inform best practices in designing and learning courses addressed to a culturally diverse group. The study is particularly important to MOOC designers and students.

Introduction

MOOCs have recently dominated the debate in higher education, and educational technology in particular. These courses addressed to the global masses have triggered polarized discussion in academia, the media and the blogosphere. On the one hand, there is optimism that these courses are transformative for higher education (Thrun, 2012; Koller, 2012; Anderson, 2013; Horton, 2013). MOOCs are also perceived as a possible way to open access to education (Koller, 2012; Anderson, 2013), especially to learners from developing countries (Koller, 2012; Thrun, 2012). The potential contribution of these courses to educational development in developing countries seems to be perceived by important stakeholders. In October 2013, the World Bank signed an agreement with Coursera to provide massive courses addressed to learners in developing countries (World Bank, 2013). On the other hand, it has been argued that MOOCs, in their original format, are not ready to be used for improving quality and access to higher education at the global scale (Daniel, 2012; Bates, 2012). MOOCs that are currently taught to students from almost any corner of the world need to be flexible enough to enable cross-cultural relevance. Without cross-cultural relevance, meaningful learning is significantly reduced, especially for students that take courses developed in foreign settings.

Practically, a perfect cross-cultural relevance is quite difficult to achieve in MOOCs since the courses are open to anyone who has access to the Internet. This openness enables students from different cultural backgrounds to enroll and take the courses. The Hofstede Centre suggests six cultural dimensions on which various countries can be compared (http://geert-hofstede.com/dimensions.html). These dimensions are power distance, individualism versus collectivism, masculinity versus femininity, uncertainty avoidance, long-term versus...
short-term orientation and indulgence versus restraint. Taking the example of the individualism versus collectivism dimension and comparing the United States of America (USA), Sweden, the Philippines and Tanzania, the dissimilarity between countries, especially the developed countries and the developing ones, stands out. While the individualism versus collectivism indices for the USA and Sweden are high (91 and 71 respectively) those for the Philippines and Tanzania are low (31 and 25 respectively). Hence, some business ideas from an individualist society might not be compatible in a collectivist society.

MOOCs can, however, be designed with some flexibility to allow students from diverse cultures to adjust the courses to their specific settings. Such a recontextualisation of courses is not a brand new idea. D’Antoni (2007) advocates cultural translation as an important feature of Open Educational Resources (OER) to enable the adoption of these resources in foreign educational settings. Various institutions in Europe, namely University of Jyväskylä (Finland), Josef Stefan Institute (Slovenia) and The Universidad Nacional de Educación a Distancia (Spain), have already been engaged in cultural adaptation of OER produced abroad (Holtkamp et al., 2011). Mikroyannidis et al. (2011) argue that a collaborative adaptation of OER in the OpenScout project was enabled by social networking. Equally, Wolfenden et al. (2012), Lane & Van-Dorp (2011) and Kanuka & Gauthier (2012) recognize the critical importance of the possibility of adjusting OER to other settings. However, while OER allow no-cost access, use, repurposing, reuse and redistribution (Commonwealth of Learning & UNESCO, 2011) to increase the cross-cultural relevance of the resources, most MOOC materials are copyrighted under licences that prohibit such practices. These licences restrict making the original versions of the courses relevant and easily understandable to audiences from other cultural, geographical and professional settings. Tailoring MOOCs for a diversity of worldwide audiences has, indeed, been pinpointed among the challenges facing these courses providers (Leber, 2013). The more students’ culture is distant from the course original culture, the more likely they are to find the courses difficult to understand. According to Jhunjhunwala (cited in Bartholet, 2013), language and cultural issues are challenges to many Indian students’ comprehension of American MOOCs. Therefore, flexibility that allows students to adjust their learning to their everyday life and learning setting would make their learning more meaningful.

A low level of cultural translation or recontextualisation of MOOCs affects course management. Liyanagunawarderna et al. (2013) argue that cultural misunderstandings are likely to occur, especially in MOOC forum discussion. According to these authors, students can unintentionally make use of culturally embedded humour or expression and exclude learners that do not share their culture. Equally, students who are not highly competent in the course language, especially those that have learned that language informally, might unknowingly use slang expressions. This might hinder the understanding of other participants who are not from their regions. They might even innocently use inappropriate language. Distinguishing slang and formal language might be one of the difficulties encountered by foreign language learners, especially when informal learning has been a significant component of their language learning. It has also been noted that although cultural diversity is an invaluable resource in MOOCs, it might easily trigger the feeling of being offended for some students (Liyanagunawardern et al., 2013), even a clash of cultures (Severance & Bonk, 2013). That is why multicultural literacy and tolerance of different perspectives are critical ingredients for an effective discussion in such a diverse environment. Besides difficulties that might occur in MOOC learning, the disparity between these courses and local context and culture has also emerged as one of the potential hindrances to their uptake in foreign settings (Young, 2013; Sharma, 2013). Suspicion of foreign MOOCs, especially those imported to developing countries, is often triggered by the lack of empathic orientation in seeing the local problem. Claims that MOOCs open access to education in developing countries seem to be not supported by convincing evidence that pioneers understand the local situation. The lack of such evidence leads to criticism of neo-colonial attitudes (Sharma, 2013; Liyanagunawarderna et al., 2013). Hence, cultural translation enablers need to be an integral component of MOOCs if these courses have to accommodate learners who enrol from a broad diversity of cultural backgrounds.

While no one size can fit the entire global body of MOOC students, best practices help students to adjust to the course in ways that make sense to them. One of many such practices has been the translation of courses into foreign languages. According to Thrun (2012), Artificial Intelligence, which is the first MOOC he taught at Stanford University in 2011, was translated into 44 languages. According to the author, this translation was made by 2000 volunteers who were enrolled in this class. Another good practice toward cultural translation in MOOCs consists of starting local study groups or geographical clusters for collaborative learning (Blom et al., 2013). According to these authors, collaborative learning in such groups was required from
students enrolled at École Polytechnique Fédérale de Lausanne who took MOOCs offered by this institution. Such groups are also initiated in various Coursera courses. Alternatively, students might create study groups based on disciplines or fields of interest if the courses they are taking can be applied to various disciplines. For instance, knowledge and skills learnt from a course on entrepreneurship and innovation can be applied in the fields of education, computer science, business and others. For this reason, MOOC students who are employed as educators might want to study together and those who are employed in business likewise. Unlike translation into a foreign language which requires the intervention of a translator, who can be seen as a third person, the development of study groups based on geographical location or field of study requires engagement of students. The final practice discussed in this paper consists of including projects in a MOOC (McAndrew, 2013). Such projects can be designed in a way that requires students to find a solution to a real life problem. Cultural translation is enabled when students are given freedom to choose the problem in their respective societies. Implementing this practice is mainly the responsibility of the course designer.

The current study discusses MOOCs students’ and instructors/designers’ best practices that enable recontextualization/cultural translation of the courses. It investigates how activities oriented to solving problems in students’ respective societies are incorporated in MOOCs. It also probes how students make their learning relevant by learning through the language they are comfortable with and formulating study groups and/or geographical clusters for collaborative learning. Two research questions underpin the study:

- How were activities oriented to solving problems in students’ respective societies included in MOOCs?
- How did students make their learning relevant to their context?

### Research methods

I conducted this research as a multiple case study that involves a cross-case analysis (Thomas, 2011). The study is based on qualitative data collected from five Coursera courses. Table 1 lists the courses that I investigated.

To be able to collect relevant and detailed data from these courses, I enrolled in the courses and took them with full engagement, like other students that were committed to studying them. Prior to the data collection phase, I sought ethical approval for the study from the University of Leicester. After securing approval, I collected data using an observation protocol (Table 2) I had developed for this purpose. The data were gathered from MOOC lecture videos, weekly quizzes,
Exams and assignments as well as discussion forums. Focusing on lecture videos, weekly quizzes, exams and assignments enabled me to identify activities that provide students with opportunities to apply what they learned to finding solutions to problems in their respective settings. As for discussion forums, this is where I identified study groups for collaborative learning that had been created and the rationale behind their creation.

I aimed to maintain construct validity and reliability in my study. To this end, I applied Yin’s (2009) principles: using multiple sources of evidence, creating case study databases and maintaining a chain of evidence. Multiple sources consisted of the five courses as well as various course components discussed earlier: quizzes, final exams, assignments and discussion forums. I saved all the materials relevant to this study on two external hard drives for later reference. The folders that contain these materials on the two hard drives constitute the case study database. As for maintaining a chain of evidence, I used a cross-sectional reference to link the research problem, questions, research methods and evidence, from my introduction to my conclusion.

The courses I analysed in this study were delivered by various universities. To be able to engage in MOOCs, I selected the courses in which I was interested. This engagement with courses of interest to me reflects most students’ engagement with their courses. Since I wanted to approach cultural translation from a student’s perspective, I tried to simulate how students engage with courses, from the course selection to the course completion level. The more courses respond to students’ interest, the more students tend to engage with their learning. Had I not taken courses I was interested in, I might have dropped out before I had finished the courses, and my feeling about the courses would be unlikely to reflect that of other students who seriously engage in their learning. As an engaged student, I was a participant observer. Yin (2009) defines participant-observation as a mode in which the observer assumes various roles and actively participates in the phenomenon that is being studied (p. 111). He notes the researchers’ ability to see the reality from the point of view of someone who is inside the case study rather than external to it as one of the major advantages of participant-observation (p. 112). In my case, I could see cultural translation from the students’ point of view rather than from the perspective of an external commentator. Hence, interest-based engagement with the courses enabled me to sympathise with other course takers.

Findings

At least one study group was created based on geographical locations, languages and fields of study. There were two attempts to create study groups based on students’ age in IHTS. However, these initiatives were not successful. Some of the language-based study groups functioned in foreign languages I was not familiar with. To identify these languages, I used Open Xerox (http://open.xerox.com/Services/LanguageIdentifier), which is an online tool for language identification. The findings in this study are presented in the order the research questions were asked.

Research Question 1: How were activities oriented to solving problems in students’ respective societies included in MOOCs?

The five courses share various aspects, mainly similar video lectures, and in-lecture quizzes for formative assessment, weekly quizzes and forum discussions. However, there are disparities concerning how students are placed at the centre of some of these activities. In-lecture and weekly quizzes in all these courses were content-oriented. Similarly, the final exams for AIP, IHTS, ILTEI and CS focused on the content. However, LSIO and ILTEI incorporated reflective activities and projects that required students to apply the MOOC concepts and theories in their own settings and workplaces. How these two MOOCs included activities that are applicable in a diversity of students’ settings is detailed below.

The LSIO MOOC included innovation constraint diagnosis surveys in its activities. In these surveys, the student had to evaluate her/himself, the organization or school s/he works for or s/he got service from vis-à-vis innovation constraints at the individual, group, organizational, industry/market, society and technological levels. These evaluations were done using constraint diagnosis surveys developed by the instructor. Then, the student had to keep a copy of the completed survey to use it as a reference for reflective writing, which was submitted to peers for feedback. At least three peers provided feedback to this writing and other peer-graded assignments. To receive feedback from their peers, students had also to provide feedback to at least three classmates.

Moreover, the course had two tracks: a standard track in which students were not required to work on an innovative project, and a studio mastery track in which students had to complete
an innovative team project. The studio mastery track project deliverables were submitted for peer feedback across six stages. The project had to start in a team of three to six people. In the first stage, each team member suggested an innovation project to the team. Then, the team discussed and agreed on one project to work on and created a project design brief, which was the output at this stage. Considering the high rate of drop out in MOOCs, the instructor tolerated drafts of the projects done by only two people in subsequent stages. In the second stage, each individual student generated and shared 101 ideas on the group project. In the third stage, the teammates shared one another’s 101 ideas and distilled all this collection of ideas to formulate four solution concepts. Then, they defined each concept, presented the four concepts graphically and identified challenges and opportunities. In the fourth stage, each team member reviewed the feedback on their Stage 3 deliverable, chose the solution concept s/he personally thought was the best and completed a concept assessment worksheet that enabled her/him to evaluate the concept relative to the six categories of innovation constraint highlighted earlier. Then, s/he had to identify two most compelling constraints and devise strategies to mitigate them. In the fifth stage, the team came back together to determine the most promising of the four solution concepts they had formulated in Stage 3 and evaluated in Stage 4. Using a project prototype template developed by the instructor, the teams defined the information-generation experiments they would use in addressing remaining questions as they moved toward the execution of their project. The final stage had a video presentation of the entire project as a deliverable.

Similar to LSIO, ILTEI had reflective activities that the instructor referred to as personal learning assignments. These activities were student-centred in that they required students to reflect on how various course concepts apply to their lives. For instance, one of the personal learning assignments required students to think of a leader they worked with who was so inspiring that if s/he moved to another company the employee (the student) would use in addressing remaining questions as they moved toward the execution of their project. The final stage had a video presentation of the entire project as a deliverable.

ILTEI also had a practicum track that is comparable to LSIO’s studio mastery track. Each student that followed the practicum track was required to conduct three practical tasks in his/her setting or workplace and write a report on each of them. The first task required the student to identify two volunteers to participate in coaching sessions. The student assumed the responsibility of a coach with compassion and the volunteers were coachees. The student/coach had to ask coachees questions about their future dreams or ideal self (vision or hope), their current value and virtue (mindfulness), the person that helped them most become who they are (compassion) and their desired legacy, experience or achievement (playfulness). The coach would use such questions to maintain coachees in a positive emotional attractor state characterized by happiness, smile, energy or similar tipping points. Then the coach (the student) had to write an essay that reported how the coachees moved between Positive Emotional Attractor and Negative Emotional Attractor states, strategies used to bring the coachees back to the Positive Emotional Attractor state and the result of the conversation. The second task asked the student to interview ten to twenty people who were close in her/his life or workplace about the time s/he was at her/his best. Then, s/he had to look at the interviewees’ responses and identify recurring patterns as well as emotional and social intelligence patterns. Finally, s/he had to submit a report of at least 500 words on this activity. As for the third task, which was similar to the second one, it required the student to ask her/his colleagues at work to pinpoint the time in which they were proud of the organization or team as well as when they were at their best. Then, s/he had to identify recurring patterns or themes from the colleagues’ responses, which would constitute the elements of the shared vision for the organization or team. Based on these elements, the students had to draft a vision statement of at least 500 words for their organization or team.

Research Question 2: How do students make their learning relevant to their context?

In LSIO, students could take advantage of the freedom they were offered and choose projects that were relevant to their cultural settings. For this to happen, students would choose teammates from the same setting or ones who were familiar with that setting. Alternatively, students could work on a project that would be transferable to their jobs, or applicable to their fields of employment or study. This could be especially valuable for students interested in multicultural literacy development. Such students preferred to work in teams whose members were from various cultural backgrounds. It was possible to form project teams based on one of the two criteria or both. Similarly, students in ILTEI could choose coachees and interviewees from
their workplace or families. They could also choose volunteers among people who shared their professional interest. The freedom offered to students to choose their projects was a great enabler of cultural translation.

Students also made their learning relevant to their respective contexts through the way they engaged in the five MOOCs’ forum discussions. In this respect, they created informal study groups based on geographical locations, fields of study/work and languages. Table 3 summarises study groups in the five courses.

As indicated in Table 3, study groups based on geographical location generally dominated in IHTS, LSIO, ILTEI and CS, but they were only five in AIP. ILTEI and LSIO had a higher number of study groups based on geographical location than other courses: 41 and 40 groups respectively. This was probably because contributions in the forum discussions counted toward the overall grades in both courses. In addition to study groups based on geographical location, each of the five courses had study groups based on language. Study groups based on disciplines of work or study were created only in LSIO, AIP and ILTEI. The number of such study groups was far higher in LSIO than in the other two MOOCs: 14, 5 and 3 respectively. As for study groups based on students’ age, this was attempted only in IHTS. Two students started threads in attempt to discuss the content with peers of their age group: under 21 and under 16 respectively. However, these age-based threads could not attract other students: they received only three and five responses respectively.

**Discussion**

The way assignments and projects in LSIO and ILTEI were flexibly designed demonstrates that it is possible to tailor MOOCs to individual learners’ needs, in their own cultural settings. Project-based activities (McAndrew, 2013) constituted a significant component for students in the studio mastery track in the LSIO MOOC. In both LSIO and ILTEI, students could relate their learning to their everyday/professional life. The inclusion of tasks, activities and assessments that are relevant to various cultural and professional settings in courses is what can be termed diversely student-oriented design. Unlike teacher-oriented design in which students work on tasks conceived from the teacher’s perspective and setting, tasks in diversely student-oriented design are conceived from the learners’ perspective and can apply to various cultural settings. Student-oriented design can be considered narrow if only students from the teachers’ settings or other similar contexts can see a direct application of the course to their professional settings or everyday lives. However, in both LSIO and ILTEI, students from any cultural background could apply their learning in their specific settings. In other words, the student-oriented design was culturally diverse in the two MOOCs. In this way, the two courses were designed to allow a cultural translation (D’Antoni, 2007). In other words, students from various cultural backgrounds can adjust their learning to their own setting since they are given freedom to choose the project and beneficiaries of their work. The two MOOCs constitute good examples of how contextualisation (Wolfenden et al., 2012; Lane & Van-Dorp, 2011; Kanuka & Gauthier, 2012) can be achieved. As for AIP, IHTS and CS, opportunities for students to adjust their learning within their setting were limited. It should be noted, however, that the nature of some courses does not allow easy contextualisation for all settings. For instance, AIP and IHTS require students to be in a setting with high technological access and be familiar with at least basic computer and Internet technology to have a grasp of the application of the course concepts. Briefly, activities that enable students to solve real life problems in their respective settings can be included in MOOCs by designing for tasks, assignments and projects that can be made relevant to various settings and by offering freedom to students to choose

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Table 3: Rationale behind the creation of study groups in MOOCs
the setting of their projects and people they work with. This answers the first research question.

Students created study groups or teams for their project based on geographical locations, languages or professional disciplines. Unlike MOOC students enrolled at École Polytechnique Fédérale de Lausanne who were required to participate in collaborative learning groups limited to this institution (Blom, et al., 2013), study groups were not required in the five courses I investigated (except the LSIO project teams). LSIO had far more discipline-based study groups than other courses. This may have been catalyzed by the requirement to work in teams on the project for students in the studio mastery track. Many of these students might have preferred to team up with peers who shared their professional interests. With regard to study groups based on geographical locations, AIP had far less groups than other MOOCs. In AIP, only five geographical location-based groups were identified in the forum discussion. It should, however, be noted that collaborative learning in this course took place in many spaces including the discussion forum, the course wiki, twitter and the Second Life virtual world. These alternative discussion environments competed with the course discussion forum in attracting students’ interest. As for the language-based study groups, they were present in each of the five courses. Therefore, students made their learning relevant to their context by choosing and working on projects that were applicable in their own settings and by discussing the course materials with peers who understood their cultural context. This answers the second research question: “How do students make their learning relevant to their context?”

Concerns that MOOCs developed in Western societies might not suit other settings (Young, 2013) are partially true, but this is mainly an issue in the course design and students’ engagement. As discussed above, some MOOCs are designed to enable cultural translation at a high level, others are not. Equally, students create study groups to discuss MOOCs from their own perspectives. Some MOOCs might not be relevant to students in some settings. However, this tends to be an issue also for students who take other online and face-to-face courses developed elsewhere. This is especially the case when a course was not designed to accommodate students from a diversity of cultural backgrounds. In an earlier paper (Nkuyubwatsi, 2013), I highlighted that international face-to-face students may find their learning not relevant to their own setting, especially when their classes are not internationally diverse in terms of participants. In a class with only one international student, class discussions easily slip into local cultural realities and, therefore, unintentionally exclude the stranger student. Equally, instructors can easily design culturally embedded activities that do not accommodate the minority foreign student. Home students in classes dominated by their colleagues from a single foreign cultural background can have a similar experience. However, if the class cultural diversity is kept in mind in the design process, the course can appeal to all students, regardless of their backgrounds as demonstrated in LSIO and ILTEI.

As noted earlier, the embedding of cultural translation enablers might be quite difficult in some courses, depending on their nature and focus. However, designers of courses addressed to a multicultural audience who try their best to incorporate cultural translation enablers are more likely to provide a cross-cultural satisfaction towards their courses. AIP, IHTS, and CS could have embedded cultural translation enablers by giving students the opportunity to reflect, discuss and write on how the concepts in these courses apply to their respective settings rather than having all assignments structured from the instructors’ perspective. The application of artificial intelligence, the history, technology and security related to the Internet and competition in business can be explored in various settings. Giving students the opportunity to discuss these issues in their respective settings could have enabled them to reflect on problems that are of most concern to them. Therefore, keeping diversity in mind during the course design and stimulating students’ engagement in study groups, virtual and face-to-face, can make MOOCs and other courses addressed to international students relevant across cultural backgrounds. The closing statement of the LSIO professor reflects a diversity of mindset in course design:

So it surely is important to know that [sic] your constraints, in your context, using the language that matters to you. And so I’ve broken up the world in a way that makes sense in terms of teaching this stuff, but you need to break up the world in a way that makes sense in terms of implementing, in terms of getting the projects done that are important to you.

(ovens, 2013) [Quoted with permission]

The discussion of cultural translation needs to be viewed through a medium-strength lens, rather than a week or powerful one. As discussed earlier, courses developed in foreign settings tend to be rejected because there is the feeling of hegemony of Western education (Young, 2013; Sharma, 2013; Liyanagunawardena et al., 2013). Those who want to use MOOCs to transform lives of people in developing countries probably need to empathise...
with local stakeholders and demonstrate an understanding of local problems from local people’s perspective. Equally, openly licensing course materials to enable local practitioners to make them relevant and use them in the way that responds to their contexts will increase trust in MOOC providers who want to impact positively on lives of people in developing countries. At the other extreme, a radical rejection of MOOCs, simply because they are not home-made, limits educational exchange that could be beneficial to learners and educators worldwide. Diversity and multicultural learning experience tends to be richer in MOOCs and these two learning ingredients can be beneficial to students and teachers regardless of their location or cultural backgrounds. The good news for MOOCs and educational stakeholders across cultures is that embedding cultural translation enablers in a course makes it more relevant to students from a diversity of cultural backgrounds. This is a niche that educators and other stakeholders need to exploit to facilitate a cross-cultural and multi-directional exchange of knowledge, skills and expertise.

Conclusion

In this paper, I discussed cultural translation, the process of making courses relevant to students in their respective cultural settings, across five Coursera courses. In two of these courses, cultural translation was enabled by the inclusion of activities that required students to work on projects or tasks that were practical in their cultural settings. Students were given freedom to choose the setting and participants in their projects/assignments. Cultural translation was also assisted by student-created study groups based on geographical locations, languages and professional disciplines. These best practices indicate that MOOCs can be tailored to each individual learner regardless of her/his cultural setting, and require course designers to keep diversity in mind. They also call on students to learn collaboratively via informal study groups created for this purpose. While students in the five courses participated in such groups, only two of the five courses were designed to enable cultural translation. The lack of cultural translation was found to be an issue of course design rather than being a typical feature of MOOCs. Designers of courses addressed to internationally diverse groups can learn from the LSIO and ILTEI designs in order to accommodate all students. If enabling cultural translation is deliberately kept in mind in the design process and students engage in collaborative learning with their peers, the course can be relevant to students regardless of their cultural background.

Acknowledgement

I am deeply indebted to Professor David Hawkridge, Professor Gráinne Conole and the reviewers for their constructive comments on drafts of this paper.
References


