

## Presentation by Dr Lucy Kimbell

### 'Some futures for art and design institutions'

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Chair: Professor Stuart Bartholomew

**N.b. Unfortunately the recording broke up towards the end and we were not able to capture all of the discussion in the question and answer session. We have included what we can of the discussion.**

LK Thank you for the invitation and the opportunity to join you here today. By way of introduction I should say that I'm an art and design native, even though I seem to have found a role part-time in a business school for the last nine years. I'm going to be talking a lot about technology, as part of the future, although not exclusively, so there is a slight danger I might sound like a consultant from Accenture or IBM, although obviously I'm from art and design, so I'm paid a lot more than they are.

LAUGHTER

LK OK, so technology. Has anyone got one of these other than me? This is a Nike Fuel band, has anyone got one of the other things that are similar? OK, I'll just explain what they are, in case you aren't familiar. This particular bit here has some accelerometers on it, I'm wearing it on my right hand, it knows my age, my weight, my height, and that I'm female. It's got a little opening here which means it's got a USB port, so about once a week I put it into my computer, which does two things, it charges it, and secondly it uploads that data to the Nike Plus website, where the data that it tracks from those accelerometers measuring movement over the course of the week then go to the web then I can look at those and see how much activity I've done. And it tells me daily, as well, if I want to, how many steps I've taken, how many calories it thinks I've consumed through to steps and the speed I've been working at. Then there's a fictional unit of measurement called Nike Fuel, which is a target I then set for myself, at whether I'm going to meet or exceed that target for the day. And then I can compare that online with other people my age, other people in a group of friends that I might join, and so on.

So this is a device that is to do, supposedly, with wellbeing and fitness, it's a trigger to change my behaviour, does just about work as something that participates in my life now, about how I engage, it's a way of gathering data that is immediately visible to me in my everyday life, but is also shared data because it goes to this Nike Plus platform and then produces much larger patterns, as big data does, to show something about how larger populations are doing things. So the Nike Fuel band is something that we associate with the internet of things, technically it's not part of the internet of things, because it hasn't connected to the internet itself, it only connects when I use the USB port to stick it into my laptop or via my smartphone. But the internet of things is interesting at the moment, there's a lot of hype about it, but there is something really fascinating about the scale, the idea that by 2020, according to one estimate, there will be thirty billion devices that are connected to the internet, and that they have some

degree of sensing capacity, like this one, it has a degree of, it captures some data, and then that data can be transmitted via wireless connectivity, to other devices, or computers, or servers, and then stuff can be done with that data.

This is actually quite profound, it's the idea that data gathering is distributed through lots and lots and lots and lots of devices, thirty billion of them, data gathering is distributed, then large amounts of data are gathered and then stuff can be done with that data. What that leads to is something about the importance of coding, so this is the programming language Pearl, which I do not know, but I can tell you that when I did my Masters at Middlesex back in the mid-90s, this was a really weird course called Computing in Art and Design, so it was at Cat Hill in an art and design school, we learnt to programme in C. To my knowledge there are still very, very few courses in art and design schools where you learn to programme, and the premise of that course, which I believe still holds true, is that if data is a material now for design then we need to be able to control some of that material, and the site of that control is software, is programming, is actually writing software, not just using Photoshop, but actually writing code ourselves and creating new kinds of software, not just waiting for clever software engineers to write it for us based on their assumptions about what we think, they think, should be done. So one sort of intermediate step in that is the development of this thing, Arduino probably some of your institutions teach Arduino workshops. When I did my masters we had to learn C, which was very hard, and we also had to learn electronics. I'd already failed that once, in my engineering degree. I think I must have passed it to get my masters, it's very, very hard, or it's hard for my brain. But what Arduino does is something really clever, it actually makes some of that simplified by having this little programmable controller, with some sensors you can plug into it, and a relatively simple interface, which allows you to relatively easily programme, create some little digital devices which gather data from the environment, from some sensors you plug in, and then do something in the environment that actuates something. So the important thing here is about where are the interfaces between the digital and the physical, or the material, Arduino is a very important and very open source, where doing that, where are the next set of things that allow artists and designers, not merely to brilliantly use software that others have written, but actually create new kinds of interfaces between the digital and the physical.

So there's all this data, where does it live? Here's the Cloud, here's a cloud by Turner from the early nineteenth century, so back in the early nineteenth century clouds were frightening, they brought rain, we know what rain does. They were unstable, you couldn't control them, they were rather worrying, they had a bad effect on the landscape but they were also rather beautiful and impressive and turbulent and so on. This is what clouds are like now. This is a photo I took from the Tube, so here is a service which allows you to access the Cloud, to store your data in the cloud. Some of you may use services like this already and if you use Google Drive you are already using the cloud. Now what's interesting here is that the anxieties that are being introduced, where the stuff that's physical, like your laptop is no longer safe anymore, your data in your laptop isn't safe unless it's also backed-up in the Cloud. So it's introducing a world for us where safety is somewhere else on server farms, in China and in the US, and in eastern European countries. Server farms are safe, where some

large corporation, such as Google, is looking after your data for you, and letting the NSA access it obviously, but your own stuff isn't safe.

So again this is something interesting. With all that data being collected by devices such as these, or by things that people are creating with Arduino and other controllable devices, where is that data going and who is controlling it? This becomes an important question, and again I think a topic for art and design practice and research. Who is controlling that data, where is that data, and what are our anxieties about what might happen with that data?

And finally, a slide to remind myself that some artists and designers, practitioners and researchers, are actually now looking at life sciences as another site of research. So not simply that digital data is material, but DNA data is also a material. So this is an artists' group that are experimenting in the field of life sciences and materials, so the materiality of life is now another sight for experimentation and enquiry in art and design practice. So what this presents is the idea of data as material, and if we take seriously the idea of data as material, and we want to participate in the creation of new software services systems, and understand the relationship between the human and the technological, the opportunity there requires us to, I think, start learning to code much more seriously, and engage much more profoundly with digital cultures, not merely as users of software, but also as creators of software and devices.

Another contemporary development is collective making, so coming again from the world of software, things like this, hackathons, so these quite often look like this, this is a small one, quite often they are large rooms such as this, with groups of people sitting around with their laptops, given a collective brief and then responding to that, using the skills they have, which is creating software. And two weeks ago there was one called Flood Hack, and it was held at the Google campus in Shoreditch, David Cameron actually Tweeted about it. So this was a group of people, there they are, gathered to try and address the floods challenge and try and very quickly come up with possible new software services, software based services, using data of different kinds to try and address some of the issues that arose from the flood.

Now I'll come on to the issue about what happens once these ideas are generated. This is another example, this is organised by a really interesting design service, design stroke service stroke local authority consultancy called FutureGov, they partner with Google and others, in this case to create a hackathon type event, which isn't just around software, but is about addressing young people and educational access. And during the course of a day or so there were sixty two different ideas that were generated, again a bit like this, a large room of people who came together, to work together creatively, collectively, to address that challenge set by the organisers.

And other examples of this are start up weekends, so this is a much more commercial version but has the same idea, that in the course of only a few hours, a weekend, you can not just come up with a new idea, but actually in this case it's an actual business idea, and it has the same principle of collective working, idea generation research, some kind of prototyping, some kind of visualisation, using the language and techniques of design. Another example of this is something called Global Service Jam, that's happening in a couple of weeks, first run in 2011, the premise of this is that

they set a brief, and then people self-organise around the world and respond to that brief, typically in small groups of twenty or thirty. This year they reckon they are going to have two hundred and fifty sites around the world, and it really is around the world. They release the brief on a sort of need to know basis, it's actually quite hard to find out what the briefs were. One of them, a couple of years ago, used the idea of superheroes to think of some services to empower people, so that kind of brief, and then those briefs are interpreted by each of the cities, and because of the time zone issue they try not to share that in advance, so that the cities that haven't yet woken up don't hear the brief. So it's the same principle, over forty eight hours in this case a group of people come together to use some kind of applied creative process to address a challenge which they and the organisers have deemed important.

And here's an example, a slightly different one, from more oriented towards the arts, and this was organised in Scotland last year, it's called Culture Hack, and the premise was that art and technology came together, again over the course of a weekend, with small mixed groups working together to explore the possibilities, which in some cases involved making a new artwork, and this was the one that was considered to be the winner. So this is an interactive artwork, it involved laser cut MDF, some fake grass underneath, and that's on the shape of the island of Canna, and then they used some audio data from another artist project, and so when you stand on bits of that island you hear some audio data, some bird noise from that island. And that was made in a weekend. So this is a slightly different take on this, because it's about collective, shared creativity, and sharing skills and so on, rather than addressing social challenges as most of those other examples are.

But I think what's important here is there is this move towards collective creativity. It's more collective idea generation. The interesting question is what happens to those ideas once they have been introduced. But something here about access, something here about art and design not just being the professional creative people, but actually opening up these processes and system methods to other people, who perhaps don't think of themselves as creative, perhaps don't know what prototyping means, but actually over the course of the weekend can engage with these practices. So I think one of the interesting things here is what does this collective making offer as an opportunity if art and design institutions engage with it more directly, so I think one of the key questions is to whom are the people involved in this ultimately accountable? Somebody sets a challenge, engage with young people, engage with older people, engage with dementia, whatever it is, but actually it's the negotiation of the relationships in the room, the negotiation of the relationships with partner organisations, so those ideas aren't just, don't just disappear at the end of the weekend but might actually lead to some impact, or further development. So here the key concept I think is about not just collective creativity, but actually then the accountabilities that are embedded in that.

I'm going to move now on to a sort of development of that idea, that Art and Design are actually operating in expanded fields. Art certain has been since the '60s or so, but I think design has definitely accelerated its site of use and engagement in the last decade.

Just going back in history briefly, some of you will be familiar with the artist placement group, the late artist John Latham and his then wife Barbara Steveni, in the '60s created the artist placement group later renamed Organisation and Imagination. And the idea was that an artist, which John Latham called the incidental person, could be in some organisational context, for example a government department, or a factory, or a UN body, and actually have some role to play. They are doing their art, but through the work they do they have some kind of wider impact on the organisation hosting them. So this was a quite marginal but interesting idea back in the '60s that then got sort of institutionalised into artists residencies, but now in design we have a much deeper engagement with this kind of way of working. One aspect of this is a consultancy such as Engine, this is a small service design consultancy based in London, they did some work with the London Borough of Barnet, where they made things like this, not simply as a representation, but actually as a tool for the commissioners of services; working in Barnet Council to actually think about what it is they are commissioning when they are commissioning services, and how they might go about commissioning and designing services differently with residents of Barnet and with their partners.

So here this is a materialising, through things like Lego – and there are lots of other ways of doing it, with sort of paper prototyping – this is a materialising of design thinking, it's taking the design process, and saying OK, let's make it quite accessible to other people who don't think of themselves as designers but nonetheless they are designing public services. Another example of this is Mind Lab, this is a cross-ministerial innovation unit in Denmark, it's been going for about ten years, at present it's funded by three government departments and one municipality. And interestingly here the fifteen people who work there are not from a design background, but if you look at their work, and if you look at what they say about their work, they are very much using a design thinking based process which is basically applied creativity, recognisable to anyone who's been through a studio education. They are using that, again, to address policy challenges, thinking about the nature of citizen interactions with the state in particular contexts. And we are getting one of those here soon, so the Cabinet Office is about to announce who is being appointed to lead a similar initiative in the UK, and that is only a pilot, so it'll only be running for a year or two, and has to show impact in the first year, so good luck to who gets that job.

And a further variant of this is the distribution of this design and creative technique, is the creation of the toolkit – now there are a plethora of design toolkits – for social innovation, for community building, for social impact. And here is one of the most prominent, designed by the global innovation consultancy with a design background, called IDO, this was commissioned by the Gates Foundation. There's very little evidence, or research, on what impact it's had, and whether it actually does help develop communities and NGOs in developing countries actually be more innovative. There's a big narrative about it. But nonetheless it's interesting here, the extension of the movement of design techniques, from studio practice, design methods, design thinking, applied creativity, out into an expanded field, far away from the expertise of people who think of themselves as designers.

So if art and design are in this expanded field now – and lots of people who are not artists and designers are using these kinds of methods, they are using visualisation,

they are trying to think about the human experience, they are trying to use prototyping, they are trying to engage people creatively in the articulation of problems, and the addressing of problems – well what's left for art and design? If everyone else can do that stuff what have we got left? Maybe it's visual, maybe we do that better than them, even if they draw pictures. And so let's think about visuality, anyone remember this, 1995? This was a radical, exciting thing that happened, remember Windows 3.1? Yeah. So I actually went as a journalist to the launch of Windows '95 at the Odeon Leicester Square. So this was a big fanfare, we are introducing a radical new development, the graphical user interface, although obviously Apple had done it successfully for a long time before that. But this was really interesting, because it was about turning something that was difficult, programming, command line and so on, and turning that into something that was graphical and therefore easier to use, and that period of the early '90s, mid-'90s, marks the creation of this term 'the user experience'.

And this is what we have now, Windows 8 interface, which was launched in 2012, and actually they've had about only two million sales of this, but if you think about the difference between this, where there's an awful lot of work still, and here, which is reduction to visual forms, what's important here is that the visual is becoming even more important in human computer interaction, the visual, and then touch screens, gestural control as well. So the visual and the performative are even more the concern of large organisations who want to interact with us, not simply the technology firms, but the firms who we communicate with or engage with via these various devices. And the scale of this, again, is huge. There are about 1.4 billion devices running Windows, 1.4 billion devices running Windows out of which only about two hundred million are running Windows 8. Google Android estimated that it's going to sell one billion devices this year. So again that is a multitude of devices where the visual and the user experience is a really key part of what the organisation needs to get right for those devices, and the systems and services that run on them, that that's increasingly of organisational concern.

Another aspect of that is the visualisation of big data, so this is a slide from the group at the University of Amsterdam, an interdisciplinary group that includes software, software programmers, user interface designers and social scientists, who take as their interest how do we visualise data that is native, data that is grabbed off the web, and then how do we make that data we can do stuff with. And again this is about fast feedback loops, and using the visual and the performative, engagement with these kind of data displays, to help understand what is going on in the world. How do we find out what's going on in the world? We can go and interview people, we can go and do surveys, or we can look at what's happening online, which tells us something about the populations who use the online world. So the source of data being the web, and then the ability to get that data very, very fast, and then operationally do something different in the world as a result of what's being learnt. So again, the importance of the visual here is paramount, it's about how do you visualise and make sense of data in ways, and allow people to actually operationally use the data.

So there's an opportunity here too for art and design, I think, very strongly, and there are some really interesting research projects around this. And another variant of that, which I think is at least as interesting, are groups, like Blast Theory, who for the last twenty years have been using, as performers and as artists, have been trying to

engage with technology, they work with research groups for example in computer science at the University of Nottingham. And what they do, I think, in their work, is explore our anxieties about the human computer relationships, our relationships with technology. We don't really know what all this distributed technology, this distributed data, what that's doing to us, what does it mean when all these things are measuring us, and we allow ourselves to be measured in this way, and we are caught up in that.

And groups like Blast Theory, this is one of their games, which involves some people running around the real world, and then it gives you an online interface which allows you to have a realtime dialogue with some of those people, so it's again about the human digital interface. This is a really important site for art and design activity.

So a final strand then is what does this mean for institutions? So there's something here about disintermediation, the breaking up of institutions and also institution making. Here are some of the interesting examples. Let's start, however, with what's special about us. So here's a teaching studio, I was teaching in that studio last week doing tutorials, it's from one of your institutions, I wonder if anyone recognises it. OK, what happens in studio teaching? Well, it's embodied learning, it's very experiential, it's individual and yet collective, it's material and maybe digital, it involves peer review and feedback, fast cycles of that. And obviously technology isn't part of this. And yet here is Coursera, Coursera is one of the new MOOCs, an online learning platform at massive scale, and here at CalArts, a good design school, art school, are exploring, well what would it be like to take something we think of as being profoundly studio based practice, performance, and see what that would look like if we try and use a MOOC to deliver that teaching and learning experience. So, I haven't taken this, so I don't know what it's like, but I'm just interested in these experiments to actually engage with technology and think about how it relates to studio based learning, or how it changes studio based learning.

And let's think about policy changes here, because here is one of our glorious leaders, and as you know primary school education and secondary education have been massively disrupted by the policy change that introduced free schools, so the idea that a group of people in a locality can basically organise themselves, if they get approval can get direct funding from central government, bypassing local authorities, and run a school themselves, under central government control. So that's the breaking up of what we think education is, how might that affect us, they are not doing it just yet in universities but actually some of these things are already happening. There's a group of people on Copenhagen, some very smart interaction designers, identified that there wasn't a kind of learning happening in the Danish education system that they thought should exist so they set up their own institution, which has been running successfully for several years. It's very small, it doesn't have many students, but it has some really interesting partners, it now also is working with the Copenhagen School of Design for delivery, and this is not awarding a degree, so they are sort of competing with us, with you, but they are sort of not competing because there's no degree at the end of this.

You get an amazing learning experience for your thirteen thousand Euros over twelve months, but you don't get an MA. Here's another example, the School of Communication Arts in the UK, it's in a former church in Brixton, this has got very close working relationships with several employers, particularly in branding, advertising and

media consultancies, a lot of the tutors work for free, and students, the pitch is here, come and work with us, instead of a three year BA you can learn with us for twelve months, you get an industry placement and you are very much likely to get a job. You do not get a degree. But you get teaching and learning, high quality, and this will cost you about four grand a term.

Another example, which is closer to the space I now seem to work in, which is management education, is in Amsterdam, it's another kind of institution, again it's not offering a degree. It's competing with MBAs for your thirty nine thousand Euros. You basically get some weeks in Amsterdam through a collective shared learning experience, very action based, action oriented, learning experience, problem based learning, and then you have a twelve month project and what do you get at the end? You do not get a degree, you do not get an MBA, you do not get a Masters in innovation, but you have this cohort of people you can now work with who have some new ways of thinking and learning, and there are people who now do this. Again, small numbers, but quite big partners involved in this.

Another example of this intermediation and creation of teaching and learning environments, Ted has created Ted Ed, which is a platform for learners to use Ted materials as part of their teaching and learning environments, and share those with other people in a kind of open source way. And finally a slightly different take on this is the School of Everything, which is in the UK, which is basically a peer to peer learning platform, so you or I could decide I want to teach a class in whatever it is, you might want to teach a class in cooking, you might want to teach a class in innovational management, or I might, and you can set it up here and then people decide if they want to come and join your course, you find a partner, you find a location, and then you make it happen. So this is peer to peer learning, it's very local, it's very distributed, it involves quite small sums of money, obviously it's out of higher education, but it has a clear relationship to issues around CPD and professional learning and professional development.

And then one further example, deep in the bowels of Somerset House in London, here is a new making space, it's only just opened, it's called Makerversity, it aims to reach people who are traditionally excluded from art and design education, particularly young people, and give them access to making, making and craft skills, and some 3-D printing. And also it's a bit out of that fix it and repair culture, so it's a make space, it's offering teaching and learning, and one of its partners is Pearson.

So if we look at these altogether there's a very clear indication that there's lots and lots of different experimentation, which is trying to look at where are the gaps and what higher education with its particular regulatory and established structures are doing, and what can you do if you are not trying to offer a degree, turns out quite a lot of different things. So I think the challenge for institutions to say how do we, given all these changes with technology, given all these changes with consumer behaviour, or learner behaviour, how do we start trying to create some form, so that we can engage with learners using the skills and resources we have, because people are already setting up and organising these things themselves.

So what I've tried to do is identify five key themes that I see around me in the worlds I'm in. And these are not just themes that are emerging, they are also drivers of change. They are evidence of change, and at the same time they are drivers. It's a sort of virtual circle and these feedback loops, and these are shaping the environment we are in. So to conclude I'm going to just very quickly offer some scenarios of how things might pan out if these themes continue in the way I've described.

OK, the first scenario, business as usual. So let's imagine we are in 2020, not actually that far away. Student fees at undergraduate level are twenty thousand pounds a year. Staff are really now – there's hardly any practitioners left – staff basically have to publish in peer review journals, otherwise they don't get a job. Visiting lecturers these days, even paid an hourly rate, have to have a PhD, and basically art and design institutions have decided what they need to do to deal with the drop in student numbers, and to cater for their Chinese, Indian, and American and European students, who still want to come to the UK for art and design education, so they are basically self-organised into offering four main areas; branding, luxury, classical art, and Shakespeare. Art schools, because they now have these twenty grand a year fees, and still quite large numbers of people coming, although not from home students, basically they build new buildings, which turn out to be quite often glass boxes, so people can look in from the outside and see these rather beautiful and interesting things, but obviously you are not actually allowed to make a mess inside. So they are about spectacle, the spectacle of art and design, rather than what a studio is traditionally.

And research funding, obviously, is very different in 2020. To get research funding only works if you have a partnership with a top school, so everybody wants to partner with Imperial College, UCL, Manchester University, Edinburgh University and so on. They are inundated with requests from art and design institutions trying to get some of the money from joint course funders. So basically art and design education has become a finishing school for elites.

Scenario two: low regulation. So in 2020 things look very different. After the incoming minister for Business Innovation and Skills, Sir Michael Gove, had successfully introduced free schools, and rolled those out, he then went forward with the idea of free universities. So by 2020 there were thirty of these offering art and design in the UK, and they were typically arranged with three models, they were either university to university partnerships, so for example, or institutional partnerships, so for instance the Tate created a partnership with Harvard, and successfully offered the Tate BA and the Tate MFA, at what used to be the site of Chelsea College of Art. There were obviously corporate partnerships, many of those, an example was Northumbria created a partnership to focus entirely, all the teaching and learning, on consumer electronics, and that partnership was with Phillips Electronics and the Chinese IT firm Lenovo, and that was delivered not in Northumbria, but actually London and Shanghai. And the Royal College of Art, well their manager has managed to achieve a private equity investment, so they did a management buy-out, and they focused entirely on digital design and on the area of design for aging and wellbeing.

So these examples show how these institutions had to adapt and create new partnerships, in the context of low regulation, and clearly show implication of that,

which is high degrees of commercialisation, specialisation, and again serving a professional elite, although it wasn't just a finishing school like in the first scenario.

Scenario three: open and social. So in 2020 climate change and global issues such as dementia, ageing populations, obesity and development and inequality issues, were even more acute, and students basically wanted to work on those issues, staff also wanted to work almost exclusively on those issues rather than doing, you know, glamorous briefs for D&AD. And employers were very much concerned with trying to engage with customers who either didn't have money, or didn't trust them at all. And obviously the communities in which art and design institutions were located were facing quite pressing problems so looked to art and design institutions within their localities to help them achieve, develop new, and create new solutions together, so very much a context for applied creativity. And the research agenda, the funding agenda, was very much tied to design for wellbeing, design for chronic disease, design for Alzheimer's and so on. But one of the implications of this scenario is a change in the IP regime, so instead of the idea that universities only IP their graduating students, or train their students to protect their IP, here it was a shift towards open source, to the sharing of solutions and ideas in creating new legal and practical frameworks for people to share their work and ideas with each other.

And some of the new partnerships in this environment, for example, the local government association in the UK partnered with Lancaster University to deliver a whole suite of degrees and CPD, and peer reviewed learning, delivered through MOOCs aimed at local government and community groups and NGOs. So here art and design has more of a role as contributors, convenors, and as facilitators of applied creativity to address urgent social and sustainability issues.

And the fourth scenario; future ateliers, so in this scenario art and design institutions, some of them follow the lead of early innovators such as Ravensbourne, and they give up awarding degrees, they decide that actually students don't want degrees, they do want to learn but they don't value a degree. They want to have access to studios and workshops, they want to have access to skills and inspiring teachers, they want to have access to practical and creative skills which might allow them to work more effectively with employers, or create their own kinds of venture, and they want to work with other kinds of stakeholders, so again art and design institutions become convenors in their localities of new kinds of relationships with local government, with NGOs and community groups, and with more corporate and commercial organisations.

But one of the implications of this is that having given up the power to award degrees voluntarily, having given up the fees, there's a new sort of economic model here that needs to be developed, and most of this just simply isn't possible inside London and large cities where property prices remain ridiculous. So what we see is new sites are developing where properties are affordable, and there are some interesting new relationships with property developers here, who actually see the opportunity to not just create individual live work units, as they did in the nineties and the noughties, but create shared makespaces to go with the flats that they build. So some of the new sites here are Bradford, Huddersfield, and Norwich, which become arguably the new Berlin for the 2020s. And here technology is important, so it's about the connections between these kind of individual practitioners and groups of practitioners globally and

locally, and also with the critical and historical studies to help them assess and make sense of their activities. So this is a scenario about specialisation, which sees art and design as continuing its role of exploratory, the explanation of anxieties about the human, and the technological, and what it means to live in the contemporary era of tremendous flux.

OK, so what I've tried to do is show some themes and some emergent drivers of change that I can see in the current environment, shaping what we do in teaching and learning and research, and through these scenarios I am trying to provoke some debate, which I look forward to having with you. Thank you.

APPLAUSE

- SB Lucy obviously is very happy to answer some questions, on what is a very stimulating proposal, particularly for the Royal College of Art, who are here somewhere.
- Q I've got a couple of questions, but the first one is, the biker jacket, what were we actually looking at?
- LK So that was some skin that was modified and created, I'm not sure exactly how, by that artist. So it's the creation of tissue as a material.
- SB Lucy, one of the things I was very struck with at the beginning of the presentation was the notion of acceleration, that things are happening, or can happen, very much more quickly than in the past. When you were giving the scenarios at the end, looking at the sort of institutions you've studied in and worked with are they sufficiently agile to keep pace with what's happening?
- LK No... Because I seem unable to actually get a job in any of these institutions, so I actually sort of hop across quite a few, which allows me some kind of perspective about working across them, and, you know, institutions doing really interesting things with amazing staff and amazing students and so on. But there's something about the speed of change, and because I...hang out with isn't quite the right word, but spend time with MBA type people as well, they work at speed. Now obviously a designer or an artist putting on a show, that's a particular kind of speed and skill, but somehow that doesn't seem to translate to the institutions' ability to put on things at skill other than shows. So I think there is a question about the institutional ability to prototype, to learn, to do fast feedback loops, and to actually try and push the regulatory opportunities, obviously there's regulation and funding issues, and you know, the money comes from central governments, a lot of it, but it's a sort of dependency model. So that's why I wanted to explore the fourth model which is just going stuff it, we are not going to offer degrees anymore, and see what that means, and I do think that kind of thinking, you know, could lead to some interesting responses.
- SB I mean sort of a part reinforcement of that observation is that the degree was once the passport to a particular network, the proliferation of degrees may mean that that's being devalued, so what you are still searching for is the influential network, which is entirely outside the degree framework.

- LK Yeah, I think you buy access to social capital, and with social capital probably comes financial capital, although less so than in other areas. I've certainly been doing some research on MBAs, and why students, people, apply for MBAs, and it's definitely the degree is the badge which is a portable, recognisable qualification of some value, except they are also very different, it's not clear that they are directly comparable, but definitely what they are buying is access to social capital, and I think the same does apply, so the access to studios, and access to resources that you couldn't own, machine shops and so on, I think that's part of it, and access to more experienced practitioners than you, or other people to learn with, so the collective learning, I think, is really important, and I think technology, MOOCs and so on are part of that, but then the material stuff we do in art and design, needs to find new institutional formations to make that possible. And things like Pearson putting money into that Maker space underneath Somerset House is an early indicator of capital investing in novel forms of teaching and learning, which are kind of traditionally in our domain.
- Q Hi Lucy, thank you very much for that, that was really very interesting, and I believe we've seen quite a lot of those ideas before but bringing them together is quite startling. I suppose what's interesting to me is because on a local level we see a lot of those initiatives happening in a very tiny way, or very small way, round about in the provinces, where I'm from. I suppose what's very interesting is the leap, the very short time you are suggesting economically, because at the root of all of this is massive economic and social difference, isn't it? And I wonder whether you have any thoughts about how the economics might or could work, other than by just groups of interested parties?
- LK So I am entirely ignorant about a lot of the economics of how things currently work, but because I spend time in this world of lean start up and people who are trying to invent new ventures, I observe from the people who create new ventures, first of all how many of them fail, so quite a lot of these are experiments that aren't necessarily going to be around in even a year or two. But it is about the ability to kind of constitute your own network, which includes getting money, income in, and this is the same space as social innovation, social innovation people are dealing the same thing, you know, declining income funding from central government to local government, still massive challenges about how to deliver services for old people and so on, and children in municipalities, and so what I observe them talking about is how to configure assets, so what universities, HE has, is incredible assets, but actually to think about it differently, to think how can we do something different with our buildings, which isn't necessarily within the current frameworks they were designed for, how to do something with our students differently, who are the resource, and the various staff and other stakeholders. So I think ... it's institutions venturing, which is a bit businessy, but actually in social innovation it's the same space, you could just call it social innovation instead.
- X Hi, I'm Neil Powell from Norwich University of the Arts, I'm kind of interested in your portrayal of art and design as being a lifestyle choice, rather than something based around practice, and I'm always fascinated when art and design ... is captured by the social scientists... I wonder, in the Brave New World of 2020 and beyond, how do you see creative practice being sustained by ... ed Ed and School of Everything, and all those kind of things, I'm quite interesting in how people actually produce anything.

- LK ... I think that is, you know, we've got this question about are we professionals? In the twentieth century we became professionals. Think about what art and design institutions were in the nineteenth century, they were about training for industry, workshops, or particular kinds of luxurious production. We now have a sort of further development of that, except it's just much broader. And then with these tool kits and the expanded field we have, we are losing the professionalisation. All these other people can do that stuff too, local government people, so there is this I think quite important anxiety about what do we do? What's special for us, and how do we ... I observe what young people are doing, you know, we are all old and already the dinosaurs in the institutions, which are dinosaurs too. Universities were set up, you know, predominantly nineteenth century and twentieth century institutions. What are the appropriate institutions? So Ted is trying to be one of those, but comes with a particular Silicon Valley take on teaching and learning. I don't know if any of you have been to Ted, it's extraordinary, in a not-good way. So I think the criticality of the people ... should use our creativity to invent those new forms ... once you have access to creative approaches who don't necessarily think of themselves as artists and designers.
- Q To what extent do you see the future as an interdisciplinary one? Because a lot of the examples you presented were distinctly quite interdisciplinary initiatives, and I'm wondering whether a lot of the institutions that we have, which are, in some senses, defined by disciplines located within material or techniques, whether that is one of the major shifts that might well then be happening.
- LK Yeah, so I think obviously this account is partly shaped by having ported myself to a business school for the last nine years or so, I basically teach design thinking and service design to MBAs, although I still teach a bit in design. So I observe students, young people basically, addressing challenges. And I don't think any one thing, if you want to make a painting or a performance, you are still driven by a desire to relate to something going on in the world, so the understanding of the world, and the ability to construct your performance or your sculpture, or make your show, whatever it is, it is about understanding the world, and I think that does require other kinds of discipline. So I don't think art and design, I think we've got caught up in 'we are special and different'. And everybody's special and different. Maths people, mathematicians probably think they are special and different, physics think they are special and different, we are all special and different, and yet we have these contemporary challenges which I am personally oriented towards, and I think students are, and I think lots of staff are, and I think communities are. So it's not so much about interdisciplinarity for the sake of it, it's more about how does one, if one is an active person in the world how do you respond to the things you see around? Whether you want to respond by organising a social enterprise, or whether you want to respond by organising a performance, you still are acting in the world, and I think your ability to understand the world and think through your agency in the world, and the ability to collaborate with others, requires what you could call interdisciplinarity ... I think actually I'm looking at it a slightly different way.
- Q ... Lucy, I'm really interested in the implications of what you are saying ... this sort of post institutional network culture, and I wonder how far your work has taken you into the question of organisational structure, institute and structure, and I am speaking from

the perspective of an independent art college, we set up a free school last September, and it's created an unusual structure..

LK Yes, I think that's really interesting that you've created a free school. I suppose the fourth scenario I tried to make more local, so it may not have come across but the idea was it was about local and about access to workshops, and learning, and children and young people who are local for the time that they have to go to school. So I think that's really interesting, I think the technology allows, partly because the data's coming from all these places, and is a resource, and also I think the idea that your particular local situation in Plymouth, there are other places that are also not central.

Q [recording breaks up]

LK Yeah, so there are other, your situation, your particular experience, your place, is about not being central, so that is actually of interest to people that are not central, so you might connect with other Plymouths around the world, which have something you could share, you know, so it's that twin town idea, what's the twinning that might happen, and I think digital technology and the MOOCs and the peer networks enable that, so I don't think you lose your place, it's more that your place becomes actually a resource.

X [recording breaks up]

LK No, I think, I think like all organisations, all business says this, you know, what are we good at? What's our core? Well if your core is physics, or your core is graphic design, that's still of value, it's just thinking about how people with that particular orientation, capability, work with others. So I think it's very, you know, how you train people, support people to become expert in one thing, but understand how that relates to other specialisms, disciplines, problems, stakeholder groups and so on. So I think there will be, and should be, some institutions that are more about the integrating, so an MBA is an example of an integrated, you learn a little bit of lots of stuff on an MBA, because it's a very general degree, unlike most masters, say, in art and design, which are very very specialist, you know a lot about one quite specific area. It's a different model, and I guess we need both. Some students, you know, some of them cognitively, and behaviourally, and orientation, will want different things, so I think we need both of these things. I don't know, economically, how that happens, but it's also about recognising what are the resources that an organisation has in the larger sense, including the culture of if its practitioners and staff and students who used to be the graduates and so on.