MOOCs in the Arts and Humanities: What are the issues?

Stamenka Uvalić-Trumbić & Sir John Daniel

Introduction

John Daniel

Thank you for inviting us to this interesting symposium on MOOCs in the Arts and Humanities. It is a special pleasure to be in Preston. Sixty years ago I spent part of my childhood living in the Pendle area between Burnley and Clitheroe. I look forward to visiting my ancestral haunts over the weekend and to showing my colleague Stamenka some of the contrasts of the Lancashire countryside.

This will be a joint presentation. Our previous addresses like this mostly focused on the development of online learning in the context of what we are calling 'Post-Traditional Higher Education'. However, this is the first time we have looked at these issues through the lens of the arts and humanities, although two years ago we touched on this topic at the Shanghai Institute of Visual Arts in China.

That talk was titled *Visual Arts Education and New Technologies.* Later Stamenka will recall some aspects of that presentation, which focused particularly on the work of David Hockney, a famous son of your neighbouring Yorkshire.

Our talk will be in three parts. Stamenka will set the stage by explaining what we mean by 'post-traditional' higher education. She will note some of its manifestations of which MOOCs are one. I will then give a brief history of the MOOCs phenomenon before passing you back to Stamenka. She will then look specifically at the Arts and Humanities and suggest some of the opportunities that online learning presents.

So I invite Stamenka to set the stage

Stamenka Uvalić-Trumbić

Good morning. I am pleased to be in this part of England for the first time.

I find the topic of this symposium of special interest because unlike Sir John, whose early studies were in Metallurgy, I am an Arts graduate who studied comparative literature at the Universities of Belgrade and Paris.

Because we are often invited to speak about MOOCs, we thought it would be good for us each to take the same MOOC as students and compare notes. We have just finished a

FutureLearn MOOC from Warwick University with the title *'The Mind is Flat'*. We enjoyed it, but it made me want to choose a topic in my own area of the Arts for my next MOOC.

However, when I look what MOOCs are available I realise that the Arts and Humanities are under-represented, at least in Europe according to this scoreboard from Open Education Europa. This bias seems even stronger in the FutureLearn list where, depending how you classify some topics, Arts and Humanities account for less that one-fifth of the current offerings.

This is seen as a problem in France too. At a recent seminar on MOOCs held in Paris someone remarked that if you want to take a MOOC on French history your only choice was a course from Princeton University. It seems that the Princeton MOOC puts Robespierre in the same company as Stalin and Hitler, which might not be how French historians would view him!

You would be unlikely to get this kind of difference in perspective between, for example, Statistics courses from either side of the Atlantic, which maybe suggests that Arts and Humanities need a greater diversity of MOOCs than other areas.

Post-Traditional Higher Education

This comment brings me nicely to post-traditional higher education. We use this term to group together the ways that higher education is opening up on various dimensions.

Of course, the ideal of openness is not new.

The UK pioneered the movement 40 years ago with the Open University, but this ideal has gained much greater momentum in this new century as it has attracted the attention of conventional campus universities.

Various factors have driven the emergence of these new forms of post-traditional higher education. They include: the global growth of unemployment, particularly among young people (which is raising demands for access to post-secondary education as jobs for unskilled and semi-skilled labour are declining); challenges facing mainstream higher education institutions as they experience diminishing financial support from governments but pressure to increase enrolment numbers; and the potential for innovation inherent in new forms of technology.

Inspired by the core value of education as a human right, ideas of emancipation of education for all, and the growing disruption of traditional institutional business models, there is a steady move towards 'openness' that is sparking innovation and could create a new paradigm in higher education.

Openness is an increasing feature of mainstream education, expressed in concepts such as open source software, open data, open access to research results, open content and open

educational resources (OER). These all promote the notions of transparency and easy access to information.

Furthermore, education providers are increasingly leveraging the Internet, digital content, open licensing, and social networking to create new forms of education. Usually web-based or offered online, these initiatives aim to increase access to higher education and to make its content more relevant to contemporary needs.

Open Educational Resources

An early ripple in this wave of openness was the decision by MIT, the Massachusetts Institute of Technology, in the late 1990s, to start putting its instructors' lecture notes on the Web for anyone to see.

I was then at UNESCO, and I am proud that UNESCO played an important role in the subsequent development of Open Educational Resources. First, it held a forum in 2002 to explore their implications for developing countries. That forum coined the term OER and defined it.

Ten years later UNESCO held a World Congress on OER. We were both involved in developing, through a series of regional policy forums, the Paris Declaration on OER that the Congress approved by acclamation. Its key paragraph, the punch line if you like, was to encourage the open licensing of educational materials produced with public funds.

Sir John's home province of British Columbia followed up quickly by offering free, online open textbooks for the 40 most popular postsecondary courses. By saving each student about $140 per term this proved so successful that a second wave of open textbooks is now in preparation.

OER are multiplying steadily and an increasing number of countries are using them to reduce the price of textbooks.

But although their long-term significance is probably greater, Open Educational Resources have not captured the media's imagination as much as their by-product: MOOCs. Open Educational Resources were the long fuse that detonated the MOOCs explosion that we shall come to shortly.

I said that we use the term post-traditional higher education as an umbrella for new manifestations of openness. OER express one of these manifestations, namely open content.

In another manifestation of openness the qualifications that define the output of higher education are being put into new bottles. This applies not just to new qualifications but the re-working of older qualifications.

Open Badges

New types of awards, such as Open Badges, are emerging. These badges, which are placed on the Web, carry more information about what was studied and how it was assessed than the usual university transcript. Learners can get recognition for short-cycle studies on economically relevant topics and aggregate a series of badges into a conventional qualification.

Sir John and I are engaged in the interesting task of introducing open badges to China, through our work with the DaTao Masters Academy.

This is not a degree-awarding university but a private-sector initiative to foster China's capacity for high-level innovation. It does this by bringing hundreds of top experts to China on a regular basis.

They represent many academic and professional fields and their task is to pass on their tacit knowledge both to Chinese students and also to high-level professionals in various fields – film animation is one of its leading programmes.

Some of DeTao's work is beyond university level, but it also teaches students through individual lectures and whole programmes. DeTao finds that Open Badges are a useful way of recognising the outcomes of a variety of learning events, from a single Master Lecture, through an enriched practical track alongside a four-year programme in Film Animation, to post-university level workshops for professionals at the peak of their careers.

John Daniel

Stamenka has explored some of the dimensions of openness that we call post-traditional higher education. MOOCs may not be the most significant element in the post-traditional universe but they have certainly made news more than the others.

Last week some asked whether the media interest in MOOCs had peaked when the *US Chronicle of Higher Education* reported that a seminar for Washington journalists on MOOCs had to be cancelled for lack of interest. However, the Canadian researcher Stephen Downes, who has been tracking media coverage of MOOCs for years, sees no evidence that media coverage is falling off.

My own interest in MOOCs dates from the autumn of 2012. I had to prepare a research paper as a visiting fellow at the Korea National Open University. Stamenka suggested that I write about MOOCs, since the media frenzy about them was then at its height. My paper 'Making Sense of MOOCs: Musings in a Maze of Myth, Paradox and Possibility' was the result. There were relatively few MOOCs on offer at that time. This graph starts in August 2013 and I was looking at the situation in August 2012.

As the number of MOOCs has grown there has, naturally, been a considerable diversification in the subjects offered, in the pedagogical styles adopted and so on.

Indeed, someone has remarked that the meaning of every letter in the acronym MOOC is now negotiable. So people are now working at exploding some of the myths, resolving some of the paradoxes and exploiting some of the possibilities.

MOOCs: A brief history

However, it is still useful to cruise briefly through the early history in order to illuminate more recent developments.

The term MOOC emerged in Canada in 2008 to describe an open online course at the University of Manitoba designed by George Siemens and Stephen Downes. The course, *Connectivism and Connective Knowledge,* was presented to 25 fee-paying students on campus and 2,300 other students from the general public who took the online class free of charge.

The course title gives the flavour. It was inspired by Ivan Illich's philosophy in his book *Deschooling Society* that an educational system should: 'provide all who want to learn with access to available resources at any time in their lives; empower all who want to share what they know to find those who want to learn it from them; and, finally furnish all who want to present an issue to the public with the opportunity to make their challenge known'

In this spirit 'all the course content was available through RSS feeds, and learners could participate with their choice of tools: threaded discussions in Moodle, blog posts, Second Life and synchronous online meetings'. These early MOOCs, now called cMOOCs (for 'connecting' MOOCs), are very different from next wave of MOOCs that hit the headlines in 2012.

Whereas the cMOOCs began from an educational philosophy, the wave of xMOOCs launched by various elite US universities started in computer science departments. One journalist called them the meeting of Silicon Valley and Wall Street. The name xMOOC comes from edX, the MIT, Harvard and UC Berkeley non-profit consortium that developed the IT platform for them. The early xMOOCs had a simple behaviourist and 'instructionist' style.

A reporter who took one of the early courses from the Coursera for-profit company said that: 'it seems pretty obvious that no one who had any working knowledge of research in pedagogy was deeply involved in the creation of the course'.

Only after such criticisms did many of the xMOOCs pioneers even realise that there was already a long history of research and development in the pedagogy of distance learning and teaching.

Other criticisms were provoked by the data from the first xMOOCs. This slide can stand for all of them. Enrolments were massive but so was the failure rate.

Most critics were not mollified by the plaintive comment of Anant Agrawal, then director of this course and now the head of edX, that it would take forty years for the same number of people to pass that course on campus at MIT.

For the critics this confirmed that MOOCs were a throwback to what some call the 'Passchendaele' approach to higher education, referring to the World War One battle in which tens of thousands were thrown at the front and few survived.

This highlights the greatest paradox on the early xMOOCs, which is that universities with scarcity at the heart of their business models suddenly appeared to embrace openness. But this was openness in the sense of access to videos of their professors lecturing, not in the sense of access to successful study.

Tony Bates, a well-known commentator on educational technology puts the paradox in stark relief. He notes that although the learners who passed the MIT MOOC that I gave as an example could not get credit for use in an MIT programme, MIT's campus students who take MOOCs do get credit for them. In other words, success is judged not by your performance in courses but by your ability to clear the hurdles of MIT's admission process. My late colleague Dan Coldeway called this ancient tradition of university admission the principle of 'good little piggies in make good bacon out'.

But let me come to the present day before commenting further on myths, paradoxes and possibilities.

More farmyard analogies can describe what happened after a handful of elite US universities launched their MOOCs. A copycat phenomenon developed. A flock of institutions aspiring to be mentioned in the same breath as Harvard woke up and decided to follow it. Although given the acronym MOOC, a herd of cattle is perhaps a better analogy.

The explanation that the others are doing it and we must not get left behind was the rationale for engaging in MOOCs, but the pioneers didn't really know why they were doing it either. A senior MIT officer told me last year, 'I keep asking my colleagues why we are doing MOOCs and no one has given me a cogent answer'.

However, to anticipate a key point for later, the herd instinct has also given all universities a greater interest in teaching regular programmes online. There has been a gradual growth in online teaching since the beginning of this century, but for most institutions it was not a priority and they did not do it very well. Nevertheless, largely in response to student demand, the numbers taking online courses grew steadily.

This year 80% of US students will take at least one of their courses online and in the world as a whole it is likely that students taking regular courses online considerably

outnumber the learners studying MOOCs – even though MOOCs get most of the publicity. Maybe the most important legacy of MOOCs will be for all universities to take online teaching seriously.

Meanwhile, as we have seen, the number of MOOCs continues to grow. More and more players are jumping in, especially outside North America. At a seminar in Lausanne in February Stamenka found an atmosphere of Euro euphoria for MOOCs.

MOOCs - Paradoxes

More MOOCs means more diversification. While most MOOCs are fully online the meanings of 'massive', 'open' and 'course' are interpreted widely. But two key paradoxes remain.

First, since the term 'open' almost always means free to the learner, most universities lose money by offering them, whatever the intangible benefits of reputation they claim. The only exception I know, which really proves the rule, is the Open University.

The OU offers a lot of free learning and, with its customary thoroughness, it has investigated the business implications of doing so. I am indebted to Andrew Law, the OU's Director of Open Media for the following slides.

Point One is that the OU starts with two advantages. First, its Royal Charter enjoins it to promote the educational well-being of the community general, which MOOCs are one way of doing.

Second, the OU teaches through technology.

It is easy for it to transform its teaching assets for a variety of purposes. Therefore it can reach new learners through a variety of channels. Each of these channels, from the BBC broadcasts reaching a billion people worldwide, to the millions who engage with the OpenLearn website, leads to an increasingly close relationship with the University.

The University has carefully tracked those students whose only contact with the OU before they enrolled as fee-paying students in its regular programmes was with its free media. They amount to some 1,500 students annually. According to Andrew Law their fees give the OU a return of about 8% on its investment in free media.

However, by recalling the scale and scope of the OU's use of media these slides reinforce my point that few other universities can generate revenue by giving courses away free.

The second paradox is contained in the word 'course'. What is higher education? From the feverish talk about MOOCs being a revolution in higher education you might think that higher education is just about teachers teaching and learners learning. Yet the most significant right that societies give to their universities is the authority to award credentials.

Until recently completing a MOOC successfully did not lead you to a useful credential, even from the institution offering the MOOC.

We were pleased to learn from *The Higher* that the University of Central Lancashire is the first UK university to offer credit for MOOCs taken anywhere, on any platform. We are sure that this will be a challenging task your academic staff because they will need to create assignments to test whether students have met the learning outcomes in a great variety of courses. But, as Beverly Leeds, who is responsible for the scheme, said "we want to harness the power of MOOCs to help our students study more flexibly and achieve their professional goals whilst earning credit towards a qualification".

Since the introduction of higher fees, the number of part-time students in England has fallen. She hopes that giving credit for MOOCs will encourage more part-time participation and wider opportunities for learning whilst in employment. This is an example of a much-heralded trend: the unbundling of higher education, whereby different institutions provide different elements of the teaching, student support and credentialing processes.

UCLAN might consider joining the Open Education Resource University Consortium. This brings together over 20 universities from around the world. Their aim is to create pathways for OER and MOOC learners to gain academic credit in the formal education system.

Where next?

To summarise: we have noted two main problems with MOOCs. First they do not generate revenue for universities and, second, students do not usually get credit for them. We have noted two exceptions, the Open University and our hosts, the University of Central Lancashire, but we suspect that they will remain exceptions.

Happily the solution to the problems is the same for both. We should see MOOCs as a phase the development of higher education that has increased the credibility of online learning generally and given universities and learners the opportunity to experiment with it. The next step is to offer increasing numbers of regular programmes online, charging fees and giving credit in the usual way.

This evolution has been represented in a version of the Gartner Hype Cycle. IT possibilities triggered the MOOCs craze. We had a peak of inflated expectations with talk about revolutions in higher education. We came down off this high to realise that MOOCs were just one step. Now we have the opportunity to climb a slope of enlightenment and increase the productivity and impact of higher education through online learning in regular programmes. We both act as advisors to Academic Partnerships, a company that helps universities to put selected programmes online.

What are the implications of online teaching for the Arts and Humanities? I turn you back to Stamenka.

Stamenka Uvalić-Trumbić

Sir John has put MOOCs in context and called them an important step towards the greater use of online learning in regular programmes. I shall argue that these developments hold great promise for teaching in the Arts and Humanities.

Free Culture

I start with Larry Lessig, a veteran proponent of openness, who was the brains behind the Creative Commons licenses. He argues that a technology has given us a new freedom.

In his book *Free Culture, The Nature and Future of Creativity,* Lessig argues that: 'The Internet has unleashed an extraordinary possibility for many to participate in the process of building and cultivating a culture that reaches far beyond local boundaries'.

Two years ago, when I attended a Creative Commons conference in Warsaw, I was surprised to find that many of the participants were not educators talking about open educational resources, but artists from Africa who wanted to bring their work to a wider audience.

Surely, the Arts and Humanities lend themselves even more readily to online study than the STEM and business subjects that are all the rage? There is a tremendous pool of imagery, video and audio material to draw on in interesting ways.

I shall limit myself to two areas, giving one example of each: the use of technology by visual artists and the use of technology in teaching art appreciation.

David Hockney

David Hockney was nearly 70 years old when he began to experiment with technology, so technology in the visual arts is not the preserve of young people.

Hockney is also a good example of the link between technology and multi-disciplinarity. He is primarily known as a painter, but is also an accomplished draughtsman, video photographer and stage set designer. His acclaimed designs of sets and costumes for the opera Turandot in San Diego and Beijing show his versatility.

The headline "David Hockney illuminates Paris" appeared in a Paris newspaper on 1 November 2010 to announce his exhibition of 'paintings' of flowers using only the iPhone and the iPad as media. It featured 200 works and it was the first time – according to the artist – that an exhibition has been sent to a gallery entirely by e-mail.

"I like to draw", Hockney told an interviewer in 2009, "I draw flowers every day on my iPhone and send them to my friends, so they get fresh flowers every morning". An art critic wrote that the iPhone images presented "intriguing explorations of colour and line. The British artist achieves stunning effects of texture and light on the iPad"

Another exhibition the Royal Academy of Arts in 2012 showed another aspect of Hockney's use of technology. In addition to the oil paintings, watercolours and sketches, the exhibition includes a display of his iPad drawings and a series of videos produced using 9 high-definition cameras, which are displayed on 18 screens and provide a stunning visual journey through the landscapes, not a hundred miles from here, that have inspired his large canvases. When I visited the exhibition I noticed that most visitors sat through the whole 30-minute video presentation spellbound. One critic said "these videos made me realise that I had never really looked closely at a tree before".

Art Explorer

The example of the use of technology in teaching art appreciation that I shall give you is rather an old one, called Art Explorer, taken from an Open University course from the 1990s. Time only allows a very summary account.

The aim was get the students onto the same wavelength as the teachers. To have useful discussions, students and teachers must share similar conceptual and perceptual frameworks. But beginning students do not have these frameworks and the teachers have often forgotten the days when they did not have them either. If students do not 'see' what experts see they cannot understand the experts' arguments.

Art Explorer had students work with paintings, starting with their down-to-earth perceptions of works of art and engaging their feelings about them. It also aimed to make the study of art fun – but purposeful fun.

There were four major episodes in Art Explorer. Within each there were different experiences that encouraged students to look closely at paintings and to reflect on their discoveries. These experiences juxtaposed the private experience of the learner with the purpose of the expert teacher. All instructions were spoken and animated.

The first episode challenged students to express their own ideas. Students were asked to look at 12 paintings and to type in words that described individual features in them. They could type in whatever they liked, but often had to look quite hard to produce more than a few words about any one painting.

The student here chose the category 'Modern' and sorted the paintings on that criterion. Then the computer came into play: it had been storing students' words of description and analysing them in various ways. These data were used to challenge students to elaborate and refine their own concepts and to re-examine the paintings.

Episode 2 was more dramatic. It was designed to be fun as well as attention grabbing and thought-provoking and had a strong element of 'play'.

The paintings in this section were 'live'; meaning that parts within them could be moved or changed in various ways by the student.

Parts could be moved both within and across paintings and students could change the size and axis of various ingredients. It would have been impossible for students to do these things with traditional teaching media.

Students were given a range of visual puzzles to solve which require them to look increasingly closely at details as they changed the paintings' appearance in various ways. To solve the puzzles learners needed to consider the different ways artists have handled the ingredients at their disposal. Thus learners were drawn gradually towards thinking about paintings as *made* objects, rather than as mysterious phenomena, and gradually self-discovery blended with guided discovery.

The emphasis throughout Art Explorer was on student activity, but perhaps this sequence - where learners experimented with their visual understanding by manipulating their perceptions - was particularly vivid. It demonstrated one way in which multimedia can act as a dynamic intermediary between expert and beginner.

Episode 3 pursued this theme in a more disciplined way. Students continued to work with the basic idea that a painting is a made object, but were supported more firmly as they examine this idea.

Students were guided very carefully towards an expert understanding of some of the ways in which paintings work their effects. For example, students could experiment with flat shapes and try to work out how to arrange these flat shapes to suggest volume. Alternatively, they could manipulate a table – rendered in three dimensions and animated – so as to experiment with 'eye-level' and perspectives. In each case, students' experiences were related back to particular paintings. The aim was to exploit multimedia to help students understand their perceptions more fully by directly 'handling' them.

Finally, Episode 4 took students to another practical issue: the notion of function. Students were provided with various ingredients (flowers, people, some background and so on) and invited to build these into a design for their own painting. However the painting they constructed had to serve a function, and students were given a choice of commissions (for example an advertisement or an illustration of a proverb).

This practical task re-invoked many of the 'illusionary' issues raised in earlier episodes but required an engagement with the problem of how to achieve the desired illusionary and emotional effect *and* meet the demands of a commission. This student has illustrated the English proverb 'pride comes before a fall'.

I hope I have shown you how Art Explorer supported students as they developed their *own* language for describing what they see in paintings. It aimed to relate these student-owned ideas to some of the organising ideas that constitute the discipline and discourse of Art History.

I stress again that the design of Art Explorer began and ended with students in mind. The Open University team was convinced that the most fruitful way of designing for educational multimedia is by concentrating on a learning need.

Conclusion

And that is a very appropriate note on which to end this talk. The motivation behind many of the early MOOCs was to teach at scale and to show off star professors with little concern for learning needs and none about how learning might be credentialed. As MOOCs give way to greater use of online learning in regular programmes we have a chance to put the learners' needs at centre stage and design courses to meet them.

We believe that both MOOCs and regular online courses present special opportunities for the Arts and Humanities. MOOCs are an ideal way of stimulating interest in these subjects and giving people a taste of what the academic study of them involves.

Then there are openings to offer a variety online credit courses and programmes of different lengths for those who wish to explore particular topics in greater depth. Open badges may be a way of giving students recognition for smaller units of study than a full degree or diploma, thus motivating them to pursue their interests further.

We wish you well in taking up such opportunities.