

Phone to Photoshop: Mobile workarounds in young people's visual self-presentation strategies

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Relatively few young South Africans are equipped to enter the creative industries, since access to these occupations requires a combination of economic, social and cultural capital. The South African schooling system does little to assist students to overcome the income and class barriers to these industries. Increasing use of online portfolios for professional self-presentation in creative fields constitutes another key hurdle to tertiary studies at elite institutions and also to freelance employment, given the local context of unequal access to digital technologies.

While mobile phones are the most accessible form of digital media in the South African context, their use in portfolio creation necessitates extensive resourcefulness for mobile-centric students. This paper explores how mobile technologies are implicated in digital self-presentation and in the creation of e-portfolios, which involve both specific forms of cultural capital and specialised infrastructure. Similarly digital portfolio creation requires infrastructure which exceeds the capacities of most South African schools.

We document the barriers and opportunities presented by digital networking for two young South African Visual Arts students. These two students attended very different secondary schools but both learned to showcase their work in digital portfolios and develop professional self-presentation strategies. We describe the visual strategies they adopted as they negotiated an unequal education system in two different parts of Cape Town. Their experiences suggest that educators should be open to accommodating the mobile practices and genres that young people already use as they help them assume and challenge 'disciplined' identities in the visual arts.

Keywords: Design education, Mobile photography, Mobile-centric, Resource constraints, Communication ecologies, Class distinction, E-portfolio

1. Introduction

Increasingly, people represent their everyday selves through media captured on mobile phones and shared on social networks. Professional promotion in creative disciplines such as visual art and design also relies on such platforms. As interfaces, content and infrastructure are becoming more broadly accessible, they are blurring the distinctions between professional practice and everyday creativity. At the same time, and particularly so in highly unequal countries such as South Africa, income differences and complex forms of cultural knowledge create barriers for young people entering creative fields. This paper explores the experiences of young Visual Arts students learning to showcase their work in digital portfolios and to develop self-presentation strategies associated with recognisably professional identities and oeuvres of work.

We present two different case studies of schools in Cape Town, South Africa. These case studies show how state initiatives such as Arts and Culture schools have broadened access to art and design education to a small degree, but that major inequities still divide even the relatively privileged young people who are able to attend schools which offer Visual Art. Access to ICT infrastructure and digital media production are key dimensions of inequality and shape the media and communication ecologies of aspirant visual creatives.

Here, as in many other places, not all youth can access a high-speed, reliable digital network or software and hardware for digital media production. Construction and maintenance of web-based e-portfolios require extensive access to school and home infrastructure. Existing social inequalities are deepened by the designs of hardware and software which assume internet access and desktop computers. We attempt to understand such creative appropriations and negotiations to ensure that software better supports mobile-centric users whose access to privileged digital ecologies is expensive, intermittent, or occasional (Donner et al. 2011a). These mismatched digital media ecologies elicit complex workarounds.

1.1 Portfolios of privilege in art education

To a great extent, in South Africa, training in the visual arts and subsequent participation and employment in the creative industries builds on and extends middle and upper class privilege. Bourdieu argued, in a very different context, that the cultural realm disguises class differences in a society – we celebrate the ‘talent’ of those successful in visual art, literature or music, while ignoring the leisure time, educational access and cultural capital which their success requires. Similarly, education certifies the abilities of the middle classes, while hiding the fact that their apparent ‘distinction’ both requires a history of privilege and guarantees future opportunities (Bourdieu 1984; Burawoy & Von Holdt 2012). Participation in cultural activities and practices involve, to use Bourdieu’s terms, forms of class ‘distinction’ and ‘habitus’ or access to the class-based cultural resources which make the practices of the dominant culture possible. In South Africa, even as the hegemony of Western middle class culture is heavily contested from a post-colonial perspective, educational institutions continue to grant access on the basis of portfolios of privilege which index class and race. Increasingly such privileges involve the ability to access infrastructure for digital media production, and to activate social capital through digital networks.

2. Context

Visual Art and Design education barely feature in low-income township schools in Cape Town today and young working class people who attended township schools remain under-represented in tertiary design education and industry (Sutherland 2004; Sauthoff & van Eeden 2010; Joffe & Newton 2008).

At the same time, there is an opening up of opportunity, as, globally, researchers have shown how young people are able to leverage digital media and networks, later turning their online interests into careers (Ito et al. 2010). But shifting participation in this way from social sharing to fan activities to professional involvement is not a trivial matter, particularly for young people without easy access to either digital infrastructure, or the requisite economic and class cultural capital (Bourdieu 1984). Even in contexts where young people are not able to study Visual Arts as a subject they go to great lengths to develop their own visual voices and counter the limitations of their environment (Walton et al. 2012; Walton & Haßreiter 2012). Case studies in this paper show that even in specialized schools offering Visual Arts, young people still confront significant obstacles to creative digital participation. This paper focuses on the role of infrastructural obstacles in young people's self-presentation strategies in two South African schools, one public and one private.

2.1 ICT ecologies in South Africa

Only 2489 of the 24793 government schools in South Africa have computer centers (Equal Education 2012). While Cape Town schools were among the few to have had computer labs installed, use of these labs is curtailed by the fact that recurrent costs must be raised from parents, who in many cases struggle to pay even minimal school fees. Such costs include maintenance and replacement of equipment, monthly telecommunication and broadband charges and software licenses.

Access to computers and internet at home is also skewed. A survey published in 2012 found that there were 12,3 million internet users above the age of 15 in South Africa (de Lanerolle 2012). Many of these internet users relied heavily on mobile access, confirming findings which documented the rise of South Africa's largely "mobile-centric" internet users (Gitau et al. 2010; Kreutzer 2009). Only 18% of those surveyed owned a computer, of which roughly 90% were connected to the Internet. Of the 84% who owned a mobile phone, 67% had Internet capabilities and of those, 71% used the phone to go online. Low income South African urban users are thus using their mobile phones as primary devices to gain access to the internet and via social media such as Facebook, Mxit and Twitter, to engage, and participate online (Donner et al. 2011b; Hassreiter et al. 2011; Walton 2010; Schoon 2012).

This picture of expanding online participation does not adequately give us a sense of what digital media is created and shared – and when and how this is done. Internet use is constrained by high cost of prepaid data and the limitations of feature and low end smartphones (Walton & Leukes 2013). For example, in a study of teenagers who use libraries and cybercafés, few young people report participating actively in fan communities or other forms of networked learning (Walton & Donner 2012). This paper echoes these findings in relation to the constraints of school media ecologies.

2.2 Art Education in South Africa

Art education and young people's development of visual creativity lies at a complex intersection of education, technology and culture in contemporary South Africa. Post-colonial critique and celebration of local heritage may be the public face of the South

African design industry, but to a large degree Bourdieu's analysis of the role of 'cultural capital' and 'distinction' in reproducing class and populating cultural industries still holds explanatory power (Bourdieu 1984; Burawoy & Von Holdt 2012). The privilege of participating in both cultural industries and visual art education relies on access to infrastructure and cultural resources closely linked to the dominant culture. Furthermore educational distinction (Bourdieu 1984) is related to middle class privilege in general and whiteness in particular. Postcolonial challenges to Western cultural hierarchy (Haupt 2008) may inform curriculum statements but local educational policies and their implementation are exclusionary in practice. Apartheid education systematically neglected Visual Art in black schools. Visual Art and Visual Design are seen as relative luxuries, requiring specialised staff and expensive infrastructure. Consequently, as few as 26% of secondary schools in the metropolis of Cape Town offer art- or design-related subjects at a Senior certificate level (Joffe & Newton 2008; Graan 2005). Historically, most township schools have not offered specialised arts or design-related subjects, while wealthier schools offer the privilege of choosing from several visual art disciplines. Thus the education system plays a vital role in reproducing class, cultural and income hierarchies. To a great degree, in South Africa, training in the visual arts and subsequent participation and employment in the creative industries reflects social privilege.

Private schools serve a tiny minority and charge much higher fees than government schools. As will be discussed below, in such schools the visual arts function as marks of class 'distinction'. Such schools commonly employ specialized teachers in order to offer both visual art and graphic design.

In government schools, by contrast, in 2013, only 6755 of South Africa's 562 112 Grade 12s studied Visual Art. Consequently, young working class people who attended township schools without specialized teachers or the equipment needed for Visual Art remain under-represented in tertiary education and design industry alike (Sutherland 2004; Sauthoff & van Eeden 2010; Joffe & Newton 2008). As a result, working-class students have little chance of being accepted to pursue art and design courses, let alone to entry-level jobs in the creative industries. (Booyens 2012; Joffe & Newton 2008)

These inequalities are magnified if we consider inequities in provision of infrastructure for digital art. The ICT facilities on offer in private schools serve a similar function to specialized subjects – namely signifying class 'distinction'. Consequently private schools were the first South African schools to embrace the use of laptops and later tablets by students. By contrast, in the minority of schools which have computer labs, available IT resources are channelled to support 'basics' such as literacy and numeracy drills in primary schools, while in secondary schools, labs are often reserved for the use of the relatively small number of students who take IT courses (Prinsloo & Walton 2008; Walton 2007).

Both the infrastructure and curriculum for visual art and digital design can thus be seen as markers of educational 'distinction'.

3. Method

Our case studies are drawn from first author Travis Noakes' long-term study exploring the use of digital media for young people studying visual art in two quite different high schools in Cape Town. In the first site, twelve volunteer Visual Arts students at a specialised co-ed state school (six males and six females) attended extra classes to develop digital skills and to construct electronic learning portfolios

(e-portfolios). In the second site, seventeen male students enrolled at a private boys' school were required to create e-portfolios as a compulsory component of their Visual Arts syllabus.

3.1 Creating e-portfolios for Visual Arts students

Over four years of action research in these sites Travis observed students producing e-portfolios to showcase their visual art. These e-portfolios featured personal profiles, their own original artworks, including digitized drawings and paintings, a range of visual designs, photographs, as well as visual material that had inspired them. They used free membership of online portfolio service, Carbonmade (www.carbonmade.com).

Although one school was privately owned and the other state-owned, students at both schools enjoyed considerably better resources than the vast majority of South African students do, given their access to computers and the availability of Visual Art subjects.

The state school was situated in one of the areas demarcated 'coloured' under apartheid's Group Areas Act. Only a minority of students lived in the immediate neighbourhood. Most students were from working class families who struggled to afford the R1200 (\$110) monthly school fees and transport costs from poorer areas, such as; Delft, Guguletu, Hanover Park, Khayelitsha, Langa, Maitland and Mitchells Plain. An Arts and Culture Focus school, this state school nonetheless had an excellent Art teacher and a working computer lab. Problems with Internet access led to a two-year delay before the e-portfolio project could be introduced.

Only Information Technology students had regular use of school's the general computing labs, and consequently only a few students were proficient at using computers. The e-portfolio lessons were presented during Visual Arts class times, and continued during lunch times. The creation of e-portfolios was not compulsory, because the teacher believed that certain students would not do the extra work that e-portfolio creation and research participation would necessitate. Nonetheless twelve students volunteered to create e-portfolios under Travis's guidance using a loaned scanner and cameras.

In addition to lesson observations and questionnaires, seven students were interviewed about their use of e-portfolios.

The second research site is an independent secondary school for boys, where a class of seventeen students created portfolios between 2010 and 2012. This elite private school attracted students from affluent homes, and is one of the most exclusive (and expensive) institutions of its kind in the country, charging fees of R6000 (\$552) per month.

The private school students all had laptops and Wi-Fi was accessible from almost anywhere on the school grounds. Scanning equipment and digital cameras were readily available. The e-portfolio curriculum was compulsory and was used to help students self-curate works for their end-of year exhibitions. In addition to classroom observations and questionnaires, seven students were interviewed.

4. Government school

Despite more limited infrastructure, the students at the government school benefited considerably from the dedicated guidance of their Visual Arts teacher. Most of the students who volunteered to participate in the voluntary e-portfolio sessions aspired to study and work in careers involving creative production. Many, like Masibulele

believed their e-portfolios could help them to gain access to tertiary studies 'I immediately saw that this is something that I could use in my near future for Tertiary studies.' Furthermore, Masibulele believed his e-portfolio work would help him gain access to professional networks in "the art industry".

Overall, this group had a strong foundation in drawing and painting, but only one student was able to attend an extra-mural activity which extended her involvement in visual culture. Nevertheless, their e-portfolios expanded the range of visual genres beyond those emphasized at school and encompassed works from youth culture such as manga, graffiti, and textile prints.

4.1 Mobile-centric ecologies

The young people attending the government school had access to computers and the internet at school, although only during e-portfolio classes and recesses.

By contrast, cell phones were ubiquitous, and eleven of the twelve students provided personal mobile phone numbers as their preferred daytime contact number. These young people thus shared the broadly mobile-centric digital habitus of most South Africans (Donner forthcoming)

Only a quarter of the students had internet access at home, but eleven could 'always or often' access computers outside school. They all had extra-mural access to the computer lab at the school. According to questionnaire feedback, most students could easily complete e-portfolio digitization work outside class; ten students 'always or often' had access to cameras, five 'always or often' to scanners.

This group had some prior experience of computers and email, but their irregular use patterns meant that they easily forgot passwords. Their ability to change passwords was limited by the fact that their access was distributed across multiple email accounts, and to open their email they needed devices such as cell phones and laptops which belonged to other people, and which they could not access during class.

4.2 Mobile genres

Of the twelve students who attended the voluntary e-portfolio lessons, their "About" pages showed the strong influence of mobile genres on their self-presentation, with a third of the group choosing to use mobile phone 'selfies' as their profile image on their e-portfolios (see Figure 1).



Figure 1: Examples (anonymized) of mobile phone 'selfies' uploaded as profile images by government school students.

Five students did not upload any images of themselves. In one case this was because the student had privacy concerns. In the other cases infrastructural obstacles stopped them from taking pictures or transferring files.

4.3 Bandwidth

None of the students were satisfied with the bandwidth available in the school lab, where internet was slow and unreliable. As a result, they had to upload one image at a time, try different computers, and experiment with uploading at various times of the day. Slow uploads appear to be more error-prone, giving rise to duplicate uploads, images and a relatively large number of images uploaded in the incorrect (portrait/landscape) orientation or posted to the incorrect folder. The students were reluctant to delete imagery uploaded, even if it was incorrect because each file took so long to upload in class. They felt having 'incorrect' imagery was preferable to 'wasting time' uploading corrected versions.

Despite being shown how to reduce file size and advised to work with small files, several students used the large, default settings of their high-res mobile phone cameras. These generated 2MB sized images, which took too long to upload from the lab.

After failing to upload more than two images in one lesson, Herschelle decided to use his mobile phone to upload images. Two others attempted this mobile strategy, but were unable to do so, owing to the relatively high resolution images, and possibly their limited airtime.

Given these complications of low bandwidth on both the lab and mobile phones, the three students who had Internet access at home were at a major advantage. They were able to upload all their images at home, and were thus able to focus their time in class on improving the design of their e-portfolios, thus gaining self-presentational advantages.

4.4 Incompatible ecologies

Almost all the young people were familiar with using simple folder structures from using Bluetooth to transfer files on their mobile phones, but they struggled to manage folders and locate files on a desktop computer or to use email attachments. Here the numeric default filenames created by cameras and scanners proved particularly unhelpful.

Getting images onto and off phones was particularly difficult. Students struggled to connect phones to the lab's desktop computers because the computers neither detected the phones, nor suggested the necessary drivers be installed. Tazneem tried several methods of transferring files, eventually resorting to sharing the image via Facebook, then downloading it to a lab PC and finally uploading it to Carbonmade.

5. Masibulele

We now turn to the story of Masibulele¹, a highly motivated and creative student from the government school. Masibulele's story provides a case study of a student who overcame barriers of infrastructure and who challenged cultural exclusion through his e-portfolio.

Masibulele loved drawing, was a top student and enjoyed a close relationship with the Visual Art teacher. His parents were not involved in his intense passion for art, nor had they seen his online portfolio. 'I wouldn't speak about it to them.' Instead, he shared pictures of his creative work with his peers via Facebook and looked forward to the day when he would have enough of a digital oeuvre to set up his own Facebook page. On Facebook he had not applied any privacy settings. Here, as on Carbonmade he prioritized being findable via search and email. For this reason he refused school-based limitations such as restrictions on providing email addresses and other cautionary measures to protect online 'safety'. He knew the power of social networks was to make new connections and he prioritized remaining open to sharing and connecting with others. Unfortunately his main form of internet access outside of limited school lab hours was via his mobile phone. This was costly and often ran out before he had the cash to replenish it.

He used his e-portfolio to present an online identity that revealed the breadth of his engagement with visual culture, rather than limiting him to an online presence as a Visual Arts student. He used the space to show his versatility and how his capabilities went beyond the school curriculum which focused on painting and drawing.

Part of the significance of Visual Art to Masibulele was his interest in asserting black identity: "my culture, where my background is from". Masibulele believed that blackness was not sufficiently accommodated by the school curriculum in Visual Art. He filled this gap in the formal curriculum by drawing in his spare time. These drawings explored black identity, as in his pencil sketch 'Black Beauty Feel' in Figure 2.

¹ Not his real name. All names which follow are pseudonyms, anonymised to protect participants' privacy.

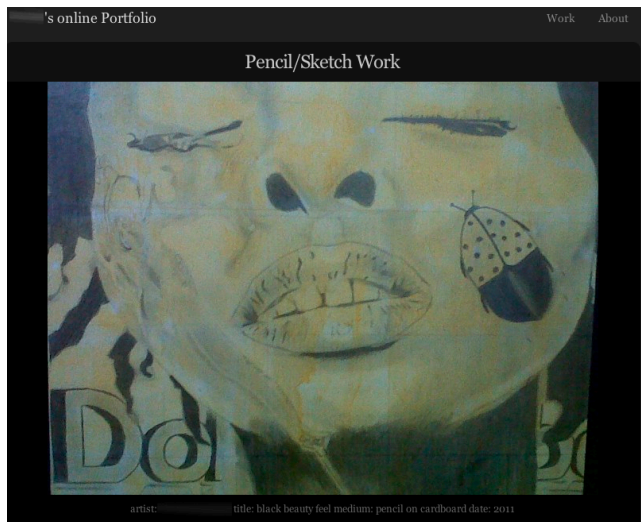


Figure 2: Portfolio item by Masibulele: "Black Beauty Feel", 2011, pencil on cardboard

Blackness was thus linked to an out-of-school sense of identity. Masibulele's awareness of cultural exclusion is further apparent from his sense that the school curriculum precluded creating works in mixed media which he associated with traditional crafts and local South African cultural identities.

Masibulele's initial e-portfolio did not attempt to reflect blackness, and also excluded other important dimensions of his identity. For example, an important part of his out-of-school sense of himself was his extra-mural involvement in fashion design and a small clothing business of which he was 'Founder/producer/CEO'. His initial e-Portfolio did not include any examples of these designs, despite the fact that he had developed his own clothing line, which he named 'SoiL' (an acronym of 'Style Over Intimate Levels'™ - see Figure 3). He had exceptional entrepreneurial flair. He sold t-shirts, sweatshirts, sweat pants and 'booty' shorts (for women only) and was planning to save sufficient money for a textile printer.

Masibulele added the SoiL folder to his portfolio after an interview for this study encouraged him to feature this extra-mural work. Once he had decided to include his clothing designs, however, he documented them extensively. His ePortfolio annotations adopted the register and address of a proud entrepreneur marketing his wares, with a hint of the conscious "awareness" that he valued ideologically: *"[SoiL] is a Clothing Line for both male and females and in the mere future for Kids too. Established last year but recognised and made more aware this year February."*

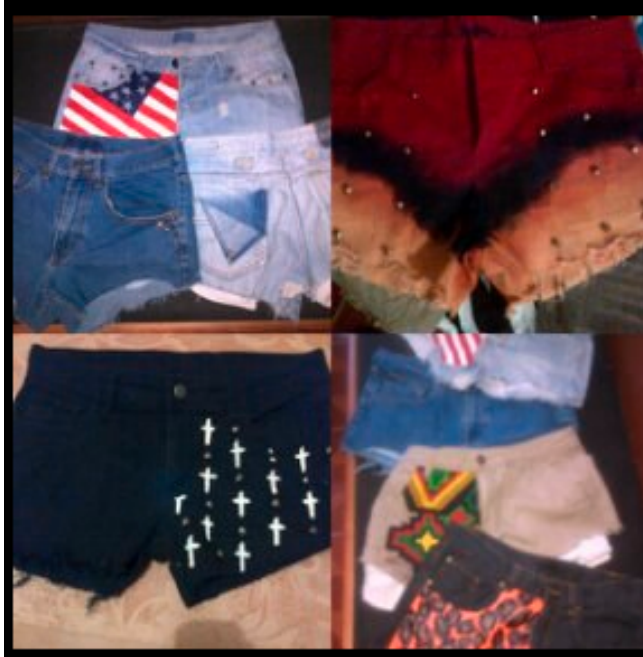


Figure 3: Portfolio item by Masibulele "These are different designs for Booty Shorts of local streetbrand, SoIL I am the proud founder/producer/CEO of SoiL. Est 2013'

Masibulele used his e-portfolio in support of his application to study surface design at the Cape Peninsula University of Technology, where he is now a first year student. Unlike most of his classmates Masibulele was able to overcome the many obstacles which stop young people from gaining access to tertiary studies – cultural exclusion, application fees, bursary application processes, and academic pre-requisites.

6. Private school ecologies and distinctions

By comparison to their peers at the government schools, the Visual Arts students at the private school had access to considerably more digital and other infrastructure for creative production. Given the facilities available here, it is not surprising that the e-portfolios were adopted so much earlier, more easily and more universally than in the government school. A large majority, or thirteen students were able to upload at least 20 artworks each.

Private school students' feedback suggested that they enjoyed extensive exposure to the visual arts, both at home and as extra-mural activities. Just under half of the students were involved in extra-mural societies related to visual culture.

The teacher at the private school adopted the e-portfolio curriculum almost immediately it was suggested to him. He nonetheless put his stamp on the project by imposing somewhat elitist requirements which removed it from the students' domain of popular culture. While the government school students were able to use mobile genres and challenge the Eurocentrism of the Visual Arts curriculum in their portfolios, private school identities were far more tightly policed into disciplinary identities. They did nonetheless showcase their conspicuous consumption of digital and consumer electronics. Eight private school students integrated extra-curricular digital visual modes such as photo-editing and videography into their portfolios, although these media were not part of the formal Visual Arts curriculum.

By the final year of the project and during their final year at school, six of the seven students interviewed said that their work on their e-portfolios was primarily motivated by a desire to gain better grades for the e-portfolio assessment. Ironically, given their

advantages over the government school students, few of the private school students aspired to careers in the arts, instead their extensive access to consumer electronics for visual creativity and their immersion in art-related activities were all markers of class distinction, perhaps equipping them to invest in artworks at a later stage rather than requiring them to earn their living in creative industries.

6.1 Extended ecologies

In interviews, most students at the private school reported that it was not difficult to complete work for their e-portfolios outside class. As the school required each student to have their own laptop, almost all had easy ('always or often') access to computers, but also to mobile phones and cameras. Over half had access to scanners. Photography and photo-editing software were highly accessible and mentioned by many in their profiles. (By contrast, only a couple of students at the government school had referred to this). Two students documented their activities as body boarders using footage from their own individual waterproof action cameras.

6.2 Slow and unreliable broadband.

Despite its well-appointed facilities, the private school was still negatively affected by disruptions to broadband. These included challenges outside the school's control, such as; power failure, copper cable theft, or local and international broadband cable failures. Problems inside the school included Internet traffic not being shaped to prioritize pedagogical usage. The day scholars, who lived with their parents were not restricted by these occasional failures, as they had alternative points of access at home. Despite the advanced infrastructure at school, over a quarter of the class reported that they preferred home infrastructure to school wifi, and they used the cheap broadband at home to complete classroom activities after school, effectively 'flipping the class'. Four of the seven students interviewed at the private school preferred to use the Internet at home, where was faster and more reliable. This meant that they could use class time for tasks other than uploading imagery.

Passwords were a problem, just as they were at the government school. The students' distributed ecology across devices was more accessible because their individual laptops were allowed at the private school, which was not the case at the government school. Instead security features and spam filters implemented on the school network were the major stumbling block, blocking password reminders sent to school email addresses. Ironically, the frustrations caused by these features often resulted in students resorting to (less secure) cloud-based services.

The limits on Carbonmade's freemium package chafed the private school students, who were accustomed to more capacious storage, both on their laptops and in cloud-based archives. They were already exploring creating an online presence on other sites. Three students had already created such portfolios to showcase their online photography and videography portfolios, and in one case, on a personal blog. Rather than paying to upgrade to premium Carbonmade accounts (which required both credit cards and foreign currency), Kyle, Hui and Gary linked to these supplementary photographic and video portfolios, which they created on other platforms (including Flickr, Wix, Vimeo and/or Youtube). The teacher needed to request the IT department to whitelist Flickr, previously blocked by the school's 'nanny' software.

Specialised peripherals such as scanners were not easily accessible from the students' laptops, and the teacher made his own laptop available for scanning, a strategy he also used to give them access to image editing software. Here again,

some individuals were able to gain an advantage by using their own copies of Adobe Photoshop in class, while two resorted to Microsoft Paint to crop and resize their pictures.

6.3 Disciplined genres

Despite the accessibility and importance of photography in their 'About Me' narratives, the private school students were instructed to use self-portraits in media other than photography, such as drawing and painting. Most of the group complied with this instruction (a few included more conventional photographic portraits or group portraits). None used the mobile phone selfies popular in the government school.

This avoidance of photography and particularly mobile phone photography can be interpreted as a mark of distinction, or a class-based preference for the exclusivity of 'fine arts', and a marker of the disciplinary foundation in drawing which the teacher wished to emphasize. This use of the self-portraits subtly shifted these students' identities to a professional, disciplined identity, that focused on the work rather than the person.

7. George

We now introduce George, a gifted and conscientious private school student, who closely reproduced the prescribed guidelines for a Visual Arts e-portfolio showcase whilst 'making it his own thing'. George did not face any infrastructural challenges, as he had ready access to a phone camera and scanner to digitise his work, software to edit these images and fast broadband access via his laptop to upload and organise these images via Carbonmade.

An exemplary student, George enjoyed drawing and sketched every day. Both his parents worked in advertising and his own identity was closely linked to being a Visual Arts student. His 'About Me' page mentions local and overseas gallery visits, and he describes himself as a 'big fan of abstract, modern and conceptual art' (EG1, about page, 2012). He supplemented these interests with online activities, pursuing his interest in art by participating on Facebook, Twitter and art network deviantART, while also keeping up with art websites and specialist blogs.

At school, George was a leader in the Accelerated Art program, and a member of the Digital Design society. He won the Visual Arts subject prize in his final year at school. Over the course of the project he grew to appreciate his e-portfolio as a reflection of his abilities and as a source of high grades he needed to maintain in order to keep the place he had been offered studying Medicine at a local university.

George's e-portfolio design was simple and elegant, with a plain white background intended not to distract attention from the artworks themselves. He differed from Masibulele and most of his classmates in that he had aimed to emulate a '*clean type of gallery look*'. As a result, he chose to use the metaphor of a clean, white gallery in carbonmade to simulate the experience of gallery viewing and foreground his Fine Art creative works.

His captions for his portfolio items, (even those created out of school) were formal, revealing none of the persuasive register or marketing address which Masibulele had adopted, as in the following caption for a self-portrait: "'Sitting Down' August 2011 Oil Paints on Board Completed as part of a Painting Course 480mm x 480mm". In this caption, George's language mimics the understated address of a gallery presenting

salient details about objects of distinction to an audience of discerning potential buyers.

Apart from his instrumental approach to maximizing his grades, George was also motivated by interactions with the online audience that Masibulele courted. While Masibulele connected primarily with his peers via Facebook, George received feedback from both his parents and his classmates about his Carbonmade e-portfolio, and had a strong sense of an appreciative online audience. He planned to maintain his portfolio after school to continue sharing his drawings with a broad audience because he also enjoyed the positive attention from people who had commented on the other sites where he uploaded his work. *'It is one of the main reasons I put things online - so I can see how people around the world feel about it.'*

George also had a photographic portfolio on Flickr. This service was blocked by the school and George chose not to link to it from his e-portfolio since he felt the 'blocked' message might confuse the invigilators of his matric exam. In this decision, George echoed his teacher's preference for disciplinary markers of a 'fine art' identity – he explained that he wanted the examiners to focus on his 'style of art' in the traditional disciplines of drawing and painting.

Presenting himself as a traditionally trained artist to examiners, and using his extensive knowledge of conventions in the art world, George thus used the e-portfolio to showcase privilege, confirm his insider status and establish a claim to disciplinary and creative identity.

8. Conclusion

Given these two case studies of successful and motivated young Visual Arts students it is worth remembering that the overall background to this study is one of exclusion and that just under 99% of young South Africans do not have the opportunity to study Visual Arts at all. In creative fields, education at most schools reproduces domination, effectively excluding young working class students from developing the skills and portfolios of work required to access creative careers. At government schools, digital aspects of the visual arts are not well established and serve to mark the distinction of those attending schools like the private school documented in the study, or the relatively good circumstances of those able to attend an Arts and Culture Focus School.

Our case studies, though featuring two exceptional individuals, suggest the growing importance of a digital habitus, or general orientation towards an online audience developed through everyday practices. The differences in reach between George and Masibulele suggest the importance of the availability of social, material and digital infrastructures such as family networks, good bandwidth, computer hardware and software.

Creative production with digital media involves the use of varied hardware and software as users digitize, edit, share and organize digital content. Our case study of the private school shows the complex layering of infrastructure and cultural and social capital involved as young people in the elite class acquire the distinctions associated with an education in Visual Arts, and the considerable advantages provided by their home backgrounds.

The state school suggests the challenges and the possibilities which come into play when these technologies are appropriated by teachers and working-class students in poorly resourced school and home environments, particularly in the global South.

George's 'model' e-portfolio reflects his privileged access to the world of art, its discourse and practices. The identity he constructed accommodates the markers of his ethnicity and rewards his cultural capital while being seamlessly accessible to both his everyday and digital networks, who provide him with multiple audiences who can reinforce his access to the discipline.

Masibulele's e-portfolio reveals a great deal about the permissible identities associated with the visual arts at school in South Africa. On the one hand, Masibulele's mobile-centric Facebook network reveals the emergence of a grassroots exhibition space, and his command of marketing discourse suggests the desire to influence this network as an entrepreneur. On the other hand, Masibulele's initial association between the academic discipline of Visual Art and white identity suggests an exclusionary ideology which teachers need to address explicitly. In this case it only came to light as a result of the in-depth interviews conducted for this research project.

While both George and Masibulele managed their self-presentations strategically, George's cultural capital allowed him a more intimate knowledge of how examiners might evaluate his work. Masibulele's initial self-censorship revealed his sense that he should conceal rather than foreground race and class identities. This crucial difference coexists with severe inequalities in access to infrastructure for digital publication, and we would recommend that these issues of cultural and economic capital need to be addressed together.

9. Pedagogical recommendations

We argue that the relative accessibility of mobile phones in the state school ecology suggests that a recentering of current curricula and software designs around mobile phone use and genres could be an important shift to broadening access. Mobile technology is already playing a crucial role in opening access to certain aspects of digital creativity, notably photography and sharing of photographs and other images. Mobile phones and mobile photography in particular should be a central component of Visual Arts education in South Africa today. At the same time, current mobile technology bars access in other ways, in particular through the tricky interface with PC-based ecologies and peripheral devices, the high cost of mobile data, and, compared to laptops or desktops, the handset's limitations as a media production device. This paper has thus suggested how students creating e-portfolios in such settings must work around the limits of phones as currently designed.

An approach drawing on Bourdieu might aim to use the affordances of mobile phones to extend the advantages of bourgeois culture to all by encouraging the use of free school wifi on students' own devices, and broadening their access to "high culture", such as online galleries.

Masibulele's story in particular suggests that such an approach is incomplete without addressing the cultural politics of Visual Art. Here Freire, for example, might seek an alternative approach which values and cultivates existing creative practices in a pedagogy starting out from young working class people's lived experience (Burawoy, 2012:104). Infused by this ethos, a Visual Arts curriculum would need to spiral out from the everyday photographic genres already accessible to young people, using them to reflect on local surroundings, and to address internalised oppression as well as to construct fantasy selves.

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