Higher Education Academy

TRANSFORMING TEACHING
INSPIRING LEARNING

Innovative pedagogies series:

Synthesising approaches to openness

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Introduction

What follows is a particular teaching moment that is located on a learning curve so steep as to appear to be overhanging. On reflection it was an innovative moment for me, but needs to be understood within a much broader and holistic set of attempts - some successful, some not successful - to solve a whole raft of problems. Problems that were both disciplinary and approached from a practitioner perspective and personally, approached from the perspective of someone having to learn how to teach quickly and in a live teaching environment. This is a narrative about synthesising approaches to Openness, and it begins in the academic year 2008-9, around the same time as Dave Cormier coined the term 'Massive Open Online Course' or 'MOOC'.

Context

There is a moment in Jeff Jarvis's book *What would Google do?* (2009) where he describes a failing Harvard student who has been spending his term on a web project, unrelated to his course. At the last moment he throws up a website and spreads the word among his fellow students that the site is a collaborative study aid and everyone should add in the missing information about the various topics, à la Tom Sawyer's fence painting. His Harvard peers diligently do as directed and the boy aces his exam. The boy was Mark Zuckerberg and the web project he'd been noodling turned into Facebook, but the really interesting thing about this story for me, was that his professor said that this collaborative cohort was the highest passing class he'd ever taught.

While Zuckerberg was getting other people to do his homework for him, media producers like me were living through seismic changes in the media economy. As an editorial photographer in New York, I had a business model in which my product (photographs) was a scarce commodity, relying on legacy media gatekeepers (newspapers and magazines) to control its supply in order to maintain its price. The final consumer, the reader, never actually paid me directly for my photographs. Instead, they would pay for the newspapers and magazines that my pictures came wrapped in (the mode of distribution). However, the Internet was redefining this business model as well as the whole media landscape in which it existed. My photographs were becoming images and the magazines and newspapers were becoming websites.

The [Internet] cookie was about to show advertisers that they didn't have to pay a premium for carpet bomb advertising in a national newspaper, but instead they could pay for individually targeted ads that followed their customers from one site to another, and would be available to the highest bidder. My scarce analogue photographic product had turned into a non-diminishing digital one, whose unit costs were zero and transmissions were instantaneous and free.

For many of us at the time our only means to wrest back control of the supply was to use copyright. I would dedicate time every week, at first, and then later, every day, to trawling the internet looking for copyright abuses (usually by Google-searching my name as this was before the days of image search) and firing off takedown notices, until eventually, a clearly terrified and very young person responded. She promised to remove the offending Heath Ledger pictures, and then, concerned of the legal consequences of her piratical actions, she begged me not to tell her parents.

This was a defining moment for me. I'd never set out to be this person. Here I was, an adult, shouting and threatening a child (albeit digitally), who'd done nothing more than I'd done as a young person and as had generations of young people before us. Humans have historically surrounded themselves with images of their heroes, be they in churches as paintings, murals, tapestries or as idols. They were the cultural signifiers declaring to which group we belonged.

I wondered who alive today hadn't pulled pictures of their heroes from magazines and stuck them to their teenage bedroom wall or used them to cover their schoolbooks? This was no different. It was just that the walls of their generation aren't physical, they're social. They're on Facebook, Tumbler, Pinterest, and their schoolbooks are more likely to be blogs. Sure, the digital has moved us from the tangible to the intangible, but it is still underpinned by the same impulse of association, both in private homage and public association.

If anything I wanted to be telling this young fan's story, and quite quickly (mostly to appease my own guilt), I sent her previously unseen out-takes from the shoot. These are the images of most value to the geek, to them they're the unpublished back-story to the shoot and access to this content is highly prized. They're similarly prized by paying publications and had previously formed an essential part of my editorial business model, but I had now given it all away for free, to an anonymous 14-year-old blogger because I was ashamed. And I thought the story would end there, but it turned out that she wasn't just any old blogger. It turned out (and probably the reason why she'd turned up so highly in the Google ranked search), that she was the "go-to" girl for Heath Ledger. She was a trusted and credible source and her blog was a hub for other Heath Ledger fans, and from which I began to see a steady flow of traffic to my site. A flow of people not satisfied with free, low resolution screen images, but instead people who wanted to buy original photographic prints and any other ephemera from the day. Everything was a potential collector's item, and the more the digital made us all archivists of the intangible, so it reminded us of the physical events and tangible artefacts that had born first-hand witness to those events. The photograph was not evidence enough.

This phenomenon of people (fans or geeks as I'm referring to them) wanting to pay for something that was apparently freely available was in direct contradiction to what my economics 1.0 understanding told me were the factors that should effect price. Not in the sense of the artefact that had born witness to the event, like the mug Heath had drunk from in one picture or the book he left behind, those things were loaded with meaning, but the images didn't come into that bracket. There was an infinitely free supply of them and yet there remained a demand to pay. What these 14-year-old bloggers were showing me, was that pixels weren't paper, that photographs were very different to images and they had their own inherent value structures (something that I investigated further by offering to work for editorial clients for links rather than fees and then in a widely publicised experiment with the science fiction author Cory Doctorow[1])

I was navigating photography's paradigm-shift with the only reference points I had, like describing images as photographs. Describing, as McLuhan puts it, new media in terms of old, where the term 'photograph' is used as a metaphor for the image, leveraging something familiar in order to describe something new and unfamiliar (McLuhan 1964). Thematic references built from what technology looks like, can be at the expense of what that technology might come to mean and history has taught us this. Steve Jobs famously cited the first car as being described as a horseless carriage, rather than a climate changer, or obesity wagon.

The darkened rooms of the Italian Renaissance, onto whose walls were projected images from outside were called *camera obscuras*, from which and we get the name camera. Those rooms were effective for safely viewing solar eclipses and later their portable, box-like variants were useful for artists to trace accurate illustrations. They have little in common, however, with the mobile super computers from which we habitually capture and share both our own data and the data of others, including, but not limited to, the things we see. Calling them phones or cameras references previous technologies that they resemble physically, but not what, in the age of data, they are coming to mean.

These paradigm shifts aren't limited to cars or photography, but instead are an expected aspect of technological change, punctuated by moments of *retrospective* significance. We are, as McLuhan said, the

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[1]A good write up by Leo Hsu can be found at **http://www.foto8.com/live/beyond-perceivable-benefits-jonathan-worths-creative-commons-license-experiment/**

people of the rear view mirror, always walking backwards into a future seen in the reflection of old technologies (McLuhan 1967).

But as a new teacher I wasn't familiar with, or wedded to, the traditional modes of university teaching – which was scary, but I now appreciate, freed me to consider these questions from new perspectives. I also didn't know how to teach these ideas of constant redefinition and paradigm shift speculation. As David Campbell puts it, "as they stormed the Bastille, no-one turned to anyone else and said '*Hey, this is the first day of the French revolution?'* it was only with the benefit of an historical perspective that this and other pieces of information can be stitched together to form a narrative" (Campbell n.d.). We (me and my students) would have to learn the subject together.

By professional necessity I was already reaching out to other people making sense of this changing media landscape. Cory Doctorow was one of them: a science fiction writer who made e-version of his books openly available for downloading with a Creative Commons License. These licenses are as Joi Ito, Chief Executive of Creative Commons, describes: a user interface that sits on top of All Rights Reserved Copyright (Arthur 2009). It enables the creator to explicitly allow certain kinds of use and reuse of their works without the user having to seek permission, and these licenses sit along a scale of openness. The most restrictive disallows remixing or commercial use, whereas the loosest allow both but only stipulate that the original work must be attributed to the author. Use of these licenses at the same time as publishing hard copies was making a good economic sense for Cory, as he says himself, "My problem isn't piracy, it's obscurity, and free ebooks generate more sales than they displace." (Doctorow 2015).

Other people within the photographic industry were also experimenting with creative new approaches to the business of photography. They included Stephen Mayes, then director of VII photographic agency, and John Levy, publisher of the on and offline photojournalism magazine FOTO8 and director of HOST gallery. Professor David Campbell, of the Durham Centre for Advanced Photographic Studies, had stopped writing for closed academic publications and instead was publishing his thoughts and reflections on a blog; eventually he left his institution to become a freelance academic. Fred Ritchin of New York University had predicted this moment back at the birth of Photoshop in 1988, and developed these ideas with his seminal text *After photography* (Ritchin 2008*)*. Ritchin's book *Bending the frame* (2013) went on to map out a series of practitioners who have since developed and are developing exciting approaches that are redefining what the 21st century photographer and their business models might become. At the time, Tim Hetherington[2] was still alive, out there in the field redefining what photojournalism and lens-based storytelling might be.

But none of us really knew how this future of photography might unfold, so it made sense to make that the starting point of the class, and I did this both with the students in the room and those people who were not but still might be interested in the conversations that Stephen, David, John, Fred and I were having, so it seemed appropriate to run the class on a blog.

#PicBod

The first class I ever designed and delivered for the Coventry University BA Photography degree was called 'Picturing the Body', a class about representations of the body in Art. This was never going to be something on which I was going to be an expert, but I did have something to say about the artefact, the crafted, artisanal, rare, and valuable physical thing forever locked in time and space. I thought of this both in terms of

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[2] Tim Hetherington produced books, films and other work that ranged from multi-screen installations, to fly-poster exhibitions, to handheld device downloads, he was killed by a mortar while working as a photojournalist in Libya in 2011. **https://en.wikipedia.org/wiki/Tim_Hetherington#cite_note-guardobit-5**

the photographic fine print, framed and on a wall, but also by analogy, as the face-to-face teaching and learning moment, 'the class', both of these were, as Kevin Kelly describes, "generative" physical experiences that could not be digitised, only simulated (Kelly 2015). Chris Anderson in his book *Free: the future of a radical price* (2009) speaks to this as well when he says that with every abundance we also find scarcity, and although in that case he's talking of the abundance of material accessible via the Internet versus the time it would take to consume it all, the Doctorow trial had brought these two concepts together. If the digital was being leveraged as a non-diminishing simulacrum, then the more people who saw it and the wider it reached outwards through time and space across the Internet, so access to the artefact of which it was a trace/representation would become relatively scarcer.

In our experiment, Cory Doctorow and I had placed this phenomenon in a market context. We began with a portrait of the author (Cory) at work in his office, which we decided was something that had a universal currency with avid readers. Reading is, after all, a very intimate experience but it is largely one-sided. We might spend hours or days with the voice of the author in our heads, following us around whatever spaces we choose to read, however, that intimacy is asynchronous and unreciprocated. We never get to share in the moment of creation. We can only imagine what the author saw as they conjured up the next story twist, or what it feels like to sit in their chair, look out from their desk or down at their blank page as the words march across it.

The image shows Cory seated at his desk surrounded by books and all manner of personal ephemera. He is small in the frame, only head and shoulders visible above a monitor which sits in the lower right corner and from which blasts the scene's only source of light (Cory actually had to sit staring into a high-powered flash head for about ten minutes).

I then made, numbered and signed special archival chrome-ink prints that were bundled along with pages from a photocopied version of Cory's latest manuscript, each page of which he had signed. Everything went on sale using a variable pricing system that relied on participatory price setting of the kind described by Yochai Benkler in *The penguin and the leviathan* (2011), but crucially our "free" version was available alongside too. This high resolution file of the image was (and is) available for download and can be printed at high definition up to a metre square. It also means you can zoom in and read the titles of the books lining the shelves, which Cory then augmented further by annotating the image to describe what the ephemera within it was.

Finally we limited the length of time that they would be on sale at this price and warned potential buyers that any remaining images would go on sale at ten times the price a month later and then any left would be destroyed.

Given that Cory has a cult following, it turned out that one of the things we had in fact done was to provide a public forum for his fans to make statements to their peers (and Cory) about how much they valued his work (evident in the good natured in-fighting via social media to find out who had secured the number one and most expensive print).

There were a number of precedents for this variable pricing, most notably in the music industry, such as Radiohead's pay-what-you like album launch of *In Rainbows*[3] or where artists such as Madonna were switching to live performances for their main revenue streams and so leveraging bits to sell generative atomic experiences.

This was what and how I was learning, and it seemed (and still seems) an appropriate and holistic way to teach, being both in and of the digital at the same time.

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[3] See: *Copyright Fight* (2010) [Blog Post] Available from **http://brusselsguy.blogspot.co.uk/2010/07/reporter-copyright-fight.html**

Innovation moment: role of the teacher

Throughout that first year, my thinking, and so too the classes, were dominated by Chris Anderson's *Free: the future of a radical price* (2009), Clay Shirky's *Cognitive surplus: creativity and generosity in a connected age* (2011), Lawrence Lessig's *Remix: making art and commerce thrive in the hybrid economy* (2008), William Poundstone's *Priceless: the myth of fair value* (2011) and Jeff Jarvis's *What would Google do?* (2009). Jarvis tells us to think of our sites (for which I heard "classes") as being *means* rather than *destinations*, aggregating hubs rather than broadcast units, platforms that collaborators can build atop of and add their value to (Jarvis 2009). Shirky makes us thinks of collaborative beta processes to join, with their associated compound benefits of support and engagement, rather than finished products to be sold and consumed. Lessig (2008) reminds us that learning with the digital is both atomised and quantum, existing as it does in multiple environments and experiences simultaneously. He also made me re-think how the learning materials should be licensed if my intention was for them to benefit from remix and adaptation à la Jarvis (2009) and Shirky (2011). Anderson (2009) was pushing us to think about new economies, to identify and unpick mirror-metaphors while Poundstone introduced us to the world of behavioural theory via the pricing structures of restaurant menus. All of these things fed into both the design and delivery of what became better known as Phonar (Photography and Narrative).

The class was and has remained 'in beta'[4] and at the beginning of each iteration we've made it explicitly clear that we don't have definitive answers to the key questions we pose, instead the participant is invited to reflect on a series of interviews and creatively respond to a series of rapid-fire tasks which will form a portfolio submission. There is no pressure to develop fully resolved solutions; emphasis is instead placed on the iterative processes, so the inevitable 'failures' are seen as an opportunity to dramatically steepen our learning curves. Marks are awarded for the reflections on these 'failures', not deducted for the 'failures' themselves.

This iterative 'thinking through doing' is both a way of chipping away at a complex problem with a number of simpler ones, and forcing us to apply and test the knowledge we're developing. It is also a fertile environment for innovation as, in comparison with the student's learning experiences so far, this represents an adverse set of circumstances. There are no exams to learn for, nor algorithmic solutions to be drilled. One cannot excel by being the strongest photographic-craftsperson in the group alone. There are no defined solutions to these problems. Instead one must find new solutions that speak to the student's own interpretation of the problem and are appropriate for their particular audience. For example:

A post-photographic portrait

> The culmination of this module will be the production of a "post-photographic portrait" of Jill Jarman's piece for Cello performed by Laura Ritchie.
>
> Your decisions throughout this process should build upon and further develop the work we've begun in creative workshop and throughout the lecture series. This process should be evidenced explicitly and succinctly on your blog as well (a 500-word reflective summary would do the trick).

and then when an online participant probed for more direction via Twitter I answered:

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[4] Every class has led with a statement about schedule subject to change according to the dynamics of the class and also inviting visitors (via a site button) to point out any inaccuracies and suggest improvements. A separate section (http://phonar.org/staffroom) also details opportunities for collaboration or adaption of the course.

> Here's a slightly longer answer than the 140 characters Twitter allows: Perhaps see the task as a license (should one be needed) to "break out of the frame". To break out of stills, to use sound, explore multi-point perspective and grapple with non-linear narratives. It's the chance to make a bigger and more ambitious project than the weekly tasks and now that you've established a weekly turnaround of work you should find it easier to build something substantial. Revisit the lectures and interviews, look over your task outputs and then think of something you feel passionate about (love or hate) and craft us a narrative.

What is not said in this example, but is explicit throughout the course, is the critical need to identify, speak clearly to and move to action, the communities of interest who surround your work.

The classes do not train you to be a 20th-century photographer; an "algorithmic" supplier of photographs. They seek to develop heuristic problem-solvers who are visually literate and digitally fluent, people who can speak clearly with images and move people to action. They use photography and education as agents for change.

We do not begin from the position voiced by traditional legacy media that "we are constantly bombarded with too much information"[5] (Cunningham 2015) and needing more professional journalists, in order to make authoritative sense of it all for us passive and docile consumers. Rather that we need to challenge those traditional arbiters of meaning, and all need to be active interrogators of the media we consume, "in the digital age, participation is a part of genuine literacy" (Gillmor 2010). Our [photographer's] journalistic "product" is no longer to speak for other people, but instead to enable them to speak authoritatively for themselves, in order for their voices to be heard and crucially for their stories to move people to action. If there is one image that sums up this moment for me, it is the World Press Award-winning photograph of 2014. It is an image titled "Signal" and shows migrants at night, on the shores of Djibouti holding their mobile devices high into the air. They are trying to capture a free telephone signal in order to connect with friends and relatives left at home or a home to which they are trying to journey. It is tragic that so many of these people continue to die in boats unfit for the passage and even though many are holding smart devices and connecting successfully to the network, it *still* takes a photojournalist from New York to bring us their story.

The subjects have the means to tell their own stories, but not the social capital to be heard. The post-digital reality is that with so many people speaking this language of images at once, we have moved to a point where seeing is no longer naturally synonymous with believing.

The past 100 years of photography's evidential currency have ended. The image has inherited its cultural legacy but not it's evidential currency. The pixel-based image is not trace representation, it is an algorithm, a string of editable code rather than a fixed compound of silver halides so regularly bearing false witness, as to no be longer credible.

The image is now, as Stephen Mayes asserts "experiential". Its end users share them as easily as texts, a form of language in their own right. Snapchat is a great example of this where images are shared among friends though self-destruct. Something that would be anathema to the photographer who has matured carefully archiving every photographically witnessed moment.

Therefore the big underlying question which the class tries to address is: "What is a 21st-century photographer when everyone is a photographer?" In lots of ways it is analogous to the position of the 20th -century teacher, in that before the 'digital', they were both arbiters of meaning.

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[5] Francine Cunningham represents publishers of news media in Europe and before that represented the recording industry.

The photographer's job was to provide a definitive representation of events informed by a rigorous application of journalistic values and integrity. Their currency and status, part learned (skills), part earned (social capital) legitimated them as both a credible witness and a trusted source, without that reputation they were worse than valueless.

The teacher has historically been a similar conduit for the 'one-to-many' mode of information broadcasting, relying on their collateral wealth of knowledge to define them as the most valuable and reliable source of information in the room. The technologically connected room however, is smarter than the stage[6]. It has access to more information than any human can possibly draw on, and the technologically connected crowd of eyewitnesses, can offer more [literal] points of view than can the one professional photographer, no matter how fleet of foot or well positioned. So it was appropriate to question what both of their new roles might be in a technologically connected society, by opening a digital version of the class online and making it free to join.

This approach drew mixed reactions from professional photographers, teachers and managers alike. The *British Journal of Photography* questioned whether I was a "Freetard or Visionary" (the comments were very firmly in favour of the former) and the senior manager at my institution who'd been tasked by our Vice Chancellor with helping me, helped by sharing that he had "given lots of things away for free in [his] time and all it'd ever taught [him] was that it made people not want to pay for anything." On the other hand, I was made a Fellow of the Royal Society of Arts and Commerce for my research developing sustainable business models and chosen by MIT Media Lab Director Joi Ito to feature as the lead case study in *The power of open* publication[7], but nevertheless…

I reflected on how my thinking had changed from the way I'd previously seen the economic drivers at work with my old business model, and it helped me to understand that in most of these cases the people just didn't realise what their post-digital value asset was. And it was as scary for them as it had been for me, but I was not the cause of their folding business models. At best, I was a symptom.

As a photographer I used to think my value asset was photographs, and when the business model for the mode of distribution of my photography failed, so did my business. But when I stopped fixating on the mode of delivery and instead focused on what David Campbell calls "the mode of information" (which was photography or more broadly visual storytelling) my model began to thrive (Campbell n.d.). The technologist Richard Stacy speaks of an imagined village in which two lamplighters live, one of which considers himself a lighter of lamps, the other a maker of light (Stacy n.d.). No prizes are awarded for whose philosophical outlook enabled them to thrive after the invention of the gas lamp.

The opinion that 'open' meant 'free', reflected a point of view that considered the value asset of a teacher to be information, and so understandably it led to them thinking that by freeing up the mode of delivery (the class), they'd have nothing to charge for.

It is a similar way of thinking that would see the value asset in a library to be the books (the sources of information). But without the librarian to take the learner by the hand and guide them through a coherent learning journey, the library is just a load of books, a room full of as yet unrealised and potential knowledge. And if one seriously considers information to be the value asset of the teacher in the technologically connected classroom, then that puts them in the unwinnable situation of having to go head-to-head with the

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[6] See: https://twitter.com/jeffjarvis/status/449970034803494912

[7] See: http://thepowerofopen.org/

biggest information library in the world - the Internet[8].

The Phonar structure doesn't posit the teacher as being the most knowledgeable person in the connected classroom. Instead they are curator and contextualiser: someone with an overview of the landscape and an idea of the destination, but needing the connected class of co-learners to chart their best routes through.

The iterative 'thinking through doing' speaks to the maker philosophy of failing fast and often, both in the products that the students are making (e.g. photographs) and their learning experience, which is, in turn my version of the analogous maker-product. But it is one that we are *all* involved in. The student comes to a class that I co-ordinate, they produce learning artefacts, the success of which they reflect on and then iterate. I reflect on the success of the class in terms of their experience, which I gauge in terms of their outputs and feedback, before likewise iterating on that, and so on.

Open class: weeks two to nine

Class sessions vary as they respond to the dynamics of the particular cohort, but the success and impact of the weekly interviews with Tweeted notes has dominated the evolution of the class. At the start of term I will have a number of new contributors lined up, plus the bank of previous ones, but then the group is invited to identify, reach out to and organise additional interviewees. This is posed as something of a challenge, but identifying, reaching out to and engaging audiences is a key learning objective, so by introducing this problem early and implicitly, we can chip away at it as a group from a safe, mentored class space. This means that together we can address questions of how one might identify and approach a prospective subject/collaborator/employer via digital means.

As the sessions progress we listen to these interviews (recorded from Skype) sharing both our reactions (via Twitter) and later our longer form reflections (from blogs). This moment of open and reactive Tweeted-note sharing has become a cornerstone of the open classes and comes directly from Jarvis's reference to Zuckerberg's collaborative Harvard class (2009).

Students electing to take the Phonar class openly are not allowed to use pens and paper for notes. All notes must be collaborative and Tweeted using the hashtag #Phonar.

So a typical class session might be that I have interviewed a particular photographer or academic in advance and posted the video on YouTube[9] I'll then use the class blog/site (http://www.phonar.org) to announce that "*at x o'clock GMT on Wednesday we'll be listening to (for example) Fred Ritchin from New York and Lars Cuzner from Norway in discussion with Jonathan Worth, it'll be freely accessible so please Tweet your notes using the #Phonar hashtag and if you do a search on the same you'll be able to see everyone else's notes in turn*".

This hashtag moment of live sharing of notes and finding those of others, is central to the Phonar digital moment. Participants new to Twitter will usually arrive with their experience of Twitter being the unadulterated torrent of Tweeted meal images and personal updates. Those who have gone through the Twitter sign up process have possibly also had a bunch of suggested celebrities pushed at them to follow which to the sceptical user can make a bad situation worse.

A more fruitful way for the Phonar participant to approach social media participation is to consider that if Facebook as all of the people they went to school with, Twitter should be all of the people they wish they'd gone to school with. On this basis, we begin this process of tuning Twitter by looking for those people who the user feels are expert in their field. If they are not contemporaries or peers, they seek whoever the user

[8]Five years later the course became the Guardian's UK Number 1 and one of the most over-subscribed at the university even with it charging the highest fees it is allowed.
[9] These interviews are usually conducted by recording a Skype conversation using something like Call Recorder or doing a Google Hangout on Air.

feels are the contemporary credible authorities and, once found, we encourage them to follow them, but crucially we look to see who they follow, in just the same way that one might go to the sources of an article.

By visualising the voices that are informing our expert, we can begin to deconstruct their view of the world and so contextualise their comments. In a similar way we can map relations between Twitterers and data mine individual Tweets, which is a particularly effective tool when researching communities of context surrounding particular threads or conversations in order to draw those individuals into further conversations and/or move them to action.

I am calling this tuning of clearer signals from the digital noise "digital fluency" as this approach is more than just reading and writing, which literacy might imply. To be fluent is also to be able to speak clearly and be understood, and in order for that one also has to be sensitive to the audience and their context. More so if the intention is to move an audience to positive action, and in digital spaces this becomes even harder when interactions can be dislocated from real-time. A face-to-face conversation in a shared physical environment has all the benefits of shared ambiance and potential for inter-personal empathy. If the room is hot and noisy, or my interlocutor arrives with puffy, wet eyes appearing distressed, I can be sympathetic in both what I say and how I say it, whereas an email cannot.

In other words I need to know to whom I am talking.

Meanwhile the class is listening (each from their own device and with earphones) at their own pace [10], free to stop, re-wind, re-play, pause to Tweet a note or read someone else's and I am streaming a column of the hashtag and projecting it at the front of the class. I will be using platforms like Storify to aggregate the Tweets, and YouTube or Archive.org to host the interview, as well as adding my own thoughts and augmenting this meta-class set of notes with other linked material. It is, admittedly, an intense experience and its open nature quickly establishes a normative behaviour for the group with regard to their note sharing, both in terms of quality and quantity (Benkler 2011). The fact that there is a norm for this 'group' which demarcates them from other years is also a powerful dynamic and a motivating factor which we build into the classes.

As a reinforcement (pedagogic tactic) of this norm, I make it explicit that each year builds on the last with new themes, new contributors and new responses from the students to both the questions and tasks. The new cohort can also remix the work of the previous year, but only because the previous year enabled them to do so by agreeing at this point to license their work with Creative Commons licenses and so pay the benefits forward (Benkler 2011). Again, the explicit question is: how much further will they be able to see by standing on the shoulders of their alumni peers? And again, are they going to reciprocate in this sharing economy of creative innovation by paying their work forward too? If so they will be known and associated among the members of this community, by virtue of their year of participation, the work they produce and whatever Phonar artwork, logo or hashtag they design.[11] #Phonar13 was best exemplified by, and lives on in #Photosense and #Photography Magazine[12], whereas #Phonar14 was "Photography for your ears" and ended with a flashmob cello concert performed by the entire class, led by concert cellist Laura Ritchie[13] and introduced from Hawaii by musician Duane Padilla.[14]

The rapid-fire nature of the Tweeted note sharing does mean that it is more of a reactive exercise, but this

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[10] A 20-minute interview will typically take 40 minutes for everyone to get through.
[11] Each year is invited to redesign both the logo and associated merchandise which they are free to exploit financially.
[12] See: http://www.hashtagphotographymagazine.co.uk/#!about/cvve
[13] See: http://www.laurarithchie.com/
[14] See: http://phonar.org/2014/12/photography-for-your-ears-in-the-final-phonar/

has proven to provide a rich foundation of material for discussion in class, and for longer form reflective blog posts afterward. And of course as the week progresses and more people from the distributed class listen to the videos and add their comments, the global set of notes get better and better. Because the class materials and the site they gathered on remain open year-round and available for any teacher to teach, should we choose to revisit an interview in another iteration then we can draw on the accumulated long tail benefit of all the previous and intervening contributions as our starting point (Shirky 2008).

This opening up of the conversation asynchronously through the use of Twitter and blogs has also had other positive results in terms of employability as well as internationalisation. The mechanics of Twitter mean that whenever one's Twitter ID is used then the user is alerted, so I direct students to include the Twitter IDs of the people they're citing, quoting or discussing.

This means that in any one class the contributor (usually high profile in their field) receives repeated alerts that they are being talked about and invariably they will come along and look in, often to actually join the conversation. This is a magical moment for any class. When the person they are listening to and commenting on, begins to talk back.[15] Students have responded that both this outward-facing and industry-centred experience changes the classroom dynamic, forcing them to focus on their note-taking which is happening publicly among their peers and be sensitive to the fact that every lesson is a potential industry contact or networking opportunity, if not a job interview. This is a great frame for the issue, as the digital footprint and learning data of each new student is more likely to be harvested by future employers anyway.

The Storify platform also affords the teacher a means to be sensitive to how the meta-class set of notes evolves. A student lacking the confidence to fully and openly engage in class discussion, might feel more comfortable engaging via twitter, where they don't have to raise their hand. As the tutor sees that this student has Tweeted comments they can reassure her by dragging and dropping a proportionately higher number of hers into the timeline with other similar notes, or perhaps situate them visually next to a popular/successful/high-profile student.

This pedagogic approach leverages the core properties of a connected learning experience, being both of shared purpose and openly connected (Ito *et al.* 2012).

Open class: week one (privacy and trust)

The public nature of learning digitally has also become a space for reflective engagement. In 2013 at the Digital Media Lab awards Nishant Shah asked what his rights might be (as an imaginary 16-year-old in the world of Phonar digital learning) to be forgotten, and I had no answer. I was co-learning of the digital while teaching with and in the digital.

Unlike my post-digital students, my school reports were buried somewhere in someone else's attic. I was no longer to be held accountable for the questionable views I'd had in 1988, nor my embarrassing actions. Radio frequency identification chips had not recorded the times I'd gone to my high school library, and universities had not analysed that data to assess my likelihood of completing their degree courses.[16] My information searches were my own business and they were made in the confidence that no matter how trivial or earnest they were, that no-one would ever know. I could browse and search my library for the innocent and private joy of browsing and searching without consequence. No-one was storing my private correspondences or algorithmically analysing their contents. Back then I'd written private letters that were sealed and public postcards that said nothing. I didn't have a mobile phone to triangulate my location, movement, modes of travel, to record my conversations and map my relationships. My buying habits were not being analysed by insurance companies and no prospective employer would ever be able to drill into the soap opera of my

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[15] See: https://twitter.com/khamissy/status/572832394874630145

[16] See: http://www.theguardian.com/education/2013/aug/05/electronic-data-trail-huddersfield-loughborough-university

social profile for the backstory on my resumé. My formative years were what would now be described as "off-grid".

In technologically connected societies we habitually share this seemingly inconsequential data by default. We share our own, we share that of others by association and others share ours. Mobile devices, pacemakers, hearing aids, library books, store cards, Twitter lists, Facebook friends and photographs all store and hemorrhage data that can be harvested, algorithmically collated, cross referenced and interpreted. Data that is of us, by us, but usually not for us, which is bought and sold by data brokers,[17] the consequences of which are fed back to us via an obfuscated feedback loop.

At the start of each year's open class I now go through some of the ways in which we, as participants, are already leaking data and ask that we model out some of the threats and risks that we might possibly be vulnerable to, but this is an incredibly hard task as we consistently underestimate the risks associated with some things and overestimate the risks associated with others. Like the smoker who's afraid of flying (even though they're statistically much more likely to die of lung cancer than in a plane crash), we are as Dan Ariely describes "predictably irrational" (Ariely 2010).

Once we have identified the things we feel are most at risk, we consider who or what might represent a potential threat and then how we might mitigate against any consequences. Unfortunately, even if we do assess rationally, it would be impossible to account conclusively for every digital byproduct and eventuality. As a teacher, and open agitator, it is those unforeseen digital externalities that worry me the most.

Externalities is an economics term used to describe the positive or negative side effects of a process. Imagine a chocolate factory that produces delicious aromas as part of the cooking process (a positive externality), but also a toxic effluent from part of the cocoa-bean washing process (a negative externality).

Companies concerned with maximising profits will try to externalise (pass on) rather than internalise (pay for) the costs of dealing with negative externalities, even though the cost to society is much higher as a result. Imagine the river by which our imagined chocolate factory is located. Once polluted, the entire river now has to be filtered at a much greater expense than if the pollutants had been filtered at source. Economists refer to this as *true costs*.

The negative externalities of learning/living with the digital are, for the majority of us, still passing around an obfuscated feedback loop. The consequences of the data trail that we as academics and even more acutely in ethical terms, the trails of our students, can leave as we teach and learn within the digital are extremely hard to quantify, assay or evaluate. It is a machine loop, not a human one wherein otherwise unrelated information is associatively and algorithmically mapped by third parties to create otherwise unimaginable connections and conclusions (Anguin 2014).

Imagine a single 40-year-old female who stops buying birth control from her supermarket and whose sister has a history of pre-eclampsia. Would she draw a direct connection between her store card, Facebook friends/relations and the subsequent denial of her mortgage application due to an algorithmically calculated potential of a fall in income? And by the time she does make those connections between, what amounts to constant surveillance, and the inequitable outcome, it is unlikely that she'll find herself in an informed position so as to be able to challenge it, as this surveillance is not mutual or transparent. There is no effective transparency of accountability in a 72-page Terms and Conditions document written in legalise.[18] Imagine what exposures we will be opened to as LinkedIn Lynda, Slide-Share and Pulse (now all part of the same group) start to coalesce our learning data with, say, Pearson, who are collaborating with Knewton and Arizona State University to offer level one of many of their degrees.

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[17] See: http://www.juliaangwin.com/privacy-tools-opting-out-from-data-brokers/

[18] iTunes terms and Conditions as of Friday 3rd July, 2015 accessed from mobile.

In class we begin by examining our ‘frequently visited locations’, on an iPhone by navigating to:

- >Settings
- >Privacy
- >Location Services
- >System Services
- >Frequent Locations

iPhone screen shots of navigating to ‘frequent locations’

We do this to recognise ‘anchor points’ or places most visited and then the times that they’re visited. We can use this information to predict where people work (do they spend daylight hours there?) and where they might live (do they spend night times there?) and most likely we also have indicators as to how they travel between those two locations. Analysing these behaviour patterns can reveal a great deal about us, and abnormalities in those patterns can say even more, “where you are says more about you than any other point of data” (Angwin 2014).

We run thought experiments on who might possibly find it useful right now to know (i) where we live; (ii) where we work; (iii) our route between both; (iv) probable mode of transport; and (v) who we associate with. Then we consider who might find an archive of this data useful in the future. What would five years spent driving to work vs walking or cycling say about me to a company selling healthcare or life insurance? Combine with that my store card, my credit card buying histories, my social media posts and their associated metadata (data about the data), my Internet browsing history, my location data and if one is wearing smart technology, then also the biometric data and it is hard to imagine knowing more about oneself than the person or entity

who owns the sum total of this aggregated data.

We also consider what our associations can say about us. Not our best friend or flatmate, but the people we share a bus ride with, a coffee shop, or building. For instance, if I spent three years studying in a class with, or in the classroom next door to, someone who was later convicted of

terrorism charges; or bought coffee at a similar time of day from a particular shop as a drug dealer; or shared a holiday destination and hotel WiFi with a child pornographer, what does our “relationship", however tacit or selective, say about me? The reality is that in the world of big data, it can say anything that the entity in control of the data wants it to say.

#Phonar is a class on narrative, and we think of narrative as the thread that stitches together what might otherwise be unrelated information. As photographers we are the entity in control of that narrative, but as students and inhabitants of the digital we are not.

In the class, I assign each of the 21 chapters of Doctorow’s *Little brother* to be read by different people over one week. When we come back together, each person summarises their chapter for the rest of the group. The book is a young adult science fiction novel set in a dystopian future where high school students find themselves on the frontline of the fight to reclaim their data. In the classroom this opens out the conversation for us to begin to wonder what the technologies we are using might come to mean. Take, for example, the main character Marcus Yallow’s description of the dangers of the false positive (which I’ve been driving towards in the previous passages):

> This is the paradox of the false positive and here’s how it applies to terrorism:
>
> Terrorists are really rare. In a city of twenty million like New York, there might be one or two terrorists. Maybe ten of them at the outside. 10/20,000,000=0.00005 percent. One twenty-thousandth of a percent.
>
> That’s pretty rare alright. Now say, you’ve got some software that can sift through all the bank records, or toll pass records, or public transport records, or phone records in the city and can catch terrorists 99 percent of the time.
>
> In a pool of twenty million people, a 99 percent accurate test will identify two hundred thousand people as being terrorists. But only ten are terrorists. To catch ten bad guys you have to haul in and investigate two hundred thousand innocent people.
>
> Guess what? Terrorism tests aren’t anywhere close to 99 percent accurate. More like 60 percent accurate. Even 40 percent accurate, sometimes. *(Doctorow 2010)*

All of this is considered *before* we begin to work in our open class. This is also just our mobile smart devices, not the software we use on them. I also ask them to investigate a site called takethislollipop.com[19] wherein the data from a student’s Facebook account is harvested and incorporated into a short horror movie that depicts the viewer as a stalker’s target and includes currently shared Facebook information and associated information. After this, Tweeting our notes in class suddenly seems incredibly tame in comparison to the data we habitually share.

I encourage participants to take both a meta-cognitive view of their current behaviour and then a third person perspective on their historical profiles by asking what they think their data says about them, and then what might a prospective employer infer from the same information. For some, this ‘light-bulb’ moment can be disconcerting, like going into a mirrored changing room and seeing one's profile for the first time. For others this can be much more sobering, both figuratively and literally and for those people I recommend Julia

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[19] See: https://en.wikipedia.org/wiki/Take_This_Lollipop

Angwin's *Dragnet nation: a quest for privacy, security and freedom in a world of relentless surveillance* (2014) with its wealth of information on how to reign in data sharing from browsers, websites and devices.

As learners we are trying to move ourselves from a position of default, or worse, statutory consent, to a position of *informed consent.* As photographers we have to consider the gravity and responsibilities of the post-digital storyteller and what sort of consent we will ask of our subjects.

We ask, what is the story we are trying to tell (what do our images look like, how will they be perceived by a viewer)? And then what is the story that our images are actually telling (what does the metadata say and how will they be read)? One can just as easily substitute image for any other form of digital communication, a Facebook update, a Tweet, a text, and even a sign-in to a Wi-Fi hotspot. As we've already seen most of the digital data about us is not (strictly speaking) consciously by us, but generated by default.

Conclusion

I have tried to set out a particular teaching and learning moment that on reflection and after five years of development, seems like a positive innovation and outcome from the open classes but one that is set within a much bigger contextual caveat. Note-sharing among peer-learners both home and abroad, with the use of hashtags in public social media platforms has been both positively received by the students and has brought numerous indirect associated benefits.

The profile of the course and afforded learner opportunities for collaboration and networking, both with industry and peers, on an otherwise unimaginably global scale, have all been very positive externalities, though the longer term externalities of learning and living in the digital are less clear and I do not feel able to approach that as anything other than transparently, as a co-learner.

In 2015, the BA Hons Photography course at Coventry University will be running a newly written degree course to be delivered by a new team of staff. #PicBod and #Phonar or 251MC and 351MC as they are respectively known within the institution, may appear in some guise, but their design and delivery will rightly reflect the interests and passions of the new members of staff assigned to teach them. It would be entirely inappropriate for someone new to feel as though they had to answer the same questions that I and my colleague Matt Johnston have wrestled with, to come up with the same answers, and thereby have to teach in the same way, because the questions we have asked ourselves are moving targets and one of the most valuable takeaways from the last five years of open teaching.

What it means to be a photographer today and what constitute sustainable practices are evolving problems, they mean the class has to be responsive in order to continue to be an appropriate solution. They are key aspects of what I'd come to think of as a holistic open pedagogy, though in retrospect is more an iterative maker-pedagogy, sharing as it does, many of the core principals of connected learning and design.

For my next class I am trying to come up with a set of questions to challenge myself and, although not definitive or exclusive, I currently have four:

- Have I enabled my class to give their informed consent to *learn with the digital*?
- Is there an equitable share of the power within and without the class, and if not, is that dynamic transparent?
- Do any of my teaching decisions constitute barriers to entry/engagement such as geographical, cultural, technological, linguistic or academic?
- Who owns our data?

References

Anderson, C. (2009) *Free: the future of a radical price.* New York: Hachette Books.

Angwin, J. (2014) *Dragnet nation: a quest for privacy, security, and freedom in a world of relentless surveillance.* London: Macmillan.

Ariely, D. (2010) *The upside of irrationality: the unexpected benefits of defying logic at work and at home*. New York: Harper.

Arthur, C. (2009) Want to live like Commons people? *Guardian* [online]. Available from: **http://www.theguardian.com/technology/2009/sep/23/joi-ito-creative-commons-twitter** [Accessed 8 October 2015].

Benkler, Y. (2011) *The penguin and the leviathan: how cooperation triumphs over self-interest.* London: Crown Business

Campbell, D. (n.d.) Narrative, power and responsibility [online] *#Phonar*. Available from **http://phonar.org/2014/10/professor-david-campbell-on-narrative-power-and-responsibilty/** [Accessed 20 July 2015].

Cunningham, F. (2015) *Disrupt Europe: how to turn the challenges of the digital world into opportunities?* Speech presented at EU Parliament, 1 July 2015. Available from: **https://alde.livecasts.eu/disrupt-europe** [Accessed 16 November 2015].

Doctorow, C. (2010) *Little brother.* London: Macmillan.

Doctorow, C. (2015) Why give your work away for free? [Blog post]. *Medium*, 20 July 2015. Available from: **https://medium.com/medium-writing-prompts/why-give-away-your-work-for-free-5ed4513d5fa8** [Accessed 16 November 2015].

Gillmor, D. (2010) *Mediactive*. Lulu.com.

Ito, M., Gutiérrez, K., Livingstone, S., Penuel, B., Rhodes, J., Salen, K., Schor, J., Sefton-Green, J. and Watkins, S.C. (2013) *Connected learning: an agenda for research and design*. Irvine, CA: Digital Media and Learning Research Hub.

Jarvis, J. (2009) *What would Google do?* London: Harper.

Kelly, K. (2015) Better than free [Blog Post]. *The Technium,* 20 July 2015. Available from: **http://kk.org/thetechnium/better-than-fre/** [Accessed 17 November 2015].

Lessig, L. (2008) *Remix: making art and commerce thrive in the hybrid economy.* London: Bloomsbury Academic.

McLuhan, M. (1964) New media and the Arts. *Arts in Society,* **3**, 240.

McLuhan, M. and Fiore, Q. (1967) *The medium is the massage: an inventory of effects.* London: Penguin.

Poundstone, W. (2011) *Priceless: the myth of fair value.* New York: Hill and Wang.

Ritchin, F. (2008) *After photography*. New York: W.W. Norton and Company.

Ritchin, F. (2013) *Bending the frame: Photojournalism, documentary and the citizen. New York:* Aperture Foundation.

Shirky, C. (2008) *Here comes everybody: the power of organizing without organizations.* London: Penguin.

Shirky, C. (2011) *Cognitive surplus: creativity and generosity in a connected age.* London: Penguin.

Stacy, R. (n.d.) Speaking [blog post]. *Richard Stacy social media architecture*, 20 July 2015. Available from: **http://richardstacy.com/speaking/**

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