

Debs                    First of all some background information. The PhD is very much about external influences and internal influences, and so it's how people came to be where they were and how that then might influence things they do in that position.

So, if I can start a little bit about how you came to be here?

Russell                The back story back into the 80s was that I did a cultural studies degree at Portsmouth University. I was curmudgeonly in the sense that I always wanted to keep a wide view on things. I did my teacher training in London before that in general studies. There were about 500 or 600 of us and virtually everybody else was doing computing. And when they said, "Oh what are you doing?" it was like what computing are you doing. No, I'm doing general studies; my specialism is general studies. And they just couldn't understand why anybody would want to do anything in that way.

So, I was very fortunate to be able to do cultural studies at Portsmouth. The course ran from I think the late 60s into early 90s, so it didn't run for much longer after I left. But it was an absolutely astonishing course in terms of stretching you out, in terms of understandings across literature, sociology, history, drama, media, the whole lot – but in the sense of trying to separate. You'd study them separately, but there was full integration across them, getting you to understand the principles involved across the different domains and interconnections across these different domains.

At that time they had assemble editing videos across the course. You'd get these cracked pieces of snow between each edit. The technology just wasn't there. But the point was the principles in terms of analysing stuff.

So, I finished there and then after that had a series of different jobs, but basically all with a move to actually go into teaching. And then I started teaching part time, having moved to the northeast, at a number of FE colleges back in the early 1990s. I was teaching basic computing, introduction to media and so forth. Again, with really low end kit; this was basic computers, BBC basics and sort of second generation VHS cameras and really low end stuff. But again, it was about the principles involved in terms of narrative and storytelling and - I was going to say interactivity; basically it was simple code writing at that stage.

It seemed that I was going to carry on doing that for a bit, but I managed to get a full-time job at Gateshead College teaching national diploma in media. And that opened up a lot of options. This coincided with early internet; but we didn't really have much on the internet side there. Basically we were just using it for email and nothing much else. We weren't teaching it; it wasn't in the media course at that time. So, it was a lot of corporate video work; live studio work, which is really good fun; and radio work; sound work – that sort of stuff. Again, not only teaching national diploma but also teaching people designated with learning difficulties or whatever; which I've always really enjoyed doing.

At the same time as that I was also doing an MA at what was then Newcastle Poly in the history of ideas; and the history of ideas from 1500 to 1950. So, again, really wide based, looking at cant and ((pagal?)). But my specialism became looking at Bentham's penotagon, which Fuko later took on as an example of self imposed discipline on people. But I went back to the original historical document and read everything that Bentham ever wrote on him. That took two years; this guy is a machine in terms of – but all the

proposals all around this pentagon: this idea that the prisoners would behave themselves because they wouldn't know whether they were being surveyed or not. And that keyed in nicely with the symbolic or actual surveillance of the internet. So, there was a sort of connection that way.

That sort of gamut, that collection of skills and learning and all the rest of it basically enabled me to get into work down here. I hadn't had any previous HE experience, but I'd been a course leader and various other things so I was able to convince them that I could actually trade up. It unfortunately coincided with the contracts being demoted at the FE level so I'm not sure I would have had a job for much longer there. It was really unfortunate from that point of view. Anyway, I managed to sort of jump ship and trade up.

I started here actually doing a lot of work with media technology students doing sort of basic web, a lot of video production work and so forth. They started teaching more within my own faculty across media and cultural studies courses and then into communication courses, corporate courses and advertising. And in the end, after only a couple of years, I was actually teaching across about eight courses a year. So, I was going to exam boards for around two months like every single day. Again, this business of everybody wanting to have some sort of digital component within the courses, which I was in favour of.

Debs But stretched a bit.

Russell Yes, that was pretty tough. I was also involved in teaching and proposed a unit for MA media, and taught on MA media for about 97/98. And I put a unit together called Consumption and Production on the Net, in about 1998. Basically the emphasis of that was the

internet was not only a place for gathering information, it was a place to put information in, to be creative and all the rest of it. That was a real statement of intent back at that point.

I then tried to encourage the course leaders within our faculty to take on a multimedia pathway, as we called it then; and that just fell on complete stony ground. I thought that's okay, what we'll do is put an exemplar together as an MA – because our dean said, any blue sky ideas we'll ((claps hands)) – right, so ((Tim Pounton?)) and myself put this MA together. I have to say the parent of that MA was that single unit of MA media: that sense of trying to produce something that was creative, expansive, that dealt with that relationship between consumption and production. There were some really stupid words produced at that time: pro users and probed users and all this sort of thing. There was an Australian academic who I think specialised in that. I tried to not go too much down that line. But anyway it was in that same sort of territory. And we put the MA interaction production together as a statement saying: this is what we mean by interactive production and digital. We deliberately didn't call it multimedia because that was already waning as a term back in the early noughties. Actually I'm teaching a unit called Multimedia Project in September. Now, that's the course leader's decision; I can live with it. Personally I think it's passé, but you can't mention that. ((Laughter))

Anyway we put interactive production together and once you build it and they all come sort of thing. There's a tremendous range of people coming from every field, right the way from nursing through to engineering, marketing, obviously production, journalism – all things were covered. Of course the upshot of that was the peer learning that can happen in that circumstance was just amazing

because people were listening to how the digital was either in or not in the domains that they were connected with. I'm not sure that was actually part of our plan, but it was a fantastic outcome from that and it really showed that you could get people communicating through the digital, through digital language and code right across all these different interfaces and all the rest of it, all the different terminologies, and you could get people to talk in a common language across these different areas.

That went on for I suppose only about three or four years and then we got the chop. And the reason we got the chop, the rationalisation for that was that for some reason the university was down by 4 million quid, and because we didn't have particularly high numbers we should feel better that we were able to offer ourselves up to save this outrageous amount of money.

Debs Yes, such a shame.

Russell But what did it save? You're talking about peanuts. Anyway, so that wasn't a good time, talking personally. What was nice for me was I wasn't ever really under the cosh for ours because obviously there were loads of courses that needed me to teach on.

Also after quite a lot of badgering I was encouraged by Professor Morris Owen to tie up with and see, as he put it, if the sorts of skills that I had in terms of interactivity and all the rest of it, could meet with musicians to create some form of interactive visual thing – which was very farsighted of him actually. He kept on badgering me, because in the beginning I couldn't take anything on – but anyway it was wonderful therapy. Eventually I succumbed and we did some workshops on this, and very quickly we realised that there was a way of doing this stuff whereby musicians could play whatever they

wanted to play, and then the visuals that were visible in front of them would change and adjust and respond to what they were doing. What was happening was the third thing was being formed, which was the inter-relationship between the music and the visuals. It took a while to really hone this down. In the first instance I was making visuals that basically went up and down sort of thing; that was about it really. And this was a lesson that I learned very quickly. Somebody would be playing a trumpet and something would go up and down, and then after about ten seconds the musician would look at me and then say, "Can I have the next one because it's just going up and down?" Ah right, we need to build in other elements within this: we need to build in deleting; we need to build in pacing; we need to build in change; we need to produce a whole range of different styles of these things such that the musicians sustain interest in what's actually happening. So, that's how it developed from something that you just do in a workshop situation to something that you could actually go and perform in front of people.

So, we quickly got to the stage where we were producing these things which we describe as movements, whereby you'd have something that had a range of algorithms in it which would produce pretty pictures, or maybe have a webcam or video or distorting 3D objects or something and you'd play that. Basically the band or musician would play until they'd got everything they wanted to get out of this particular thing and then we'd move on to the next one. So, you'd play a sort of chocolate box collection as a gig.

And it actually got the stage where to increase the surprise I would actually include kickets – as we came to describe them these little apps – that I would actually include kickets that the musicians had never seen before. Right, here it is. In fact we did one in I think it was

Canada which just looked like a black screen, and Morris said, “Start, start it up!” We had a room full of people. I went, “That’s it”. So, then he had to play and find out how he was going to affect it. We explained afterwards to the audience that that sense of discovery that you had in that really undercut the feeling, as we had in some of the early gigs, people were coming up afterwards and saying, “Wow, it’s amazing how you were able to play along with those visuals!” ((Laughter)) It was completely back to front understanding what was involved with it.

So, it was a fantastic creative explosion really, and in terms of offering some sanity to me in terms of the thing, but also it’s opened up all sorts of other interests for me.

Just to go back to the MA in interactive production, of course that finished. But what subsequently happened was we put an MA media scheme together that was going to draw together a range of different MAs, having only had really MA media running for quite a few years. So, the idea was to go to a competent collection of MAs which had core elements that everybody did, and then elective elements that you did with your particular named title – it was that format. What was so pleasing to me was the actual guts of MA media scheme was almost exactly what we had been running on MA interactive production. So, you’ve got a research component; you’ve got professional development; you’ve got opportunity to do your practical work. And we also brought in a new unit which we called Creative Practice Project which brought all these different people together at the beginning for all these different named pathways and set them a creative brief. For me that again was very similar to what we were doing on MA Interactive Production. So, there we had really quite a strong structure. And that went on for about four or

five years. There were a lot of graduates from that course that came out of it that we're still in contact with; and also obviously back into MA Interactive Production too that we're still in contact with. In terms of outcomes and destinations we've got people working all over the world in that and it's been very gratifying.

But then two or three years ago the centre decided that they wanted to take a faculty-wide approach to MAs. So, they stopped what had been working really successfully and with large numbers and brought in, well Karen was saying the other day, 46 MAs. I didn't know it was that many; but anyway a lot of MAs. Consequently very few of them run. The idea was everybody would have their own little MA in whatever school you were. Basically the advantage, so-called, would be the strength in the fact is coming from you in your school and you can own that and all the rest of it. But basically that meant what would run would only run if there were people dedicated enough to put the whole edifice together in their particular area. And obviously in a lot of cases those didn't run.

For our part we had our MA media course that ran, but really lost its identity from what it was. There was at one point talk about taking it back to the MA media scheme again; but I don't know what's actually happening with that.

So, from my point of view it's been a strange last 15 years in terms of things working: in some cases they were working very well from a curriculum perspective; in other cases things ended without any by your leave. Hey, people have the right to manage, don't they? But by a lot of different outcomes you could see what was actually working well and what wasn't within those systems. And in other cases what I was doing was basically just running from research alongside again

to try and say, "Look, this is perhaps what we ought to be doing, something along these lines", rather than only the traditional lines of TV and radio and all the rest of it, old school media from that point of view.

What also I decided to work on fairly recently was my own PhD work, which is another example of trying to say this is it, we've got to be expansive, we've got to see what's happening, got to understand what's happening across all these different domains. It's also width; I'm always interested in the connections between these elements and prevent the siloing of concepts or the siloing of students really in terms of only learn one skill set. And that is around the concept of responsive environments. That is a theory practice PhD, which is where I'm trying to develop the theory of responsive environments. To a certain extent you don't have to develop it that much because it's a term that virtually every domain understands across museums, galleries, architecture, education and all the rest of it. But because again the analysis has been mostly siloed and there's a lack of cross-referencing here's an opportunity to say here we can interconnect these different elements and see if there are common principles that have been used in these different zones which can then be brought together and say we can actually talk about some fundamental principles that work across the different domains that can feed back into these domains and help understand the bigger picture.

Debs                    So, it's going back to Bentham's penotagon really, isn't it?

Russell                ((Laughing)) I suppose everybody is doing these things and they didn't realise they could be looking across to it; they're all prisoners of their own ideas. I hadn't thought of it that way before but there is something in that. And for me being a practitioner I didn't just want

to do a theory based PhD, so basically what I'm now doing is actually putting some prototypes together which try and express some of the ideas that I've got on the theory side. That is part of what I'm doing for my infield PhD transfer document for hopefully September, October is both an infield analysis of how responsive environments have been used – so that's really just mapping the field; and then what will probably be, well already is, quite a detailed analysis of a prototype I'm putting together for a museum on the Isle of Wight, and that's to explore certain number of concepts that are attached to that.

But if you wanted to look back on the themes that run right the way through my career, if you like, it's very much that sense of trying to understand these bigger pictures. I just think somebody has got to do it. Often I will take on things that people don't see why they should bother with. An example being interactivity: you have quite prestigious academics saying that interactivity is not something that you can actually define. I think sorry ((laughter)), but that is immediately from a cultural studies perspective something you've got to deal with. You can't have a situation like that where an academic says something like that; not least because it sends students the wrong attitude. ((Rough voice)) Oh yeah, racism, that's too difficult to define that is; I won't bother.

Anyway, that's always been my stick, if you like. That is the concept in terms of the way that I work.

What has been interesting for me in terms of the work with ((?)) Video Sonic is that that has been an opportunity to really get, as much as a lot of these things are expansive and trying to get the whole picture, that is an example of where we've really drilled down

into quite specific procedures and looking at specific aspects of interactive audiovisual. So, both in terms of performance but also in terms of installation, those are the main two; although we've got a range of different offshoots that we're also interested in – fashion being one of them. But those two aspects of domains, of performance and installations in museums and galleries, that has been a really interesting research project. Obviously they play to, it used to become a motto on the course: oh yeah, you're a jack of all trades, master of one; you've got a big wide view of the world but you're so busy talking about that you lost contact with that; how do you throw all these different balls in the air. My approach to that is I suppose I'm reasonably good at pub quizzes and that but that's not the point; it is to gather. That is what absolutely annoys me about all those TV programmes, Mastermind and all that, is that they think the collection of data makes you a mastermind. How mad is that?

Debs Just regurgitate the format that you took it in, yes.

Russell Yeah. You can get a computer to do that much better. The two key phrases for me are, and have probably been there from the beginning: what are the principles – and that's what I've learnt from all my studies, BA and MA – what are the principles. Are the principles local to the thing or could they translate into other domains? And can you see similar frameworks or processes happening in completely different domains?

Debs I'm just going to agree with you there because I was asked to look at action research in great depth with relation to this study. And I thought action research, what does that do really, because it's nothing different to what I've been doing as a designer for very many years. And yet academia has rephrased the design process into

something called action research. It's just like okay, they call it design process, they call it this, they call it that; but fundamentally it's the same thing. I understand what you're saying.

Russell        There's a sort of power relationship there in terms of the ownership of the process. Oh, you think you're doing the process; no, we're doing the process and we're going to call it this and therefore it is something more substantial. ((Laughs)) You've got to be careful. If you start mapping everything onto everything else then that's potentially –

Debs            Similarities.

Russell        Yes, I think that's the key point: what can you draw. From the point of view those who don't learn from history are condemned to repeat it – there are lots of different versions of that of course – and often that sense of you can look at that quantitatively: don't ask for outrageous reparations from a country you've just beaten after the 1<sup>st</sup> World War. That's not the principle; that's a specific action that happened. What's the principle involved in that? And that is you can either encourage to come with you into the 21<sup>st</sup> century, or the 20<sup>th</sup> century as it was with Germany; or you can seek retribution. Those are the two principles of action; two processes you can go through. And those processes I think each Arabian country is trying to work through that right now; that's part of what's happening in Egypt. So, these are the principles you are trying to draw out of something but you can actually use them in multiple settings.

It's interesting in terms of the way that we're often asked to ((?)) in terms of transferable skills, that's transferrable skills in the sense of they've learned to do a presentation on one thing so they can do a presentation on another thing. Well, actually what about

transferable cognitive skills? That's not actually part of our assessment criteria.

The other phrase that I would use in that, I referred to earlier, motor analysis. That is a related thing to that: what form of analysis could we use in this instance; and could we use the same form of analysis in a range of different domains to try and understand it. So, all of that cuts across the sense of certainty is a way of describing it that you get in certain domains more obviously than others. And you certainly get that within psychology: they will tell you that they know what they're doing and what you're doing, and that the certainty – the whole corridor has just full up with psychology; a real bastion of reality here!

I saw a presentation from a woman psychologist at a conference this year and the certitude of what she was saying. You just think was that ever the case, the sort of modernist understanding of your intellectual domain. Ironically if you look at it from the sense of post modern perspective, a bit of this, a bit of that, you can cobble something together. Neither is true. You've got to actually analyse what is actually out there and see if there are common principles at work. That's why I'm an academic practitioner I think fundamentally. I think that was a key moment actually in terms of my research, and has been in all of my research. It's nice to have an opportunity to mention it really because when you go and interview people, when you go and talk to people or whatever, you find that there are common principles that they are utilising. Why I was able to come up with hopefully a new way of looking at interactivity was because I went and talked to practitioners in terms of how they were using it. Academics don't have to deal with interactivity. Marketeers, advertisers, interaction designers – funnily enough – they actually

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have to deal with different forms of interactivity that they're offering their customers, their clients or whatever. That is how I was able to develop or abstract out of that some principles in terms of what I thought interactivity actually was. I'm on various book lists, reading lists right across the world, including Bratislava ((laughs)); but my citation rating for my paper with *New Media and Society* is not one of the highest at the moment. But hey, I have a long-term hope that people will suddenly twig it; at least it's a different perspective of what's going on in that area. So, that aspect of where are you going to get an understanding of principles from: you're going to get them from understanding the practices of stuff.

Again, the counterpoint argument to that is: you're looking at all of this mucky real stuff, you can't abstract out anything of any meaning. And anyway, that's only one instance. Yeah okay, if I wasn't a historian I'd go along with that. But that is a key; you can use historical analysis to analyse lots and lots and lots of instances and draw comparisons across them. What sort of academic are you if you only look at one instance of something and draw huge and ridiculous conclusions from that? I would argue that that's where psychologists come in: they do a few studies, usually with psychology students, and they come out with all the responses as they wanted.

To look at something as complex as interaction design or usability or the digital and how complex that actually is, the skills that you need to do that you need all of them; you need the whole range of skills to actually enable that.

Debs I don't think that I would ever have come to this point if I hadn't have done the wide variety of jobs, of contracts or design work or

whatever, the different areas. I've been in engineering, I've been in architecture, I've been in all kinds of different places; and you pick up and observe and so on. So, you pick up different things, as you say, the principle by which things are done or the process by which things are done, and you see how they're actually replicated in all those different areas. And then as we said early maybe turn different things. But without all that breadth of different experience that has brought me to this point I wouldn't be able to do this, there's no way because I wouldn't have that understanding of actually what is going on in all those different disciplines to be able to say, well actually the things that interest me have made me push the talking walls down this particularly route. Now, if I was interested in something else I'd probably go down that route. So, all those practitioners, all those psychologists all have internal and external influences that bias what they do, I feel. And I've observed that everywhere I've been.

Russell

The sort of yin and yang of that is if you've got a, to use the phrase, a responsive attitude to understanding what is going on. There's a yin and yang to it because you can look at these things objectively, from a theoretical perspective and think yeah, there are definitely similarities going on in this and that's really interesting, and that enables you to amongst other things work efficiently because you can think right, I've used that system in that instance, I may well be able to bring it over here and apply it in this domain.

However, there is also the business of site specificness, and that is where you have to bring a different range of skills inasmuch to understand the drives of the people within that particular domain.

For us a classic example of that was working at the V&A in the tapestry gallery. We knew nothing about tapestry; we knew tonnes

about interactive audiovisuals and installations – but we knew nothing about tapestry, the actual content in space. So, we spent six months researching that. I almost managed to get on a course to go and make a tapestry; I just missed it unfortunately in terms of timing. But my colleagues Sarah and Morris went to visit Hardwick Hall where some of these tapestries had been before they went to the V&A. We talked to curators and all the rest of it. That was all about understanding where we were at that particular point; but it was also all about making sure we didn't produce something that made no sense to the people that we were supposed to be doing it for; and that it accentuated, it was actually complementary to what was on offer and perhaps challenging too. But I was amazed with the very positive attitude of the curators. They were responsible for the actual structure. We had other ideas for that and they said, "Well no, why don't you use a blank tapestry and then project on it?" It was their idea. And you just think my god, we're not just sort of coming in and saying all right, our coats over our shoulders, we'll just do this for you luv, and all this sort of stuff.

The upshot of it was what we produced had our interactive dynamism in it and all the rest of it, but it was using their content in a sensitive way and drawing out all sorts of different otherwise hidden aspects of the tapestries that wouldn't be seen. For example, being able to digitally zoom in to each individual little loop of a thread in a tapestry; something that you couldn't do unless you'd brought a microscope with you. So, it was that sense of actually being able to do it.

At the same time you've got to have a wider perspective in terms of what may be useful principles across different domains, you also need to be able to zoom in and understand sympathetically. The way

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Morris put it, he said, “The alternative to that is just doing a smash and grab. You just come in and you just do what the hell you want because hey, you’re geniuses. You’re just using V&A’s backdrop”.

In fact actually the only other thing that was ever done in that gallery was a Punch and Judy show. You think what the hell has that got to do with 15<sup>th</sup> century tapestries – nothing. Why do that? It doesn’t make any sense at all. It was just something in the content in the space.

So, from knowing nothing about tapestries I’ve become a real tapestry fan boy in that time. You’re getting into literally the warp and weft of the actual content where it’s down in that sense a tangible connection with that stuff. Consequently, having that micro understanding of the content, and a macro, wider view of how similar principles could be used in multiple domains, being able to have both of those is tremendously rewarding in being able to do that.

Debs

I perfectly agree with you because to do the talking walks for Beaulieu Abbey I had to know about the characters. So, I had to research real characters, people who actually did live at the abbey at that time; and also know enough about the era in order to invent characters as well and understand what they would do and how they would dress and how they would talk. So, there was a huge amount of research on just creating the characters alone. Forget the architecture; it was just that one point.

They had real character too. The medic was a lutheranian was bothered and always quite and meek and mild, but bothered all the time. So, when the music was composed for him as his signature tune it was that kind of quieter softer music, but with a little bit of

pace behind it. So, you do have to really get right into the nub of these things in order to, as a designer, understand them, don't you, I think. Although you're working with a curator you're not necessarily taking hold of all of their knowledge in that sense; you're working for yourself.

Russell

That's the killer thing really from a commission perspective. Something you say to your students obviously is that you're not in there to just turn up cap in hand and do what the hell you're told; but neither are you there to do the smash and grab where you just take any notice. It's the partnership; you've got to develop that partnership between the parties: they can learn from you, but you have to learn from them too.

Then there can be issues in terms of translation of knowledge. But I think if you are alive to the fact that you might be using similar principles in an educational project or in a museum situation or in an architectural smart building situation, they are completely different domains, but there are similarities and principles. But you may have to translate those principles to the people in their own language. This is something I was looking at ages ago as part of early research. There is a wonderful quote from a designer talking to a technician being interviewed and saying, "Well, do you use their language so they understand what you're talking about?" He said, "Yes, I do. But if I only talk in their language then they won't understand my language". So, the issue of translation in these circumstances is important to acknowledge that.

We use the phrase cone heads and creatives – although that's incredibly problematic because plenty of cone heads are creative; plenty of creative do cone. But in terms of the domain of cone or the

domain of design, if you like, there are plenty of opportunities for misunderstanding in that and you've got to be able to try and find some common words that can connect you together.

Again, that's why you want to have something tangible in front of you, whether it's wire framing to mock up and try out some alpha versions and all the rest of it, because then you can see that you're actually building something together. That actually issue also obviously becomes part of the translation, the thing itself; there is actually a practical outcome in terms of this.

Certainly talking to Paul ((Stefco?)), one of our old MA students, he was saying that he'd worked on projects where project managers had ended up with 28-hour days because they just didn't understand, or a 35-day week, because they'd completely lost the connection between the GAN chart and reality. So, instead of reality having to be acknowledge, you just extend the GAN chart into impossible time zones. ((Laughs)) 28-hour days – no, don't do that. Go and talk to real people about if there's a concern tied in with about the project is being developed. And then you understand how maybe you need more days and not more hours; and not that you need to extend a month, you may have to go into the next month. That's obviously an example of again there's that silo of understanding: this is the only way I can appreciate what you're doing is to use this same format.

We're talking about dynamic systems not only in terms of what we're creating but people are dynamic systems.

Debs                      Changes all the time.

Russell Yes. That's part of the fun, isn't it? ((Laughter)) Which we haven't really talked about at all, but anyway.

Debs There are several questions, some of which I don't know that we'll get through and some of which we've already spoken about.

Russell I've been expansive. If you want me to be more targeted in what I'm saying.

Debs No, these are just guides in case you're tongue-tied or anything like that.

Russell Not much chance of that!

Debs Do you remember the Dunster prototype, early prototype?

Russell Bien sûr.

Debs Do you remember when I first came here as a student and had this idea that I wanted to take it forward for my degree?

Russell Uh huh.

Debs Can you remember what your thoughts were of the idea at the time?

Russell This is going back a long way. In some ways it was, to me, I could see it being exemplar for what I thought ought to be happening. There were CD-ROM formats around at that time. Even something like Mist had similarities to it: that sense a space and 3D representation or use of video or architectural representations and so forth. And there were other things going on that were dealing with representations of historical spaces and all the rest of it. But from the research that I'd already done in that area I thought that actually your aspirations – because your aspirations were about interactivity in the digital and

all the rest of it – but actually at that stage it was actually really difficult to do very much at all. CD-ROM was a poor format; it was just terrible.

Debs           It was! I've actually got ((?)) about the technology aspect.

Russell       It's a deadly format.

Debs           It was very limited in its way of interactivity really, wasn't it?

Russell       It's like a non linear version of a DVD. You had to put it in and you got to fire the flipping thing up and get it working, and then it wouldn't necessarily remember how far you'd got so you'd have to fire it up again – all that sort of stuff. It was very stilted and time-consuming to actually do it. And most computers' RAMs were so small you couldn't get very much in them to actually show; that was a limitation as well. So, the video files were microscopic. A tremendous challenge to try to do something in that way.

But more importantly than the technical aspirations for it, I thought that the aspirations in terms of the layers that you were trying to incorporate in that concept that was what was important and that's what was driving it, right from very, very early on, across different timeframes – same place, different timeframes. And it was really exciting.

I don't know if I ever told you this, but it did chime with a concept that myself and Sheila Graber and her mater, who was in the northeast but now is in Ireland, a concept that we were looking into which is the idea of having animated spaces that again you could sort of peel away and find other layers to. The reason I didn't mention is because it was a bit to one side. It connected to me in

terms of some of the thought processes that I'd been going through. There was an obvious like philosophical connection between what you were doing in that and my culture studies.

Debs I can see that now from your explanation earlier.

Russell Just to be able to have the different layers. You've got your leaders of the household and your underclass. And trying to get the wholeness of that experience, the processes that people went through, and the processes the building went through was really fascinating – and still stands up now because there are sort of architectural programmes that are doing a little bit of this now. But it's still an idea that could translate into other media, for example TV. The problem with it is that it's too concerted for the sort of frippery that you get on television unfortunately.

There have been some architectural processes recently that have tried to do something like that, sort of a historical version of Grand Designs.

So, that was my absolute first impression of this was this was not only a great idea, but it was an exemplar of what I was hoping people would do within the MA. So, you said all the right things in the interview!

Debs I didn't know that; I was very nervous.

Russell I'm not sure I necessarily, as an interviewer, would say something as daunting as that to somebody; but that's how I felt.

Debs That's very nice to hear. I wasn't looking for compliments.  
((Laughter))

So, did you have much experience of visiting heritage sites? One of my questions in all of this is: is it too much content, not enough content for the visitor, the user experience at heritage sites?

Russell

Certainly more really before my kids were born. We take them to all sorts of things like Osborne House on the island and other places, and we did go to Dunster, as a case in point. Certainly before the kids were born when we were living up in the northeast every weekend we would go to either a garden or a museum or a historic location. In fact actually in retrospect we should have been members of English Heritage or National Trust because we would have saved a fortune. It was partly from my partner, Tabby's point of view, because she became fascinated with both the landscape and the architecture of the landscape. And she did some major prints on Dunsterambury Castle in the northeast and also various other castles and so forth – really large scale A0 size prints, lino cut A0, which is mindboggling, production line prints. You were pushing on an open door from my point. I knew a lot about the notion of heritage and that.

I never did a special on it, either BA or – well actually the closest I came to it was my BA dissertation piece project was on a comparative study of Isle of Wight tourist guides from 1823 to 1987. So, for me growing up on a place that was often described as a place of heritage or a place of tourism, it was more the tourism that I was interested in really: how you deal with that in terms of being surveyed as if you were part of the landscape, as it were. That also was a connection.

Debs

I go to heritage sites a lot, real strong interest in history, and that era of all these wonderful buildings that have been built. That's where

((?)) came from. I'd been with ((Daughter?)) and so on, and with other people, and I've been amazingly frustrated as a visitor at not being able to have the information that I wanted to have. ((Laughs)) Self consumed. But that plaque or that board or that whatever wasn't enough. Even if I could get in front of it to read it would have been good. So, I found visits very frustrating because I wanted to be lost in that place and take on the ambience of that place and meander at will; and you can't do that in these places unless they're derelict buildings. So, the idea of all of this was to give that user that ability to be able to do that.

Feedback at different times has been a case of: we've actually put too much there; content is too deep or too rich or too much a choice ultimately. And as somebody who is very into interactivity do you think that there can be a whole debate about choice: whether there should be choice or shouldn't be choice and too much is on. What do you think about choice?

Russell

It's another classic opportunity to almost give up on interactivity. There are people writing on this and saying the tyranny of choice, there's too much to choose from and therefore you choose nothing and all this sort of stuff. The response is it's got to be at the optimum level for that particular scenario. Obviously if you've got 100,000 people coming to your stately home every day, and in order to get the most out of a touch screen you've got to be with it for 15 minutes, you top that up ((laughs)), you go back to 28-hour days. How much time does each person need to be with it, and then consequently is that a problem.

There was one museum that said – I don't know if it was your quote actually, "Oh yeah, we would love to have touch screens, but the

cleaning bill for them is something like £20,000 a year to get the muck off the screens”, which is a horrible thought. But again it’s part of the story. I think that might have been Osborne House they were saying that. So, there are other layers of implications in trying to do something of that ilk.

But I think it’s better to try. If the choices are around the business of human interest and who do you want to get to tell you a little story, do you want somebody who’s in the stables or do you want the head of the manor that is what is driving the choice. But you do find kiosks and other things. You’re just pressing these buttons and you think I have no idea why I’m doing this. And it hasn’t reset itself so it’s still in the middle of itself. So, how do you get back to where you can make an informed choice; and all these other technical faffings that people have to go through.

I just think it’s what is optimum for that particular situation. The only input that we had from people on the V&A one was sound; but even that was problematic. At one point we had the chief curator in and I was whistling and this thing was moving around in front of us, and she turned to me and she said, “Nobody has ever whistled in this gallery before”. ((Laughter)) I can’t remember what my response was now; something like, “About time they started whistling then”.

The best thing was a cough. A cough worked perfectly because it wasn’t obviously trying to do something, but the response – you coughed, not very loudly, but it’s such a large room that you got the reverberation around and that created a range of different effects.

In that one we were working on a 20-minute loop of stuff that was both interactive and linear running through, on the assumption, well we discovered the average length of time that somebody would

spend in a space was 20 minutes. But what we saw with our own eyes was people coming in, only looking at the tapestries and walking out. They'd come from maybe anywhere on the planet to see these tapestries and that is why they were there. They weren't the least bit interested in what the other thing was. Fair enough. Actually in some ways that was a vindication of us because what we're doing is not so mind bendingly intense that they can't concentrate on just looking at the other objects. It was just trying to put something complementary and in situ.

That's another key phrase: if it's something that actually does complement the experience then all to the good.

The other factor that is now in with this is when do you get the additional content? You might see that there is this content there; but as I just had a text just then, the additional content doesn't necessarily have to be on a kiosk whereby everybody has to take turns in going through it. So, that is another significant development.

It's very liberating because the CD-ROM and kiosk modes are very similar in the sense of how quickly you could get stuff to people in a way that stimulates them. You don't really want them to be being late for the coach back because they're still trying to wade through Section 28 of one kiosk.

Debs            My initial idea was the fact that you would have it on your phone and you could either download at the beginning of your visit, you would be told all about it and therefore you could download sections that you wanted to to your phone; or you could prepare for your visit in advance if you knew you were going to go there, and therefore download content for what the kids are interested in – what bit would you be interested in looking at when we go

tomorrow, kind of thing, and get them to bespoke their own day from the information. And you as parents could also pull down what you wanted – which could all be very different. And you can think I actually wanted to go and look at this, and all the time being tracked because it's on mobile or whatever. It's a win-win for the site and the visitor.

Russell        When I was doing my research – was it last summer? – I tried to look at these things in a more abstract manner. I think it's translated into something that I've been talking to students about now in terms of social media and so forth, is that – certainly my music students get excited about doing a gig or an event or something like that, and then they want to do another one – well what about the legacy? When you think about it, preparation beforehand that you can on mobile or other systems; but being there is another thing. But then what is the legacy from that afterwards? They don't have to be separated out from each other; they can all be part of a stream that enables you to have an extended experience over something. That is for me, in terms of my research, has become an interesting challenge. Is it a problem that you could go into a space – well before you go into a space and you've got this prelim thing that's kicking off – you go into a space and you've got this additional thing with you so that again makes you interconnect with that; and then afterwards you've got something that you can take away. There is a way of looking at it that the responsive environment is only on an app. That is an extreme version of it.

The problem I've got with that – and the subtitle for my work at the moment is Designing and Locating Interactions – the being there still matters.

Debs           Very much so, yes.

Russell        I think it's good from a research perspective that you need to deal with the devil's advocate position, the opposites, the challenges to a particular view. The challenge is: well hell, now you've got mobile you don't have to be anywhere at all; you can bring all of this stuff to you.

Debs           You don't get the ambience; you don't get the feel for something. And people, however young to however old, do have that innate sense of wanting to absorb the ambience of the feeling of somewhere. Even the temperature: whether it's cold or hot, it makes it, if you go to a gig or concert, it's definite. Rather than watching it on TV where you're just sat there; whereas if you're there it's like you're alive. That's the difference.

Russell        There is the debate over whether more or less people are going to live events now. I don't know what the latest figures are.

Debs           I think there are more.

Russell        Certainly as far as I was aware it was actually more, and festivals and all the rest of it. There seems to be an infinite number of festivals now and people are flocking to them because they want to have a real experience. They can have a layered experience too; they can have a mobile experience alongside. It's ironic that BBC named Glastonbury as the first digital festival. Glastonbury have been using Bluetooth and various other technologies since at least two festivals ago. If I was Glastonbury I'd be saying get a life, BBC, we were digital before you started streaming everything.

That's an interesting way into this to say: when is the experience? Is it before, during or after. It can be all of those things. Therefore when you're getting an extra rich experience – well, you obviously get a rich experience when you're in that location because you're situated in that space and it evokes things that won't be evoked in other places – but there are opportunities for a rich experience before or a rich experience afterwards as well, of different qualities.

Debs                    It's why people take videos too, isn't it, when they go to somewhere? Paul is into cars and stuff, so he'll go to an event and he'll spend most of his time behind the camera videoing the cars rather than staring at them. And then he'll take the video home and he'll replay it and edit it and make it his. And then he'll post it up for the world to share and wait for all the hits to come in. So, for a car enthusiast what is actually happening there? Because he's attending the event, he's hearing all the noise, he's recording it all; but he's not actually for real watching it – he's watching it through a lens. So, again you've got that player there as well.

Russell                Absolutely.

Debs                    It is difficult. And every user, every visitor is going to be completely different. And the visitor going there on Monday is going to be very different to the same visitor going there the next day: the weather could be different; their mood could be different. We've got all these different things and you are designing for that.

Russell                Yes. Because you can go the key stage two sort of thing where you've got worksheets – which you did do – colouring sheets and all the rest of it; so, that is one client base you're relating to. Some people will see this as just entertainment and no more than that; a moment's digression from the rest of their life. Others may wish to

approach it from a really hyper MA level or PhD level research project. So, you've got one kiosk that is trying to react to all these different aspirations.

Debs            That is the Beaulieu one, the cube: trying to do all those different things. It's going back to choice: perhaps too much option.

Russell        There are certainly other ways in. There is business of filtering so you can do your filtering there quite quickly and say what sort of punter are you, what would you like, what level of information would you like to have in there and what are your interests or whatever.

Debs            The old ((?)) web two kind of thing.

Russell        I would say that can be done in a multi linear way. You've got a number of ins. All the paths might lead to the same content; but you go in as a little boy, an academic or somebody with a passing interest, you choose which path you'd like to take in terms of gathering more information. Now you could have a situation where, because you've got an academic interest, you'd like to have a look at the bibliography that was used to construct the thing – we've hit that button and we'll Bluetooth it to your phone. There are ways of providing extra levels of content to different types of people, which would be obviously site specific in all cases.

Okay, that's a challenge to actually implement; but that's a really quick way of dealing with what would otherwise be too much information.

There's ways and means really in terms of dealing with that. Once the Pandora's Box is open and you've got something that is robust then why not offer this stuff up? But if you can construct a system

whereby it's not crucial for the guy to stand there; they can literally just say read more online, get the app or whatever it is. Of course there is the cheesier end of the market, the kiosk thing, is only trying to sell the app. I'm not sure I've seen examples of that but clearly there are some.

Debs            You mean a row of kiosks where you can go up, like you sign into a conference, and you do your name and interests etc, like you do when you sign into a conference, and then it will Bluetooth all that information for you to your phone so that when you walk around you've got all the information there. That's what I envisaged.  
(Laughs))

Russell        Yes. That's what they were doing in Glastonbury because you just walked in and an update inventory of what was on.

Debs            Your likes and dislikes.

Russell        Yes, you would download that as you walked in.

Debs            That's the way to do it.

Russell        That's seamless then, isn't it, and personalised and customisable and all the rest of it; and not invasive of your time because you can always refer to that sort of material later.

It's interesting to say that a reference point for that is Donald Norman and his book on invisible interfaces.

Debs            I think I've picked that book up.

Russell        It's futurology in some ways; but he was talking about that computers will just disappear. They'd be on your wrist. The iWatch is on its way. So, consequently one way of looking at it is they become

ambient. But of course the problem with using the word ambient – and there are researchers out there are using that term – is oxygen is ambient in the sense that I don't see it; I just use it.

Debs This comes back to your responsive environments as well, doesn't it?

Russell Absolutely. And actually one of the writers on responsive environments is using the term ambient within that. I just think well yeah, that is a way you can describe your stuff; but the point of interactivity is for the user to have some form of interactive role in that decision making process. If everything was ambient then we'd all be swimming in it. Where do we gauge it?

Debs There has to be choice.

Russell Yes. And that is the opposite of the notion of the tyranny of choice or having too many choices: to have no choices is back to the same old sort of linear mulch that everybody has had to put up with throughout time. There ain't nothing wrong with linear; don't get me wrong. I say to students, certainly MA students, "What was the most powerful media experience that you've ever had?" And most people will say a film, still. I say, "Well how many of you would say a website?" What the hell? How could a website do like 2001 Space Odyssey? But that is the aspiration.

There is nothing wrong with a linear; but in some ways an ambient form of responsive environment or installation logically is a linear experience because it's not something that is in your compass. It is doing things for you: you move forward and it switches a light on; it's trying to do this cybernetic thing. In some ways it's actually worse than linear in the sense you've lost a connection. In fact the worst form of interactivity is where you trigger something, you don't know

how you've triggered it and you're not even really sure what you've triggered, something is happening, but you've got no context for why it's actually happening. That to me is a failure worse than somebody putting a really crap film together, or equivalent to anyway. You just watch it; I can't watch this anymore because it's not engaging for me, it's not connecting with me. Well, some interactive experiences work in that same way. In fact they're more obvious in the way that they don't work because they have no narrative drive to them.

Debs            It is the narrative behind it, isn't it, really?

Russell        It's all about storytelling. The definition of interactivity that I came to is: the position of you as a user in relation to the creation of content. Otherwise we're just pressing buttons: that's me being interactive – what the hell. Literally you could get one of them nodding pelicans to press a button – it was on one of the Simpsons episodes.

The really exciting thing about interactivity is that you are considering who it is, how you are positioning them and what the content is and where is it relative to that little bunch of things. That's how interactivity works. That is how it really works in practice. So, why don't we define it as that? ((Laughs)) That was my revelation. It wasn't rocket science; it's just like that is what you have to have for an interactive experience. But then you look in the dictionary and a lot of the dictionaries don't even have interactivity in them. And then that starts to make you think hm, that's a problem.

Debs            I'm conscious of time; taking up too much of yours.

It's the same topic but slightly off topic. To me you are a designer, you're a programmer, you're a curator, you're an educator, you're a

manager, kind of stakeholder owner of Kicket – out of all of those different roles one, how do they work all together? Are they fairly seamless in the way that they work together? And out of all of them if you had to drop one or put one above everything else what would it be? Put one above everything else, what would it be?

Russell            Interesting question. The seamless bit of it I was and will ever be a generalist. I'm not saying that's an easy route to take.

Debs                Probably the hardest actually.

Russell            Well, I'd like to think so.

Debs                It is the hardest.

Russell            Where did that originally come from, beyond Freud's couch? Having false memories, god help me, about how I was affected by a Chihuahua when I was three or something. I don't know; I've always had that expansive understanding or wish to understand the world in that way. So, it's not been an automatic process. That is why I was so keen to do a cultural studies degree because it gave me tools to be able to do that, and then even more so on my MA, and I've continued that in my own research within the PhD; continued to look at multiple domains. Although nobody is going to tell you to do a wide range PhD, are they, because that is madness. Even though within the constraints I'm under I'm still trying to map things wide – which you need to do a bit of that on any infield course.

So, that side of things I can phase from one thing to another. At the moment I'm working on ((counts)) five main projects which aren't directly related to my teaching.

Debs                That's a lot.

Russell Yes. Probably maybe more but I'm too scared to think about. But a lot of projects on. I've got the ability to go right, I'm going to spend two hours on this one, two hours on that one and all the rest of it. Actually no, six projects. So, one might be to do with the little band that I'm. I'm working on a little concept. So, do some music for two hours; work on responsive environments for two hours; work on some prototypes, theory practice. Actually it's a good way of looking at it specific about the PhD, that sense of being able to drive something forward using processing – because I'm using processing at the moment – drive something forward and then hit a major stumbling block, my god this is really serious, I've no idea how I'm going to get through this, this could be the end of the PhD ((laughs)); and then think okay, I'll leave that and get on with the theory, because at the moment the theory is working really well. I'll do a couple of hours on that. I've been meaning to get a couple of references out of that book anyway – which I was doing on the boat coming over today. And then go back to the practice: oh, that's what was wrong. Phew! So, things feeding off each other. Of course that is times two: that is both in the sense that one needs to inform the other one because that is what theory of practice is about; but they psychologically support each other. You are using different sides of your brain even between the two, so you can gain some respite. But it's not R&R in the sense of having to just go off and lie in a heap for a while – which I did do yesterday ((laughs)), let's face it. You can recuperate around doing something creative. And that's tremendous because your output is expanding and developing on both sides from that point of view. And these other projects that I can stretch myself out in a way from the main thing and just do something completely different.

((Takes phone call))

Debs            My question whereby which of the roles you would like to elevate –  
                      would it be musician?

Russell        The way I put it is if you cut me in half and go and find the sort of  
                      core thing I think in the end you would find a musician, because it  
                      informs everything else. I'm not in the least bit religious, I am an out  
                      and out practising atheist; but nobody is going to deny that there is a  
                      somewhat spiritual nature of music and the way that it can connect  
                      people together and the way it gives joy in the way that many other  
                      things don't.

The other thing is I'm a musician on one level but I wouldn't get  
grade one in any instrument. I've tried reading music – that might be  
my retirement project to see if I can actually learn to read and play  
at the same time – but I can do what I want to do without that; so I  
play intuitively and experimentally, if you like, as a bass player and  
electronic musician. I'm not into music to try and understand it from  
a theoretical perspective.

Debs            Just at your core.

Russell        Yes. The nice thing about it is that for me it's not possible to express  
                      it in any other language so that's why it's so powerful, and that's  
                      why you can have moments of intensity off of music that are very  
                      difficult to have in any other form. But I think that informs  
                      everything else. You think it's got narrative, it's got layering, it can  
                      tell so many different stories, it can move people, it can convey so  
                      many different things. And that sense of having that as an aspiration  
                      into other areas. Back to what I was saying before, can you imagine a  
                      media or a website that moved you, back to a CD-ROM that moves

you at all? Well, there were some very good CD-ROM, and of course Mist was a CD-ROM. So, trying to create something that conveyed an effect or whatever. So, you do get moments of that sort of order.

The ultimate form of interactivity can be you and an instrument in that sense. A user positioned in relation to content: there you are, you're holding an instrument and you've got that immediate connection there.

So, there are two sides of that: you've got almost like a project management approach – do a certain thing in that area, do a certain thing in that area, and they all feed off of each other in that sense. It's not a problem to have six or seven different projects going. And it's not about juggling them; it's about one thing informing another. Again, that sort of cuts back to responsive environments in different domains: the connections of principles across different things and you might learn one thing, something in one location that you could apply to one of the others. But if you're only doing one project, if I was only in a band then that would be limiting in terms of only in that domain. It would be great fun and I'd enjoy myself and all the rest of it; but I am fortunate enough to have a sort of brain that wants to work across a whole range of different things.

To say what's core, I suppose the thing that has to be core is the thing that is fundamentally indescribable. Because otherwise you start to say my core is the ability to manage everything. Jesus, you know! ((Laughs)) Just go and do a business degree if you want to do that. That is not what is core. The thing that is going to have to be core is the thing that is drawing out from something deeper than all the other pieces of the puzzle. That would be a way of looking at it.

Debs

Thank you very much.

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