Int Rev Educ (2018) 64:221–239
https://doi.org/10.1007/s11159-018-9708-z

CrossMark

ORIGINAL PAPER

Perceptions of authority in a massive open online course: An intercultural study

Bjarke Lindsø Andersen[1] · Jaitip Na-songkhla[2] · Cathrine Hasse[1] · Norazah Nordin[3] · Helmi Norman[3]

Published online: 9 February 2018
© Springer Science+Business Media B.V., part of Springer Nature, and UNESCO Institute for Lifelong Learning 2018

Abstract Spurred on by rapid advances of technology, massive open online courses (MOOCs) have proliferated over the past decade. They pride themselves on making (higher) education available to more people at reduced (or no) cost compared to traditional university schemes and on being inclusive in terms of admitting vast numbers of students from all over the world. However, MOOCs tend to be tacitly based on the course designers' lifeworlds, which results in the sidelining of participants whose lifeworlds are different. The authors of this article highlight *culture* as an important but often overlooked aspect in the research on, and the design and running of MOOCs. They begin with a review of the role of culture in MOOCs research and find that it has been somewhat ignored. Next, they present a methodological framework – the culture contrast method – with which to approach the decisive role culture plays in MOOCs. Third, coming from differing cultural backgrounds, they apply the culture contrast method in a case study, contrasting

✉ Bjarke Lindsø Andersen
blan@edu.au.dk

Jaitip Na-songkhla
jaitipn@gmail.com

Cathrine Hasse
caha@edu.au.dk

Norazah Nordin
drnmn@ukm.edu.my

Helmi Norman
helmi.norman@ukm.edu.my

1 Danish School of Education, Aarhus University, Copenhagen, Denmark

2 Innovative Educational Technology Research Unit, Chulalongkorn University, Bangkok, Thailand

3 Universiti Kebangsaan Malaysia, Selangor, Malaysia

experiences, interpretations and perceptions of a particular MOOC. Their varying perceptions of how, when and why they experienced a presence of authority emerge as a consistent theme in their data. Through the analysis of their data, they distinguish between the MOOC as an assemblage, consisting of the online interface, the design and hardware they inhabit as course participants, and their respective lifeworlds as their local and situated different cultures. They argue that during the run of the course, lifeworld and assemblage collide and enact a cultural authority. This authority sets the benchmark for what is deemed proper practice within a particular MOOC and it gives preferential treatment to some participants rather than others, thus actually undermining the professed inclusiveness of the MOOC format.

Keywords massive open online course (MOOC) · MOOC design · authority · culture contrast · lifeworld · human–technology assemblage

Résumé Perceptions de l'autorité dans une formation en ligne ouverte à tous : étude interculturelle – Favorisées par les avancées rapides de la technologie, les formations en ligne ouverte à tous (FLOT) prolifèrent ces dix dernières années. Leur promotion vante leur accès élargi à l'enseignement (supérieur) pour davantage de personnes à un coût réduit (ou gratuitement) en comparaison des cursus universitaires traditionnels, ainsi que leur caractère inclusif grâce à l'admission en grands nombres d'étudiants du monde entier. Néanmoins, ces formations ont tendance à reposer implicitement sur le monde de leurs concepteurs, ce qui entraîne la mise à l'écart des participants issus d'univers différents. Les auteurs de cet article éclairent la *culture* en tant qu'aspect important mais souvent négligé dans la recherche menée sur ces formations, dans leur conception et réalisation. Ils passent tout d'abord en revue le rôle de la culture dans la recherche sur les FLOT et constatent qu'elle est quelque peu occultée. Puis ils présentent un cadre méthodologique, la méthode de la confrontation culturelle, qui permet d'approcher le rôle décisif de la culture dans les FLOT. Tous issus de divers horizons culturels, les auteurs appliquent ensuite cette méthode à une étude de cas, confrontant expériences, interprétations et perceptions d'une formation spécifique. Leurs perceptions variées quant au comment, au quand et au pourquoi de leur ressenti d'une présence de l'autorité apparaissent comme thème récurrent dans leurs données. En analysant ces données, ils établissent une distinction entre la formation en tant qu'ensemble constitué de l'interface en ligne, de la conception et du matériel qu'ils investissent à titre de participants, et leurs univers respectifs, à savoir des cultures distinctes locales et implantées. Ils avancent que pendant le déroulement de la formation, cet ensemble et leur vécu entrent en collision et instituent une autorité culturelle. Cette dernière établit la norme en matière de pratique jugée appropriée dans le cadre d'une formation donnée, et accorde un traitement de faveur à certains participants plus qu'à d'autres, sapant ainsi sérieusement l'inclusivité proclamée de la formule FLOT.

Introduction

The recent proliferation of Massive Open Online Courses (MOOCs) since 2008, when their first prototype was run,[1] has been associated with potentials for and promises of democratisation of access to education, scaleability and lowering of costs and increased globalisation (Koller 2012; Ferster 2014, p. 14; Knox 2016a, p. 55). However, most of the research literature concludes that the promises, ambitions and potentials of MOOCs have not in fact been fully realised. The reality has proven unable to live up to the ideals. For example, MOOCs have been reported to have dropout rates between 90 and 95 per cent (Ho et al. 2014; Perna et al. 2013). In addition, those who enrol are predominantly white males from the Western world, who already have an academic degree (Selingo 2014).

This article sets out to consider why there is such a gap between potentiality and reality, arguing that this may have something to do with *culture*. We find this approach relevant and worthy of investigation, because research and review articles rarely mention issues of cultural diversity as an explanation of why MOOCs struggle to fulfil their promises (e.g. Dillahunt et al. 2014; Haggard 2013). Through empirical analysis, we will argue that the collision of hardware, design and interface of the MOOC with participants' local lifeworlds creates a particular culture which has an important authoritative dimension. This new kind of authority is important because of the subtle way in which it guides the actions for learning and education, and – not necessarily intentionally – creates diversity with regard to for whom and in what ways MOOCs can be a beneficial and satisfying experience.

There are two types of MOOCs, *connectivist* or "cMOOCs", which are focused on a collaborative community, and *extended* or "xMOOCs", which are scaleable to vast numbers of participants. The former kind is more constructivist[2] and is about distribution of knowledge between nodes and peers in a loosely structured network. The latter, which feature the kind of structure used by today's major MOOC providers (such as *Udacity, Coursera, FutureLearn* and *edX*), are more tightly structured (Adams et al. 2014). Thus, in an xMOOC, the design could be said to embody a new type of "teacher" – in the shape of a grouped combination of software and interface intended to facilitate teaching and learning. An xMOOC typically consists of

> very structured content (divided into 6 to 10 units), video lectures, enhanced learning material and self-assessment (Ebner et al. 2014, p. 2).

[1] What is generally referred to as the first MOOC was a Canadian education course on networked learning entitled "Connectivism and Connective Knowledge (CCK08)". It was organised by Stephen Downes and George Siemens. Participants comprised 25 fee-paying students enrolled in Extended Education at the University of Manitoba (Canada) who were awarded credits for this course, as well as more than 2,200 online learners who were not charged any fees and did not earn any credits (Downes 2008).

[2] *Constructivism* refers to a body of learning theories (e.g. those of Jean Piaget, Lev Vygotsky and John Dewey) which assume that learning is about the individual's construction of knowledge rather than transmission of information (Anderson and Dron 2011).

Dutch educationalist Gert Biesta has raised concerns about what he terms the "learnification" of Western school systems, whereby teachers are reduced to facilitators for students' self-directed learning (Biesta 2010). In the discourse on MOOCs, this seems a relevant concern to the extent that MOOCs (both types) are organised around precisely such a principle of self-directed learning (Knox 2016a, p. 28), and the role of the teacher is therefore often overlooked or downplayed (Veletsianos and Shepherdson 2016, p. 214). We argue that the failure to take the teacher into account is not just a matter of failing to address the physically concrete instructor guiding students in a MOOC, but an issue which is actually closely linked to the different ways in which authority is perceived and recognised with respect to the diversity of lifeworlds among participants.

We draw on theoretical insights gained in the fields of sociomaterialism and posthumanism[3] which can contribute in valuable ways to research on MOOCs (Knox 2016b). These insights have certain implications: Instead of identifying the teacher as the discrete body of a single human being, we regard the functional entity of the "teacher" as being tightly connected to the cultural perception of the materiality of the MOOC, i.e. what a MOOC is made of. As such, we consider the MOOC and its interface an *assemblage*, an

> ad hoc groupin[g] of diverse elements, of vibrant materials of all sorts. Assemblages are living, throbbing confederations that are able to function despite the persistent presence of energies that confound them from within (Bennett 2009, pp. 23–24).

The interface and design of a MOOC are not dead matter, but alive and shifting as the MOOC is interpreted by its participants. In their interpretations and perceptions, participants are highly dependent on another factor, which we call the *lifeworld*. The term is borrowed from phenomenology.[4] For us, it denotes the situated cultural aspect of the encounter between a MOOC's design and its participants. The lifeworld is the world we live in, which we take for granted in our everyday lives. It is the pre-scientific world of experience which we are confident with and do not question (Zahavi 2003, p. 30).

Thus, what is usually referred to as the teacher, we think of as *distributed authority*, which is the collision of various situated lifeworld-guided perceptions of the MOOC's design and content, including features typical for MOOCs such as short videos with "talking heads", an interface based on symbols to be clicked, small assignments to be uploaded, social media-like discussion groups, etc.

[3] In a nutshell, *sociomaterialism* and *posthumanism* are recent lines of thought within the social sciences which highlight the role played by technology and materiality in the enactment of reality. As Tara Fenwick et al. write: "Sociomaterial studies try to reveal the minute dynamics and connections that are continuously enacting the taken-for-granted in educational events" (Fenwick et al. 2011, p. vii). See also Knox (2016a).

[4] Briefly, *phenomenology* is a philosophical position which is concerned with understanding how things appear for the consciousness from a first-person perspective. The constitution of a phenomenon is based partly on one's bodily sensory interaction with the world and partly on hermeneutics through one's culturally shaped frame of reference for interpretation. See also Gallagher and Zahavi (2008, p. 5).

Distributed authority is thereby not simply authority tied to humans, but, as noted by Ed Hutchins, distributed across human and non-human agency (Hutchins 1995).

Culture in massive open online courses

A thematic search (Imel 2011) using the terms "review", "MOOCs" and "culture" found only three relevant hits. Rachel Flamenbaum et al. discuss in an article how the global power of MOOCs provokes an elimination of local differences in culture (Flamenbaum et al. 2014). The second hit was a conference paper which reviews what makes a good MOOC design; setting cultural criteria in order to reach a functional MOOC design. These criteria include "video lectures must consider diversity in cultural values" and "be careful when using symbols such as food, animals and everyday objects" (Yousef et al. 2014, p. 46). Finally, the third hit is a blog post. In a discussion on teaching in a diverse cultural context, the author provocatively asks: "If you were to land today in a small town in India, Argentina, or South Dakota and have to start teaching one of your courses tomorrow morning, how well do you think you would do?" (Sharma 2013).

However, the notion of culture used in all three items is different from the one we employ here. We do not subscribe to the global-local binary that is often implicitly at play in the discussion of *culture*, as in the above articles; nor do we reduce culture to particularities of language or diversity in local tastes in food or clothing. In our discussion, culture is not automatically or stereotypically tied to nationality (Baskerville 2003). Rather, we define culture as virtual and physical local aspects that only emerge in analytical culture contrasts. Thus, culture simultaneously constitutes real experiences *and* an analytical implication (Hasse 2015). From this position, we set out to scrutinise a particular MOOC as a culture in itself and investigate how this culture is enacted through and by a human–technology amalgamation. In our analysis, this amalgamation highlights the role of the diverse local lifeworlds of the participants tied to, but not exhausted by, national cultures.

Questions addressing qualitative differences among MOOCs, such as "what impact does it have on the MOOC that participants are situated in diverse cultural contexts?" or "how can we benefit from the differing cultural backgrounds of MOOC participants?" are seldom raised in the research literature on MOOCs. MOOC designers may therefore risk neglecting the cultural diversity of participants. *Cultural diversity* can here be understood broadly as all relevant differences which are present in the particular meeting between a newcomer and an existing social space – in this case, the online space of the MOOC. Participants in MOOCs may have gained their experience with teaching and learning in different cultural lifeworlds that affect how they engage with the distributed human–technology authority of MOOCs.

Culture, as we use it here, is an analytical term used in anthropology to stress diversity in perceptions, beliefs, values and traditions tied to what is taken for granted as "common sense" in local human experience and learning (Rapport 2014, p. 57). It extends to how we perceive materiality and authority in diverse ways. *Authority* is to be understood as "more than advice and less than a command"

(Arendt 2006, p. 122). What is regarded as authority is relative to one's cultural values and is a form of belief shaped over time by the structures of education, class, material production and power (Bourdieu and Passeron 1990). Taken together, in the anthropological sense, this conglomerate – values, perceptions, and beliefs – over time constitutes the *cultural lifeworld* of people (Jackson 2005). In other words, what is considered more than advice and less than a command is a matter of culture. We will argue that these kinds of cultural diversities are often neglected in MOOC design, and, for that reason, MOOCs end up treating various participants differently because of their cultural backgrounds.

So, why is culture seemingly overlooked as an aspect of MOOCs? Even though a number of attempts have been made to establish guidelines and standards for practice, they rarely include culture (e.g. Morrison 2016). As has been argued e.g. by Neil Selwyn (2014), MOOCs, as a current trend in higher education, must be interpreted and aligned with a capitalist desire for profit, often resulting in increased instrumentalisation, marketisation and commodification of education. Due to the market-driven practices and the quest for sustainable revenue models, participants in MOOCs are considered in terms of quantity and scaleability rather than as qualitatively different individuals. In other words, the providers' main concern is what can be measured in numbers – how many participants have enrolled, how many have completed their course – and how to increase retention. Participants' backgrounds are, at best, a secondary concern which, to the extent that the question of origin is raised at all, is often illustrated in quantified heat maps[5] that do not consider actual cultural differences and their impact on learning and education, as noted by Jeremy Knox (2016a).

We must remember, as Jerome Bruner has argued in *The Culture of Education*, "that education is not *just* about conventional school matters like curriculum or standards or testing" (Bruner 1996, p. ix; italics in the original).

Individual learning styles are often placed at the forefront of learning design (of any course, not just MOOCs), thus neglecting the importance of cultural diversity in seemingly individual learning styles (e.g. Coffield et al. 2004). As ethnographic studies have shown, learning and education cannot be separated from each other and conceptualised as mere information processing or completion rates; they are always situated within a cultural context (Lave and Wenger 1991).

Methodology and theoretical framework

Our case study

Our research group consisted of an Asian-European collaborative team of five researchers (the five authors of this article), all tied to the Education and Research

[5] *Heat maps* are "graphical depictions of MOOC data [which] display darker hues according to higher instances of particular variables, and represent this information, not in a spherical globe, but rather on a flattened map of the world" (Knox 2016a, p. 68).

Hub for Lifelong Learning of the Asia–Europe Meeting (ASEM LLL Hub),[6] with the European region represented by two Danish researchers and the Asian region represented by one Thai researcher and two Malaysian researchers. The sample MOOC we chose was a generic course (i.e. a non-technical course) of the xMOOC type. Since our discussion concerns general issues, we have chosen to blur the actual content of the MOOC; suffice it to say that it dealt with cultural media issues and was provided by one of the major Western MOOC platforms.[7] The MOOC itself was taught by instructors who were native speakers of English. The MOOC was duration-based (i.e. not self-paced) and ran for a period of two weeks. According to the first week's introductory session, participants came from all over the world, including Rwanda, India, Mexico and South Africa.

The research was conducted as follows. We, the five members of our research team, all enrolled as participants in the MOOC. We began by writing a script for our participation, including guidelines for how to take notes of our own experiences following the activities of the MOOC. All researchers conducted online participant-observations in the MOOC, inspired by the approach of *virtual ethnography* (Hine 2015). Virtual ethnography pays particular attention to the relationship between everyday contexts in which the participants are situated and how this affects their experience of what is going on in an online space. In this way, we sought to remain focused on both the technological assemblage of the MOOC and our respective local lifeworlds. We asked each other to pay close attention to any aspect of the MOOC which could be considered as influencing our behaviour and guiding our actions, such as visual encouragements, nudging or things that made us curious. It was thus an explorative study where we had no fixed point for how and what to contrast in terms of specific content.

Observations and actions performed in the MOOC, as well as the emotions we felt, were systematically documented via screen recording and field notes. As we progressed, we became particularly aware of our emotional reactions and why we reacted in the ways we did. This narrowing of our focus was a result of weekly online meetings among the researchers, with the purpose of exchanging views and experiences as well as contrasting each other's experiences with the MOOC. Through these discussions, a research question was formed to guide the coding of our screen recordings and field notes:

> How do the different cultural backgrounds (of the researchers) influence the perceptions and interactions in the MOOC, and what guides them (the researchers) in this?

As a result of our approach, we ended up with a vast amount of relevant research data with many possibilities for exploring cultural contrasts and how participants

[6] According to its own website, "The ASEM LLL Hub, established in 2005, is an official network of Asian and European higher education institutions, working and learning together to achieve excellence in comparative research on lifelong learning, to offer research-based education policy recommendation, and to develop mutual understanding between Asia and Europe. It also facilitates researcher and student mobility and exchange within and between the two world regions." (http://asemlllhub.org/aboutus/ [accessed 17 January 2018]).

[7] Consent was obtained from instructors before the research was conducted.

engage with MOOCs. In the following, however, we will restrict our discussion to a couple of excerpts from our dataset.

Although we have data from all five authors, for the purposes of this article, we have chosen to focus on the experiences of two of us and to compare and contrast these in order to explore our analysis in depth. However, the excerpts we have chosen for inclusion here are representative of authority as a cultural issue, which is present across all of our data.

Culture contrast as method

Culture contrast is an approach which makes it possible to detect that what is present in one cultural context might *not* be present in another. It takes its point of departure from the anthropological recognition that while culture may have manifest components, it also always constitutes an analytical implication, where culture is both what we see and what we see with (Hutchins 1995). Before we discuss our own study, here is a brief example from where the method originated (Hasse and Trentemøller 2009). It was developed from comparing and contrasting the meanings of research findings in different cultural contexts without knowing beforehand *which* research findings would be generated from the diverse cultures.

The original study refers to a group of Danish and Italian researchers who had the overall aim of studying career paths of physicists. The study asked many questions regarding, for example, the physicists' own backgrounds. By contrasting a number of interviews with Danish and Italian physicists conducted by Danish and Italian interviewers, respectively, a number of unexpected and significant differences emerged (Hasse and Trentemøller 2009). Italian interviewees and interviewers found it perfectly self-evident to associate the concept of "family" with uncles and aunts, whereas these connections were absent in the Danish material and without any immediate reaction from the Danish interviewers. Neither of these findings were predicted before the research was carried out and only emerged by comparison with the absence of such associations in the Danish dataset. As such, cultural diversity was detected in terms of how Italian and Danish physicists were recognised as "good" physicists (Hasse and Sinding 2012).

This methodology is based on contrasting what is present in one dataset with what is absent in another. By applying this approach to our own case study, we were able to contrast cultural findings and discuss presence and absence of comments, surprises and frustrations. Table 1 shows three different themes which emerged when we started comparing and contrasting the data our two sample participants had

Table 1 Examples of contrasts

Participant 1	Participant 2	Emerging themes
- Expecting to guide oneself	- Expecting teacher guidance	Expectations of guidance
- Decisive in actions	- Hesitant in actions	Pace in actions
- Focused on physical surroundings	- Focused on the interface	Focus and attention

recorded on their experiences with the MOOC. The table illustrates some of the absences and presences that emerged from our ethnographic research of the MOOC. In the following empirical analysis, we will focus on authority as a theme.

Tertium comparationis and the pitfall of stereotypes

A study such as this one undoubtedly runs the risk of being guided by certain more or less reflected stereotypical preconceptions regarding what to expect from members of "the other culture", and how they behave; the Malaysian authors may have certain preconceived ideas of how the Danish authors behave and vice versa. The ultimate pitfall is to let such stereotypes remain throughout the process as an implicit hypothesis which one seeks to verify throughout the project. Stereotypes are defined as "views that members of one nation hold of those of another nation, or its culture" (Minkov 2012, p. 47). In this study, we do not see stereotypes as something one can simply decide to abandon, and we have therefore coped with them in a constructive manner through our research design.

The method of culture contrast explicitly refrains from defining a *tertium comparationis* as is common in cross-cultural studies.[8] *Tertium comparationis* marks a common platform of comparison: a context-free, universal category which is believed to apply as a frame of reference in all situations (Connor and Moreno 2005). It is at play when

> a generalized category, as a tertium comparationis, is identified and tested in two (or more) different cultural settings (Hasse and Trentemøller 2009, p. 47).

In our case study, such a *tertium comparationis* could have been, for example, language or activity level, which we would then have predefined as our shared focus. However, relying on such a shared focus would have encouraged us to generate stereotypical ideas and would also have made us implicitly rely on our stereotypical assumptions of the other.

> Instead, the culture contrast method allowed us to show how patterns of connections can be contrasted and thus made explicit leading to new and surprising challenges of the researcher's emic[9] categorisations (ibid., p. 46).

In other words, language might have emerged as being the focus of our analysis, but only if it took us by surprise when examining each other's data. This focus would, however, not have been pre-defined. Nor did we identify the MOOC's culture as distributed authority across technology and humans as a *tertium comparationis* beforehand. The aspect of *authority* only gradually became a focus as we discussed the course in our research group – realising that we had different perspectives on what an authority is and should do.

[8] The Latin term *tertium comparationis* generally refers to something which two things that are being compared have in common.

[9] The distinction between emic and etic concepts refers to the difference between concepts that are meaningful to the actor in the field ("inside"), these are called *emic*; and concepts which are applied as analytical tools in the analysis (from the "outside"), these are called *etic* (Morris et al. 1999).

Empirical analysis

Case 1: How to introduce oneself?

The first contrast we identified was in the accounts of the MOOC's first activity: Introduce yourself. In MOOCs, it is common practice that participants are asked to introduce themselves. Examining our notes, we saw a difference in our accounts; of how we brought our perceptions of a classroom instructor with us to this activity, and our ideas of how an introduction should and should not be made. For Participant 2, considerations concerning the importance of status as related to age and "face" are brought into the MOOC. As noted:

> "Thai always have a smile on the face: To be an adult in a good manner, one will keep a smile on the face." (Participant 2)

Furthermore, Participant 2 observed how people from Asian countries are understood to have some considerations on how to present oneself which are absent from Participant 1's notes. We found the latter to be more seamlessly in line with the instructions. In the notes, Participant 1 states:

> "Many have introduced themselves, but only few have said 'welcome' or commented on others' introduction. […] I commented on John, or whatever his name was, and asked him what his expectations of the course are. I put myself in the position of one who says 'welcome'. Do I become a kind of host to the others?" (Participant 1)

Upon reflecting on the "exercise", Participant 1 threw himself into the task, playing an active role without considering "losing face" like Participant 2 did. It is not because he did not pay attention to how the other course participants might perceive him, but rather that his considerations were related to how far he could go in assuming the role as a "host" himself by welcoming the others. This approach directly collided with the experience of Participant 2, because in the lifeworld of Participant 2, not being able to detect the age and status of the participants via the interface of the MOOC can be a problem:

> "In a traditional face-to-face first meeting, participants are welcome to introduce themselves to others. That will be a little bit awkward for some people in a MOOC, who might have a status that needs to be addressed." (Participant 2)

Participant 2 also notes that "one still has face to maintain, even online". Through this example, it becomes evident how the same interface can be interpreted in various ways because of the diverse lifeworlds participants bring with them. Consequently, the sum of different lifeworld-guided interpretations of this particular task constitutes the MOOC as a cultural site. Moreover, since the MOOC's design defines the parameters of engagement, this culture is authoritative. It deems some participants to be in line with the MOOC's assemblage while others are not, because they cannot find their own lifeworld expectations represented or met by the

interface; e.g., there are no options for stating your age. In the design of the MOOC as a learning environment, there is, tacitly, a right and a wrong way to engage with the required tasks already envisioned by the human-technological team creating the MOOC and embedded in their cultural lifeworlds. While they, for instance, expect participants to be active, through our application of the culture contrast method, we also found unexpected barriers to who can engage and how. In the notes on this activity, Participant 1 commented on a couple of other participants. Participant 2 remained silent and did not engage with others; not due to lack of engagement, but because of cultural barriers.

From this initial contrasting of our notes on the first activity in the MOOC, we can already tell that the participants' lifeworlds affect how they approach and inhabit the technological assemblage of the MOOC. They approach it in widely different ways and, at least for the one participant, we identified explicit reflections on how this is linked to cultural practices inherited in the locally situated lifeworld. In the next section, we will shed some light on how both the course content and the interface encompass features which, culturally, give preference to certain participants.

Case 2: Picking two films

The next example is also from the first week of the MOOC and it was the fifth task. Participants were asked to go to a resource site and pick a film to work with. Here, we again contrast the notes of Participants 1 and 2. In Table 2, we provide a

Table 2 Synoptic view of contrasts

Participant 1	Participant 2
"It contains a link to an external website. The exercise is just text. It says that the external website, the blacklist-site,* offers more than 100 movies for free. Popular movies. We will use it throughout the course. I think: Do I have to find something then? Hmm. I don't really bother. Well, I click the link. New tab opens. I scroll down and look. It is movie covers. I find *Boyhood*. I have seen that one. It was good. I also pick *American Sniper*. Never seen that one, but looks like an action movie"	"One hundred movies in the blacklist website; I don't think the list is sorted by title. Even though it was sorted by title, it is still difficult to browse through the displayed names in a format of graphic movie posters […]. I realize that there's a culture difference, especially in the films. Not much flexibility and support to me in terms of variety in choice of movies. This is not an international film website!" "Finally, I chose *Monsters University*. It was a long time since I saw it. My son was still little. It is the only choice I have for the instruction, 'choose one you're familiar with'. Vaguely, I remember the scene, but I'm not confident going through the movie […]. I feel frustrated that there's no choice of a movie I ever saw, so I can't effectively achieve the assignment. Let's take a deep breath before diving into this challenging instruction"

*The blacklist was a blog linked to by the MOOC instructor. It was a repository of 100 manuscripts which MOOC participants could freely access. They were used as a teaching resource throughout the course

synoptic reading format where the two participants' notes on the same task can be compared.

We will now use this example to highlight the differences and relations between the MOOC as assemblage, the different lifeworlds folding into this assemblage, and lastly to demonstrate how the combination of this assemblage with the participants' different lifeworlds enacts the cultural authority of this MOOC.

In both of the excerpts shown in Table 2, we see references to aspects of the assemblage. Participant 1 is largely guided by the assemblage and has a reflexive and seemingly smooth relationship to it. He runs through the purely text-based exercise, moves on to the link to the external website and utilises his own browser and mouse to carry out the intended actions, clicking and scrolling back and forth. The technology mediates his experience of the assemblage and, as we can judge from the notes, he responds to the instructions without hesitation, his actions are in alignment with the MOOC designer's intentions. He seems at home in this mainly Western universe of films, even if many of them are unfamiliar.

If we look at how the assemblage is at play in the notes from Participant 2, a different pattern emerges. First, Participant 2 explicitly notices the same fact as Participant 1; there are more than 100 films to choose among. However, the quantitative amount does not seem to impress her. From that point onwards, her reception of the assemblage and the engagement with the MOOC as well as its instructions diverge from that of Participant 1. First, uncertainty as to whether the films are in alphabetical order is expressed, and subsequent problems in navigating the website are evident. Participant 2 does not consciously take note of the fact that she has been directed to an external website, even though this is the likely cause of her problems with navigation. The amount of support in terms of pedagogical considerations which are provided on the course's own website is not the same as the amount offered or built into the external site of the blacklist, to which she was ushered through a link from the internal MOOC platform.

Comparing and contrasting these readings of how the assemblage unfolds, it becomes evident that, while Participant 1 completed the assigned task with assured ease, an equal amount of unassuredness made the task troublesome for Participant 2. These diametrical experiences occurred despite the fact that the website was new to both of them and that they were both only familiar with one of the listed films. However, such analytical judgements are only possible by contrasting the two experiences so that one can serve as a backdrop for reading the other. If Participant 2 had expressed similar confidence regarding the assignment, Participant 1 would not have stood out as seeming particularly confident, and vice versa. The frustration or confidence of the one can only be identified by comparing and contrasting with the other – and in relation to how the participants responded to the demands of the MOOC.

The next aspect of our analysis is the lifeworld. As already defined, it addresses our everyday taken-for-granted assumptions of how the world works. Participant 1 states

> "I think: Do I have to find something then? Hmm. I don't really bother. Well, I click the link". (Participant 1)

The quote clearly marks the participant's expectations of what he is supposed to do – as well as a lack of educational discipline, which becomes apparent through contrasting it with Participant 2's diligent determination to complete the assignment despite frustrations. Participant 1 then picks a first film, *Boyhood*, which he is familiar with and which he liked. One might say that the familiarity of the content drives him to continuing instead of giving in to his lack of discipline; had he not found something he knew, he may well have quit – at least to judge from his level of engagement. However, there is an alignment between the MOOC and his lifeworld, and this encourages him to continue.

He recognises a particular culturally shaped authority embedded in the MOOC assemblage. His existing knowledge about the content he is faced with in the MOOC makes him respond to the demands of the MOOC in ways that show familiarity. The second film he chooses, *American Sniper*, is a film he has not watched, but he is familiar with the genre (American action films). As such, although he is not familiar with the actual film, he expresses a familiarity; he knows what to expect. If we take a closer look at Participant 2's notes, again we see how connections are made with the local lifeworld. In the first excerpt, the connections to the lifeworld are marked by an absence:

> "Not much flexibility and support to me in terms of variety in choice of movies." (Participant 2)

Participant 2 is not aligned with the MOOC's cultural demands and does not find the (predominantly Western) movies familiar. There is a lack of points where this participant can establish a connection between her own local, familiar frame of reference and the choices available in the MOOC. This lack of familiarity ultimately causes a sense of alienation which is later soothed because a peripheral connection becomes established. The participant chooses a film which she vaguely recalls having watched with her son. Her private life – an integral part of the situated lifeworld – thereby serves as a point of (re-)connecting with the content of the MOOC. However, the film – *Monsters University* – was not chosen as one among a number of options, but as the only option, leading to her final remark on the assignment:

> "I feel frustrated that there's no choice of a movie I ever saw, so I can't effectively achieve the assignment." (Participant 2)

Frustration does not just result from the lack of choice, however, but also from being given an "impossible" task by the MOOC assemblage.

The final analytical point we would like to highlight here concerns the aspect of culturally shaped authority. The authority does not exist before participants inhabit the MOOC. Instead, the authority only *emerges as a result* of the collision of participants' lifeworlds and the assemblage of the MOOC. Some participants adhere easily to an instruction, others struggle to interpret it. The authority in a MOOC develops "on the go" through the alignment of the different lifeworlds that inhabit

the assemblage; that is, the authority is a relational phenomenon. The educationalist and philosopher Charles Bingham has argued that the most prevalent explanations of educational authority "make a fairly primitive ontological[10] presumption regarding authority. They presume that authority is a thing" (Bingham 2009, p. 4). What Bingham pursues is a concept of authority that pays attention to its relational character. Authority emerges through relational practices and cannot be eliminated or discarded: "As soon as there is a relation between human beings, there is authority" (ibid., p. 12). Although Bingham convincingly argues for the relational character of authority, he, too, overlooks the cultural, material and technological conditioning of authority, and his concept of authority therefore suffers the pitfall of placing human beings in a privileged ontological centre.

Through our empirical analysis of experiential sequences from a MOOC, we have shown how the demands that form part of the course's design and structure are interpreted and perceived differently in relation to the different lifeworlds of the participants. The varying perceptions result in the enactment of a particular kind of authority that shapes the culture of the specific course. This authority includes some participants and excludes others. Some struggle to meet the demands, while others can barely motivate themselves. These outcomes are all due to the relation between lifeworld and assemblage, but their specificity only becomes evident when we contrast them with one another.

Discussion and conclusion

In this analysis, we have highlighted particular human–computer interactions to demonstrate that culture is at play even at this basic level. The assemblage has come into being through the work of designers and instructors, who each have certain assumptions in mind about the course participants, while the participants have certain expectations of what a course looks like and how it will work for them. The actions undertaken in the MOOC determine how the final authority is configured. However, it becomes clear that the way the in which course and its demands are experienced varies from participant to participant. We argue that this is due to our different situated lifeworlds. In practice, these different ways of inhabiting the assemblage of a MOOC result in differential treatment, where some participants thrive because their lifeworlds are more directly aligned with those of the designers and instructors, while others are sidelined because their lifeworld experiences do not fit as smoothly into the course. Such a judgment can be made after undertaking an analysis of culture contrasts, where it becomes obvious that these differences exist – even in the most basic tasks such as introducing oneself and picking two films.

Cultural diversity emerges in contrast. For Participant 2, it was a challenge to decipher the cultural authority of the demands made by the MOOC, as it diverged from the expectations of her local lifeworld. The cultural authority was therefore experienced as compromising her acquisition of the content and her participation in general. Only through comparison with the other participant does it become evident

[10] The term *ontology* refers to philosophical discussions of "being".

that expectations, perceptions of form and content as well as the authority you adhere to are a result of cultural dispositions. It is not through the MOOC itself that one becomes aware of this, but through the analytical comparison of one's own experience with another's account of theirs. Discovering these divergences in cultural dispositions holds potential for learning how to create culturally sensitive MOOCs. To create a MOOC that is sensitive to cultural diversity requires a configuration of the assemblage that is able to adapt constructively to the differences in the participants' lifeworlds. In this particular case, the cultural authority of the MOOC appears to have ignored the cultural diversity of its participants, and therefore overlooked the chance to enhance everyone's learning experience. Instead, this MOOC's assemblage seems to have been largely unaware of this diversity and treated the students as an undifferentiated mass.

Many proponents of MOOCs tend to assume that participants participate on the same footing and comprise a unitary "mass" (Knox 2014). This assumption implicitly also means that there is no need for differentiation in the way the activities are formulated, the way the the interface is structured or the resources chosen. That this assumption is problematic, and in our case, in effect gives preference to certain participants, has become evident in our example.

Through the method of culture contrast, we can also note points where participants converge, regardless of national cultural backgrounds (e.g. when all struggle to prioritise the MOOC). We also acknowledge that, in our research, all participants share the cultural lifeworld of academics, albeit in different local settings. These additional accentuations only go to show that many more culture contrasts could be explored, including issues of class and gender background, for example, which may all affect how students view the "teachers" embedded in the technological demands of the assemblage.

We believe that the potential of learning through MOOCs goes far beyond what any human instructor or technological assemblage could predict, and that MOOCs should therefore be more flexible and facilitate a space for all kinds of learners with different cultural backgrounds. Some participants may be able to supplant the authority that would otherwise be culturally established (and not let themselves be intimidated) if it is not aligned with their lifeworld and try to find a space for themselves, waiting, exploring and seeking like-minded virtual coursemates. However, all MOOCs could include a space for learners where they could negotiate their learning choices under the authority of the MOOC; e.g., finding the right course mates to work with (to engage in what educationalist Lev Vygotsky [1978] termed "peer learning").[11] If the dream of the MOOC as a genuine global educational space is to be reached, we suggest that designers should cater far more for participants' various cultural backgrounds and explicitly address this aspect of diversity along with the content of the MOOC.

There is no doubt that, in the case of MOOCs, cultural diversity will remain a key aspect in the future, because the imperative of being "open" can also potentially create a diversified online space. Yet, there remains a tendency in existing research to unify and homogenise the students into clusters dependent on their pattern of

[11] For an interpretation of Vygotsky's concept, see for instance Bruner (1996).

engagement or activity (e.g. lurkers, drop-ins[12] and participants) (Knox 2016a, p. 96). Not only does this stratification neglect cultural differences, it also re-enforces and subjectivates the participants into certain normative categories, which do not do justice to the actual struggle to meet MOOC demands, partly caused by their cultural background. Due to their cultural dispositions, some participants adhere to a differently configured authority, which may put them in a different category (e.g. "lurker"), despite their highly-motivated zest for learning. It is this zest that MOOCs should aim to identify and nurture. Yet, as the MOOC was perceived by us in our ethnographic accounts, the implicit cultural norms reigned supreme, both in the interface design, the demands and the content of the curriculum. The interface and content of current MOOC assemblages and their authoritative demands are not innocent, but appeal more to certain cultural lifeworlds than others.

References

Adams, C., Yin, Y., Vargas Madriz, L. F., & Mullen, C. S. (2014). A phenomenology of learning large: The tutorial sphere of xMOOC video lectures. *Distance Education, 35*(2), 202–216.

Anderson, T., & Dron, J. (2011). Three generations of distance education pedagogy. *The International Review of Research in Open and Distributed Learning, 12*(3), 80–97.

Arendt, H. (2006). *Between past and future: Eight exercises in political thought*. Harmondsworth: Penguin Books.

Baskerville, R. F. (2003). Hofstede never studied culture. *Accounting, Organizations and Society, 28*(1), 1–14.

Bennett, J. (2009). *Vibrant matter: A political ecology of things*. Durham: Duke University Press.

Biesta, G. J. (2010). *Good education in an age of measurement: Ethics, politics, democracy*. Abingdon and New York: Routledge.

Bingham, C. (2009). *Authority is relational: Rethinking Educational Empowerment*. New York: SUNY Press.

Bourdieu, P., & Passeron, J.-C. (1990). *Reproduction in education, society and culture*. London: Sage.

Bruner, J. S. (1996). *The culture of education*. Cambridge, MA: Harvard University Press.

Coffield, F., Moseley, D., Hall, E., & Ecclestone, K. (2004). *Learning styles and pedagogy in post-16 learning: A systematic and critical review*. London: Learning and Skills Research Centre London.

Connor, U., & Moreno, A. I. (2005). Tertium comparationis: A vital component in contrastive research methodology. In P. Bruthiaux, D. Atkinson, W. G. Eggington, W. Grabe, & V. Ramanathan (eds), *Directions in applied linguistics: Essays in honor of Robert B. Kaplan* (pp. 153–164). Clevedon: Multilingual Matters.

Dillahunt, T. R., Wang, B. Z., & Teasley, S. (2014). Democratizing higher education: Exploring MOOC use among those who cannot afford a formal education. *The International Review of Research in Open and Distributed Learning, 15*(5), 177–196. Retrieved 8 January 2018 from http://www.irrodl.org/index.php/irrodl/article/view/1841.

[12] A "lurker" is someone who observes others without making his/her presence known. In the context of MOOCs, lurkers "are the majority of xMOOC participants, where people enroll but just observe or sample a few items at the most. Many of these students do not even get beyond registering for the MOOC or maybe watching part of a video" (Hill 2013). "Drop-ins", according to Phil Hill (ibid.), "are students who become partially or fully active participants for a select topic within the course, but do not attempt to complete the entire course. Some of these students are focused participants who use MOOCs informally to find content that help them meet course goals elsewhere."

Downes, S. (2008). Places to go: Connectivism & connective knowledge. *Innovate: Journal of Online Education, 5*(1), Article 6. Retrieved 17 January 2018 from http://nsuworks.nova.edu/cgi/viewcontent.cgi?article=1037&context=innovate.

Ebner, M., Lackner, E., & Kopp, M. (2014). How to MOOC?—A pedagogical guideline for practitioners. In I. Roceanu (Ed.), *Let's build the future through learning innovation! Proceedings of the 10th International Scientific Conference "eLearning and Software for Education*", held 24–25 April 2014 in Bucharest (vol. 1, pp. 215–222). Bucharest: Editura Universitatii Nationale de Aparare "Carol I". Retrieved 8 January 2018 from https://www.openeducationeuropa.eu/sites/default/files/asset/How-to-MOOC-A-pedagogical-guideline-for-practitioners.pdf.

Fenwick, T., Edwards, R., & Sawchuk, P. (2011). *Emerging approaches to educational research: Tracing the socio-material*. Abingdon: Routledge.

Ferster, B. (2014). *Teaching machines: Learning from the intersection of education and technology*. Baltimore, MD: Johns Hopkins University Press.

Flamenbaum, R., Buyandelger, M., Downey, G., Starn, O., Laserna, C., Kelkar, S., et al. (2014). Anthropology in and of MOOCs. *American Anthropologist, 116*(4), 829–838.

Gallagher, S., & Zahavi, D. (2008). *The phenomenological mind*. Abingdon: Routledge.

Haggard, S. (2013). *The maturing of the MOOC: Literature review of massive open online courses and other forms of online distance learning*. London: Department for Business Innovation and Skills (BIS).

Hasse, C. (2015). *An anthropology of learning*. Dordrecht: Springer.

Hasse, C., & Sinding, A. B. (2012). The cultural context of science education. In D. Jorde & J. Dillon (Eds.), *Science education research and practice in Europe* (pp. 237–252). Rotterdam: Sense Publishers.

Hasse, C., & Trentemøller, S. (2009). The method of culture contrast. *Qualitative Research in Psychology, 6*(1–2), 46–66.

Hill, P. (2013). Emerging student patterns in MOOCs: A graphical view. *e-Literate* [blog post 6 March]. Retrieved 16 January 2018 from https://mfeldstein.com/emerging_student_patterns_in_moocs_graphical_view/.

Hine, C. (2015). *Ethnography for the Internet: Embedded, embodied and everyday*. London: Bloomsbury Publishing.

Ho, A. D., et al. (2014). *HarvardX and MITx: The first year of open online courses, fall 2012–summer 2013*. HarvardX and MITx Working Paper No. 1. Cambridge, MA: HarvardX and MIT Office of Digital Learning. Retrieved 8 January 2018 from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2381263.

Hutchins, E. (1995). *Cognition in the wild*. Massachusetts: MIT Press.

Imel, S. (2011). Writing a literature review. In S. Rocco & T. Hatcher (Eds.), *The handbook of scholarly writing and publishing* (pp. 145–161). San Fransisco: Jossey-Bass.

Jackson, M. (2005). *Existential anthropology: Events, exigencies and effects. Methodology and history in anthropology*. Oxford: Berghahn Books.

Knox, J. (2014). Digital culture clash: "Massive" education in the *E-learning and digital cultures* MOOC. *Distance Education, 35*(2), 164–177.

Knox, J. (2016a). *Posthumanism and the massive open online course: Contaminating the subject of global education*. New York: Routledge.

Knox, J. (2016b). What's the *matter* with MOOCs? Socio-material methodologies for educational research. In H. Snee, C. Hine, Y. Morley, S. Roberts, & H. Watson (Eds.), *Digital methods for social science* (pp. 175–189). London: Palgrave MacMillan.

Koller, D. (2012). What we're learning from online education. TED Talk. TED Global [online resource]. Retrieved 8 January 2018 from https://www.ted.com/talks/daphne_koller_what_we_re_learning_from_online_education.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, UK: Cambridge University Press.

Minkov, M. (2012). *Cross-cultural analysis: The science and art of comparing the world's modern societies and their cultures*. Los Angeles: Sage Publications.

Morris, M. W., Leung, K., Ames, D., & Lickel, B. (1999). Views from inside and outside: Integrating emic and etic insights about culture and justice judgment. *Academy of Management Review, 24*(4), 781–796.

Morrison, D. (2016). MOOCs desperately seeking quality. *Online Learning Insights* [blog post 26 February]. Retrieved 8 January 2018 from https://onlinelearninginsights.wordpress.com/2016/02/26/moocs-desperately-seeking-quality/.

Perna, L., et al. (2013). *The life cycle of a million MOOC users*. Presentation presented at the MOOC Research Initiative Conference held 5–6 December 2013 at the University of Texas at Arlington, TX. Retrieved 8 January 2018 from http://www.gse.upenn.edu/pdf/ahead/perna_ruby_boruch_moocs_dec2013.pdf.

Rapport, N. (2014). *Social and cultural anthropology: The key concepts*. London and New York: Routledge.

Selingo, J. J. (2014). *MOOC U: Who is getting the most out of online education and why*. New York: Simon and Schuster.

Selwyn, N. (2014). *Digital technology and the contemporary university: Degrees of digitization*. London: Routledge.

Sharma, G. (2013). A MOOC delusion: Why visions to educate the world are absurd. *The Chronicle of Higher Education, World Wise* [blog post 15 July]. Retrieved 8 January 2018 from https://www.chronicle.com/blogs/worldwise/a-mooc-delusion-why-visions-to-educate-the-world-are-absurd/32599.

Veletsianos, G., & Shepherdson, P. (2016). A systematic analysis and synthesis of the empirical MOOC literature published in 2013–2015. *The International Review of Research in Open and Distributed Learning, 17*(2), 198–221.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Yousef, A. M. F., Chatti, M. A., Schroeder, U., & Wosnitza, M. (2014). What drives a successful MOOC? An empirical examination of criteria to assure design quality of MOOCs [conference paper]. In *Advanced technologies for supporting open access to formal and informal learning*. *Proceedings of the IEEE 14th international conference on advanced learning technologies, ICALT 2014*, held 7–9 July in Athens, Greece (pp. 44–48). Washington, DC: Institute of Electrical and Electronics Engineers (IEEE) Computer Society.

Zahavi, D. (2003). *Fænomenologi [Phenomenology]*. Roskilde: Roskilde Universitetsforlag.

The authors

Bjarke Lindsø Andersen holds a master's degree in Education Science and is currently a PhD Fellow at the Danish School of Education, Aarhus University. Bjarke has given talks internationally and published about entanglements of technology in education. His current research concerns the organisational implications of moving from traditional teaching to online modes of teaching at university level. A central topic in this regard is how teachers and support staff co-work in order to make sense of what technology means to teaching practices. Beyond his research, Bjarke has experience with teaching both online and offline at local and global scales.

Jaitip Na-songkhla is currently Department Chairwoman of Educational & Communication Technology, Faculty of Education, Chulalongkorn University. She plays a leading role in Thailand's educational technology as the Director of the Innovative Educational Technology Research Center and is widely known for the best practice of e-Learning for an entrepreneur training programme. Her research areas of e-Instructional Design include learners at all stages from K12 and Higher Education to Professional Development and mature learners, as well as topics such as Open Learning, Electronic Performance Support and Teachers' e-Coaching System, Mobile/Ubiquitous Learning, Mixed Reality, and Learning Technology for the Aging. She also currently chairs a sub-committee working on a National Digital Learning Platform for Thailand 4.0 within the framework of a National Education Reform.

Cathrine Hasse is a professor at the Danish School of Education, Aarhus University, Denmark. She has many years of expertise in studying learning, innovation and culture in organisations with a special focus on technology as well as on universities as workplaces. Her training as a an anthropologist is supplemented with a PhD (2000) which crossed over between cultural psychology and anthropology. Her main research interest is now centred on the relation between learning (especially posthuman learning), culture and technology. She is the author of Danish and English books on learning, education and

methodology, and has a large number of international as well as Danish peer-reviewed journal articles in her portfolio. She is also an active conference speaker and a member of many academic publication and research boards.

Norazah Nordin is a Professor of ICT in Education and is currently the Dean of the Faculty of Education, Universiti Kebangsaan Malaysia (UKM). Her research areas include Mobile Learning, Integrating ICT in Education and Lifelong Learning, and Instructional Design in Online Learning. At the national level, she is a committee member of the Critical Agenda Project (CAP) (E-Learning), Ministry of Education, Malaysia and also a member of the Council of Malaysian Public Higher Education Institutions e-Learning Coordinators. Her latest projects with the ministry include the development of a prototype of Massive Online Open Courses (MOOCs) and its guidelines; development of the Blended Learning Standard and Rubrics and review of the National e-Learning Policy. She is also one of the co-founders and the Honorary Secretary of the Mobile Learning Association of Malaysia. At the university level, she is a member of the UKM ICT Council, which is responsible for promoting Mobile Learning, Blended Learning and Flipped Classroom teaching at the university. Her current projects are iTunesU and iBook initiatives with Apple Education Development, Malaysia.

Helmi Norman is currently a Senior Lecturer and Assistant Dean of Teaching and CITRA Center at the Faculty of Education, Universiti Kebangsaan Malaysia. His research interests are in the areas of mobile and ubiquitous learning as well as open and distance education. He is currently a member-at-large on the board of directors of the International Association for Blended Learning. Previously, he was appointed as a visiting scholar at the Swartz Center for Computational Neuroscience, University of California San Diego, USA and was awarded a visiting post-doctoral fellowship by Erasmus Mundus at the Faculty of Science and Technology, Bournemouth University, United Kingdom. He is also an educational technology consultant for Apple where he is involved in primary, secondary and higher education projects.