Instagram Photography and the Geography Field Course:
Snapshots from Berlin

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Resources Paper

Instagram Photography and the Geography Field Course: Snapshots from Berlin

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Abstract:

Although geography has long associated itself with photography, the rapid advancement of technology has created a clear divide between the visual practices regularly used in wider society and the way photography is utilized by critical geographers in their teaching. We suggest the door is ajar for new modes of (geo)photographic thinking, and one visual tool at our disposal are social media applications that allow images to be instantly shared, analysed, and discussed. This article critically reflects on the use of Instagram to enhance student participation, engagement and learning on a geography field course in Berlin. Based on interviews with students, their field journals, and our own critical reflections, this paper looks at some advantages of using Instagram in teaching geography, but also promotes caution and drawbacks to relying on instant visual digital methods.

Keywords: Instagram; Photographs; field course; teaching, visual methods, Berlin

Introduction

> '[With the camera] the teacher of Geography can do some good solid
> work. In the camera particularly he [sic] will find a valuable friend and
> helper. Although many teachers still delight in the long lists of old-
> fashioned text-books, yet many are trying to vivify their work instead of
> presenting a mass of dry bones. They know that there is no subject on
> which boys [sic] can be keener, and they will find the camera a great aid
> in their present uphill task of teaching a subject which rarely receives the
> recognition it deserves'
>
> (Carter 1901, The Geographical Teacher).

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For geographers such as Carter at the turn of the last century, the camera was a geography machine: a tool to inspire the 'boys' of late Victorian England. Several generations later and geography's enthusiasm for visual methods has continued apace. Over a hundred years after Carter's advice on the 'uphill task' of teaching geography, academics would once again be positioning the discipline as inherently 'visual' (Rose 2003; Driver 2003; Thornes 2004). Geography has of course changed dramatically since the publication of '*Amateur Photography as an Aid in Teaching Geography*' (Carter 1901), not least the jarring gendered language in the above epigraph. Yet the pedagogical cornerstone of the field course has remained critical to doing human and physical geography (Sauer 1956; Lorimer 2003; Coe & Smyth 2010; Phillips & Johns 2012; Glass 2015), and the camera's place within field courses has received much insightful academic attention in this journal and beyond (see Sidaway 2002; Latham & McCormack 2007; Lemmons et al 2014; Mavroudi & Jöns 2011).

Carter's quote demonstrates the historical prominence of an association between geography, fieldwork, and photography (Schwartz & Ryan 2003). Yet the way that photography is used in everyday life, and within geography as a discipline, has evolved greatly over time. Technological advancements including the use of polaroid photography (Ellis 1974), disposable cameras (Matthews 1998; Sidaway 2002), digital photography (Latham & McCormack 2007; Fraile-Jurado et al 2018), geotagging (Welsh et al 2012), repeat photography (Lemmons et al 2013), and the selfie (Hawkins & Silver 2017), have all altered how students engage geographically with space and place, both in and beyond the field course.

Such has been the uptake of photography in everyday life that Sidaway's observation in 2002 that '[m]ost students will have taken photographs before' (2002: 100) seems an almost trite observation when read today. Nowadays, the ubiquity of photography within day-to-day life means 'our students are socially competent photographers, and the practice of taking and sharing photographs is an everyday norm' (Watt & Wakefield 2017). The extent to which critical geographers have aligned themselves with this cultural and technological shift, however, is questionable. The fast developments in visual technology, social media, and digital practices have altered the photographic landscape fundamentally in recent years. Despite this, geographic research adopting visual methods often still relies on older participatory techniques, including the use disposable film cameras (Davies 2013; Alam et al 2017), leaving the door ajar for new modes of (geo)photographic thinking (Garrett 2013; Wilkinson 2016).

Scholars such as Gillian Rose (2016a; 2016b; 2016c) have drawn attention to the nascent ways in which social media and digital photography – at least in the 'Global North' - has altered our relationships with technology and space. Despite some useful geographic research that employs late-modern visual platforms (see Williams et al 2016; Boy & Uitermark 2017; Hawkins & Silver 2017), a rift has opened up between the visual practices used in wider society and the way photography is utilized by critical geographers, and in education. As Horton (2019, 270) remarks: 'work by social and cultural geographers has barely kept pace with the proliferation of new, dynamic, multiplatform digital popular cultures and social media'. This paper pushes back against this, situating itself within important questions regarding new 'mediascapes' that students are exposed to (Jarvis et al 2016), as we suggest geographers who teach need to pay attention to *new* ways of seeing, making, and sharing images. We agree with Hall (2009, 453) that 'the camera is an essential tool for human geography students',[i] but highlight here how the production, circulation and interaction with digital photography has transformed its pedagogic potential.

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Following calls from Rose (2016a, 346) that 'geographers must invent some new methods that can address the distinctive qualities of digital cultural production', this paper critically evaluates the use of Instagram to enhance teaching during a geography field course. After reviewing literature relating to visual methods in teaching and the place of fieldwork within the discipline of geography, the paper will describe a field course in Berlin that used Instagram to enhance student-learning, participation, and engagement by adopting an approach that encouraged interactive reflexive dialogue. The paper looks at some advantages of using Instagram, but also urges caution and presents drawbacks to relying on instant visual digital methods. In doing so, we build on a growing body of scholarship in this journal that examines how technology and visual methods can enhance student-learning (Welsh et al 2012; 2013; 2015; 2018; France & Wakefield 2011; France & Ribchester 2004; Graybill 2015; Fuller & France 2016; Williams et al 2017; Oliver et al 2018).

Technology, Teaching, and New Visual Methods

Visual methods, including the creation, collection, and analysis of photographs, have been championed by a succession of human and physical geographers as important to contemporary teaching (Thornes 2004; Sidaway 2002; Latham & McCormack 2007). Not only has geography been positioned as a visual subject (Rose 2003; Driver 2003), some have stressed that: '[s]tudying human geography at university without photographic images would be unthinkable' (Hall 2009, 453). Others have argued that 'visual literacy has become an important part of physical geography' (Thornes 2004: 287), and across the breadth of the discipline, photographs play a vital role in how we teach geography. A few scholars have noted the profound impact of digital technological advancements on the practices of geography, as well as how 'the digital reshapes many geographies' (Ash et al 2018: 35). Geographers have argued that during field courses especially, photography can be simultaneously familiar yet productively-challenging to geography students (Sanders 2007). Sanders warns against using outdated technologies within our teaching, arguing that 'teaching in a way that connects with students' life worlds, captures their energy and enthusiasm, and challenges them to stretch themselves often demands that we *re-stock our toolkit of strategies and methods'* (2007, 183 emphasis added). Something that has largely been missing from that toolkit thus far has been the incorporation of photo sharing platforms, the most popular of which we focus on here.

Geography undergraduates today will increasingly be the product of classrooms equipped with interactive whiteboards and markers, augmented reality apps, and multi-touch interfaces, making them particularly equipt to benefit from 'blended' digital learning (Dhir et al 2013a; Graybill 2016; Oomen-Early and Early 2015). Students are therefore not only 'digital natives' (Prensky 2001: 1) but also inheritors of new social media (Graybill 2016; Oomen-Early and Early 2015). Social media is one of the most dynamic and interactive recent developments in education (Al-Bahrani & Patel 2015). Geography has long associated itself with incorporating technology within its research practices, for dissemination, and also pedagogically (Carter 1901; Welsh et al 2013; Glass 2015). Importantly in terms of teaching, there is growing evidence indicating that students enrolled on courses that involve social media receive higher examination results and are more actively involved in the learning process (see Mazer et al 2007; Ebner et al 2010; Junco et al 2011; Dhir et al 2013b).

As Page and Reynolds (2015, 1004) suggest, 'today's university students, while heavy users of social media as individuals, are learning how to work collaboratively in groups and also how to write collaboratively with and through socially mediated contexts.' In other words, there is something to be gained from incorporating social media within teaching. The increased digital

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complexity that has emerged in higher education has presented challenges as well as opportunities. As others have warned, while students may be familiar with these technologies, those using them might not fully understand how to harness them to enhance their learning, especially not in geographical terms (Oomen-Early & Early 2015). The tendency of students' use of the internet, according to Graybill (2016, 65), is towards students as *consumers* of information, whereas utilizing social media in creative pedagogical interventions can contribute to a rigorous inquiry of these practices. The use of these devices in practice, both in terms of software and hardware, often fails to shift teaching paradigms. Educational practitioners tend to favour more familiar teacher-directed 'content delivery' models (Cochrane et al. 2014).

In sum, the digital cultures surrounding the routine and daily use of smartphones by young people have been widely celebrated, though they are not without their limitations (Glass 2015; Thornham and Gómez Cruz's 2016). Latham and McCormack (2007) found that the novelty of using digital cameras during geography field courses - at a time when they were a relatively new technology - meant that students were distracted somewhat by their very novelty. Additionally, they concluded that students needed greater support in using what was then an unfamiliar technology, as well as there being financial costs in terms purchasing expensive photographic equipment. In contrast, the technology of Instagram that we focus upon in this article is by no means novel; rather, photo sharing platforms are a normalized part of many students' lives. We suggest that because of the ubiquity of platforms such as Instagram, students' familiarity with social media, and its free-to-use cost, that our case study does not suffer from the same technological pitfalls noted by Latham and McCormack (2007).

The ubiquity of connective mobile devices underpinning the 'bring your own device (BYOD)' teaching culture has great potential to help shift teaching towards innovative, student-directed learning practices (France et al 2013; Cochrane et al. 2014; Medzini et al 2014; Glass 2015; Grayhill 2016; Welsh et al 2018). As some scholars argue, 'social media tools can help elicit critical thinking and problem solving online' (Oomen-Early and Early 2015, 105), which can itself generate important pedagogical dialogue. Other benefits of digital methods include the fact that students and their teachers are better able to record, manipulate and interpret a higher quantity and quality of visual data than previous visual technologies have allowed (Latham and McCormack 2007, 254). As will be discussed, the potential that photo sharing platforms have in terms of enabling real-time feedback and engagement with students is important. Like previous incarnations of the camera within geography, Instagram-enabled mobile devices are 'a physical intermediary that students can use in order to interpret the world around them' (Glass 2015, 288).

Youthful Geographies of Instagram

Instagram is an extremely popular photo sharing mobile app. Instagram was launched in 2010 and just four years later had garnered 200 million active users per month with around 60 million photographs posted by its users daily (Highfield & Leaver 2014). By 2016, Instagram suppassed Twitter in its usership, with over half a billion monthly active users, and almost 100 million images shared everyday (Hunt 2016). It remains one of the fastest growing social networks, second only to facebook (Dredge 2015) [see Table 1].

Social Media Platform	Monthly Active Users	Images posted per day

Instagram	400 million	100 million
Facebook	2.5 billion	250 million
Twitter	140 million (daily) / 310 million (monthly)	500 million*
SnapChat	150 million (daily)	10 billion**
WhatsApp	1 billion	no data

Table 1: *Active users of popular social media platforms*[ii]

In what is a highly competitive social media landscape, Instagram exceeds Twitter and Facebook in its influence over young people's lives (Krallman et al 2016). According to research by the Pew Research Internet Project (2014, cited in Wallis 2014, 182), 17% of all internet users use Instagram, while the percentage of 18-29 year olds who use the app stands at 37%. Moreover, 81% of those in that age bracket who are unfamiliar with Instagram in particular, are likely to have some experience of having uploaded original multimedia to the internet. While not all geography undergraduates fall into this category, the majority certainly do, and we suggest the image-uploading capabilities of Instagram are a valuable tool for engaging students with visual geography. Rose calls upon geographers to 'plunge into the popular' (2016a, 346) by making use of the actually existing ways people engage photographically with place and space in everyday life. The use of Instagram in this paper follows this call. At the time of writing, a search on Instagram for the hashtag #geographyfieldtrip produces 3174 results: for many students, Instagram is already an informal part of how they engage with contemporary field courses. In this article we explore how Instagram can be formally incorporated into the student learning process.

Despite its huge popularity, the photo sharing platform has remained a research blindspot within geography (cf. Boy & Uitermark 2017; Horton 2019), with untapped potential both as a visual research method, and within undergraduate teaching and student engagement. The scale of its global usership alone, which exceeds the combined populations of the USA and Russia, is noteworthy - as is its prevalence in the everyday lives of millions of young people especially. Instagram is a key part of the ballooning 'attention economy' (Marwick 2015), with more than one in ten students in the USA actively and routinely using the app. It is often used to give an idealist impression of everyday life in real time, but here we focus on its educational potential.

Outside of the discipline of geography, scholars have identified aspects of using Instagram that contribute to a critical pedagogical mode of teaching. For example, as Wallis (2014) suggests, the invitation for students to be productive using Instagram as part of a learning and teaching session, rather than just consuming received wisdoms, particularly helps to facilitate a more dynamic and creative way of 'doing geography' (Mullens et al 2012). As well as enabling such participatory practices, using Instagram can also provide, as Al-Bahrani and Patel (2015, 63) highlight, an 'intimate setting' for communicating ideas during undergraduate teaching. They suggest that being able to post questions and thoughts on Instagram helped to overcome shyness, allowing instructors to 'move discussion beyond the classroom by asking students to respond to other students' posts' (Al-Bahrani & Patel 2015, 65). In this way, social media provides space for geography teachers to extend student engagement beyond the lecture theatre or seminar room, and 'forge close-knit learning community among students' (ibid, 65).

The Berlin field course

Berlin remains a very popular field course destination for various geography departments in the British Isles (Latham and McCormack 2007; 2009). At the time of writing, as many as twenty UK Universities and at least one in Ireland (Maynooth University) offer geography field trips to the German capital, making the city a significant site for geography in higher education.[iii] Berlin has been the location for second year undergraduate field courses at [*Department and University redacted for review*] for over a decade. The field course forms 50% of the *Techniques in Human Geography* (GGM204) module which is designed to introduce a range of research methodologies to students as they prepare for their third-year dissertations. Up to 75 students participate in the overseas field course, accompanied by four geography lecturers and four postgraduate teaching demonstrators. Alongside the course on Visual Geography, students also focused on the themes of Creative Economies, Political Geographies of Berlin, Nazi Architecture, and Geographies of Memory. The field course element of the module is worth 10 credits and is assessed using a field course diary that the students submit at the end of their time in the field (see Dummer at al 2008; Moran & Round 2010). This course received very positive student feedback and achieved an above average score of 4.8 out of 5 in the course assessments that the students submitted in 2015.

Like many field courses, the GGM204 Berlin fieldtrip is a geographic hand-me-down: a course inherited from previous generations of geographers - its contents slowly evolving over time, with shifting staff often on precarious contracts. For example, a visual element had long been a feature of the field course, with the limited use of Polaroid cameras (inter alia Ellis 1974). When Polaroid ceased production of their iconic film in 2008, the geography department's dwindling supply of film meant that students were tightly rationed to just three images each. This left little room for mistakes and became increasingly distant from the ways students were interacting with images in the digital spaces of their everyday lives. From 2011 however, we supplemented the existing course to incorporate a stronger visual focus using more recent technologies. Between 2012 and 2014 we used bluetooth-connected printers to allow students to print small images from their digital cameras, as well as their (now ubiquitous) smartphones. This created a number of limitations however, with printers occasionally breaking, running out of paper, or losing connectivity (see Welshe et al 2013). Students found it frustrating having to spend unnecessary time printing their work, instead of critically thinking on the day's activities and working on their field diaries. In 2015 we introduced photo sharing methods using Instagram, and it is this manifestation of the course that we reflect upon here.

Before entering the field, preliminary lectures included discussions of how visual methods can be utilized in geographic research, as well as ethical considerations when using photography in the field (see Speake 2017). This drew upon key literatures in visual geography (Pink 2013, Rose 2016b), as well as our own experience of incorporating visual methods in our research ([redacted for peer review]). A reading pack provided prior to the field course also orientated students to the field site and made students familiar with the key themes of visual research. Group work, field diaries, informal feedback sessions, and 'street teaching' (Moran & Round 2010), were all utilized to assess and deliver GGM204, though here we focus on the visual aspect of the field course. As part of the Berlin course, students were asked to complete two visual projects using Instagram, which are discussed below. Firstly however, we will briefly explain the significance of using hashtags within Instagram.

#GeogBerlin

For this teaching project, all students used the hashtag #GeogBerlin to make their image searchable by the whole group and by the module leaders. Further to this, using an IFTTT (If This, Then That) account, which connects across social media platforms, we created a code that meant all #GeogBerlin content would automatically be posted simultaneously to designated Tumblr and Twitter accounts (see Cochrane et al 2014 for a similar example). The Tumblr account features all 351 photographs made during this project and became a 'digital scrapbook' that automatically archived the student's photographs, synthesizing the visual 'residue of fieldwork' (Lorimer 2003).

Although many of the undergraduates already used Instagram in their day-to-day lives, all students were asked to create new anonymous accounts using their student ID numbers as their usernames. For ethical reasons, an additional level of anonymization has been used for this publication: BerlinStudent1; BerlinStudent 2; and BerlinStudent3. The use of student ID numbers ensured the marking process was anonymous, as students often referred to individual Instagram photographs in their assessment handbooks. It also provided anonymity when students reviewed and commented on each other's Instagram posts during the field course. During the project all students signed release forms permitting the use of their images for academic publication, as well as participant observation, focus groups and the use of their anonymous feedback forms. Signing the release form was *not* a mandatory prerequisite to participate in the course, and students were able to opt-out if they wished.

Project A: 'Rephotography in Berlin'

The first student exercise was inspired by the book '*Ortszeit / Local Time'* by Berlin-based photographer Stefan Koppelkamm (2005). The book contains striking monochrome photographs of dilapidated buildings, street vistas and urban landscapes from various locations in East Germany (GDR) in the 1980s, before the collapse of communist rule. In an interview we conducted with Koppelkamm while in Berlin, he explained how his initial photographs were taken in a 'flâneurial' and exploratory way after he was given a short-term visa to visit the GDR from his home in West Berlin.[iv] Yet after the fall of the Berlin Wall in 1989 he realized he could capture a unique historical record of the urban landscape by returning with his camera to the exact same geographic locations. The end result was his fascinating photography book *Local Time*, where detailed images of pre-unification Berlin are juxtaposed with 'rephotographs' (Lemmons et al 2014) that Koppelkamm made throughout the 1990s, when he revisited the same locations with the same camera, tripod and medium-format film. In this use of rephotography 'the photograph offers a visual record of "moments" that can be measured against future change' (Sanders 2007, 185). For the first Instagram project, students were asked to retrace Kopplekamm's footsteps and recreate photographs in the same locations using Instagram.

Unlike Lemmons et al (2014) who utilized repeat photography with geography undergraduates on overseas field courses to 'increase participation and cultural interaction' (2014: 86), we used it here to encourage students to notice the intricate ways that the Berlin landscape had changed over time, especially since German reunification in 1990. It was not so much the final finished Instagram picture that was of use by students, but the *process* of 'actively looking' that comes with doing photography (Hall 2009), or what Susan Sontag referred to as 'seeing through photographs' (Sontag 2001: 111). As one student reflected in their fieldwork diary, this use of Instagram photography 'let me focus more upon the small grain of the urban [landscape]'.

Working in groups, students had to navigate the city in order to find and photograph four of Koppelkamm's locations in central Berlin and compare their Instagram photographs with his images from the 1980s and 1990s [Figure 1]. Roland Barthes (1981: 15) referred to cameras

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as 'clocks for seeing', and using Instagram in this way transformed the student's digital images into 'arrested moments in the flow of historical consciousness that allow history to exist' (Yusoff 2007, 217). In utilizing Instagram as part of a rephotography project in this way, the students' images and their close observations of the changing landscape was used to discuss the social, political and economic impacts of globalization, gentrification and post-socialist transition.

Figure 1: *A map provided to students in their field course handbook with the locations of the photographs that Koppelkamm made before and after the fall of the Berlin Wall.*

To take one example, students who photographed the Brandenburg Gate from the same position that Koppelkamm had in the late 1980s, managed to deconstruct the changing urban landscape through a close examination of their Instagram pictures. Several students commented in their field notebooks about the geopolitically prominent position of the American Embassy on the right of the frame. They noted how security bollards had been emplaced around this prominent building. They discussed how the former threat of Cold War politics, represented in the 'no man's land' of the Berlin Wall, had been replaced by the specter of terrorism and urban security theatre [Figure 2].

In some instances, it was not always possible to stand in the exact location Koppelkamm had several decades earlier, due to the changing urban landscape and redevelopment of previously abandoned sites. For example, the area behind Kunsthaus Tacheles, near Oranienburger Stresse, is a classic example of gentrification in the reunified city, and is now difficult to access [Location 2, Figure 1; and Figure 3]. This restricted urban geography led students to reflect on the right to the city (Lefebvre, 1968), the politics of gentrification (Florida, 2002; Peck, 2005), and the urban impacts of German unification. As others have

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noted, today's undergraduates are often too young to remember the fall of communism and other recent political changes that have an obvious resonance with older lecturers. However, the 'imaginative use of visual sources' (Moran & Round 2010:274) helped mitigate this challenge.

While this first project encouraged a very disciplined and controlled use of photography, alluding to the myth that photography can be objective (a notion that Carter (1901) might have recognized), the second task was more creative and playful, encouraging students to think critically about the construction of the image.

Figure 2: *An Instagram image by* **BerlinStudent1** *shows one of Kopplekamm's monochrome images juxtaposed to their own photograph of the Brandenburg Gate.*

Project B: 'Hashtag Geography'

For the second project, students were invited to take Instagram images that explored links between ways of seeing the city and the key themes of the field course. Adopting a less structured approach than Project A, students were asked to upload three images each day as they traversed the city. They were provided with a series of potential hashtags associated with the themes from their reading materials to use alongside their photographs in order to help describe the landscape and record their initial analytical thoughts *in situ.* With students including the hashtag #Geogberlin with their Instagram posts, we were able to interact and engage with students whilst they were moving around the city, providing additional prompts to help them reflect upon their initial interpretations. At the end of each day, we gathered into two groups and discussed what they photographed, why they did so and how this linked to the readings they had been given. The photographs became catalysts for conversations, and prompted in-depth discussion of key themes, and gave an insight into the different ways that students were interpreting similar issues.

We drew upon the work of Rose (2016b) and Sontag (2001) to discuss the construction of images and their multiple sites of meaning. In this way, their Instagram photographs were positioned as more than a way of 'imprisoning reality' (Sontag 2001: 163), but rather, actively constituting a particular sense of place. This task encouraged students to think reflexively about the photographs that they take in daily life. By creating their own images, the students participated in 'active learning', a highly effective pedagological technique in geographic learning (Kurtz & Wood 2014). This positioned the students 'as authors of knowledge' (ibid: 546) as opposed to passive receivers of visual information. By critically thinking about the research potential of visual methods, this exercise also linked to the planned curriculum development of their skills for their upcoming dissertations. This free-form use of Instagram allowed reflection about the construction of photographs and their audience. As one student declared, the use of Instagram "made me think about *why* I'm taking a photo" (their emphasis).

Having described the tasks that the students were set, the following section reflects on the benefits and drawbacks of incorporating Instagram into an urban field course.
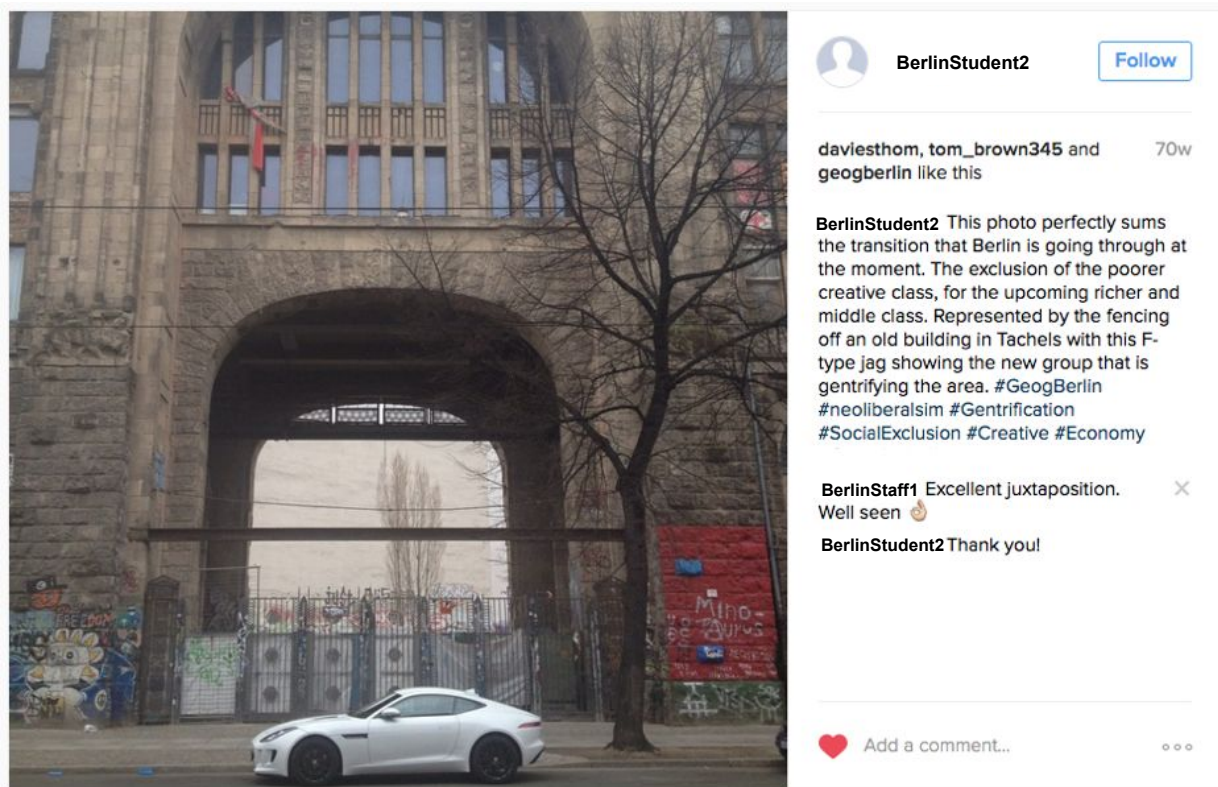
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Figure 3: A visual cliché: a student's Instagram image outside Kunsthaus Tacheles and caption showing urban conflict in Berlin's regeneration.

Discussion

Harnessing Instagram for instant communication and feedback

Geographers have rightly highlighted how geography field courses promote 'experiential learning and the need for students to actively do geography, rather than to passively study about the world they inhabit' (Mullens et al 2012: 223; for a critique, see Nairn 2005). Indeed it is the *doing* of photography that most appeals to Hall (2014) who encourages the use of photography by geographers to actively engage with urban landscapes, where the practice of photography is both illustrative (Rose 2008) and performative (Hall 2014). Geography fieldwork teaching methods and assignments often reflect this desire for students to engage independently with their surroundings, involving individual or group work followed by feedback and discussion at the end of each day (see Healey et al 1996). Yet as Golubchikov points out: 'encouraging students' independent learning should not be equated with a hands-off approach' (2015:145). Indeed, independent learning and engagement with places, though extremely valuable, also brings with it the possibility that students may misunderstand critical concepts while in the field. For example, observing students' interpretation of the urban landscape via Instagram showed us that some students had misunderstood concepts such as gentrification. Student learning is often only assessed *after* the field course has ended, in group-presentations (cf. Marvell 2008), marked essays (Golubchikov 2015), web-based assignments (Latham & McCormack 2007), reflective fieldwork notebooks (Dummer et al 2008), or other combinations upon return (see Moran & Round 2010). It is therefore useful to develop creative ways of supervising student learning - at a distance - while still in the field.

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While in the field, Instagram provides a real time 'snapshot' of what the students are thinking, how they are interpreting the relevant information and whether they might have misinterpreted particular concepts and ideas. Incorporating Instagram as part of a geography field course provides another platform for dialogue with students during their time in the field. Downward et al (2008: 69) rightly predicted that the fast development of portable devices with live streaming capabilities would allow 'real time feedback' in the learning environment, and our example of using Instagram to encourage student learning during an urban field course attests to this. For example, while the students had been sent off to do a group exercise in Berlin and the instructors were in a café in another part of the city, a student posted a photograph showing people relaxing by the River Spree near some street art [Figure 4]. The student posted a caption along with the image, reflecting that:

Figure 4: A computer screenshot of an Instagram image and student-teacher interaction on the social media platform.

> **BerlinStudent3:** *"Is the process of gentrification eroding the creative identities of Berlin? #geogberlin #creativeclass #identities #gentrification #everchangingcity"*

We had searched for the hashtag #geogberlin and could see this recent post by the above student. Gentrification was not one of the central concepts were initially focusing on, and we were pleasantly intrigued to see the student describing the outcomes of gentrification in this way. We asked the student to expand on their rhetorical point via Instagram by writing below their caption:

> **BerlinStaff1:** "*Good question, what are your views on this?*"

> **BerlinStudent3:** *"I think this has occurred to some extent…in areas you can see where gentrification has happened and areas have less graffiti, there are wealthier people living there and there are more branded/chains shops opening up"*

This short interaction via Instagram took place while at the students and staff were in separate parts of the city, and helped to inform the reflexive feedback session later that evening. For example, in our group conversations we encouraged students to consider the processes and structures behind gentrification, as opposed to simply describing its outcomes. Our conversations with the students therefore broadened discussion of issues around gentrification beyond 'graffiti' and 'branded shops', to incorporate some consideration of the long-term re-structuring of urban space, class and uneven development. Being able to see the photographs that students had taken during the day allowed us to use these images as springboards for group discussion. Not only did the use of Instagram facilitate group learning but it also allowed individual advice to be given to students via the mobile application. To take one example, we gave advice to a student via Instagram to look into the work of Barthes' *Camera Lucida* (1981) [see Figure 4].

Welsh et al (2012: 479) suggest that photographs taken by students during field courses can 'encourage further student reflection and understanding of a landscape post-fieldwork'. We would add that by using instant photo sharing platforms such as Instagram, it is possible to extend that reflection process into the time of the fieldwork itself. In this way photography becomes a 'live' process, and not just a visual add-on to assessment essays and field notebooks.

Circulating interpretations via a 'digital scrapbook'

Through asking students to use the collective hashtag #geogberlin, all their images were collated and archived onto the group Tumblr account. This created an online space, accessible throughout the fieldtrip, to observe and prompt discussion of other photographs and representations of the city. Through this 'digital scrapbook' students had a shared resource of images to consider throughout the day. Later, during group workshop discussions, these images were analyzed more fully to consider the multiple ways in which students were seeing the city. Rather than restricting photographic materials to use in their field notebooks, this 'digital scrapbook' helped raise questions among the students about the circulation and audiencing of their interpretations (Rose, 2016b). Having a scholarly audience for their photographs encouraged students to think more carefully about their social media practices and the ways in which their use of Instagram shaped, albeit in a very minor way, the power relations imbued within the spaces and places of the field course. For example, as one student remarked:

> "*Social media has become more important in seeing how different people perceive a place - through the types of photo they take, what they take pictures of and how they caption it*"

Another student commented:

> "[It] *made me realize their power to interpret and share opinions and visions of place*".

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Others suggested that representing their learning experiences through Instagram: "… makes me feel more conscious of my hashtags". Yet perhaps this is not as trivial as it might seem. Formal media and party-political practices have highlighted the reach and force of image sharing under hashtags. This was evident when UK Member of Parliament Emily Thornberry was forced to resign after posting a photograph with a misjudged hashtag in 2014 (see Rose, 2016c). Relatedly, our students reflected on how new digital social media shifts social interactions between images and places, in ways that can have a distancing effect, as well as acting to or draw people closer through social networks:

> "It is a great way to interpret things in all forms. Can take both your own photos, look at how other people view it through their photos and emotions"

Considering these emotional responses to, and impacts of the fieldwork is significant because it opens up the possibility of engaging with emotions in a field in which they might otherwise be neglected. Indeed, running this fieldtrip in Berlin involved students confronting particular histories that cohere around the city, including that of the holocaust, which affected some of our students more directly than others.

As the days progressed it was apparent that many students had taken similar photographs of particular aspects of urban life, which echoed the repetitive visual discourse that Instagram often reproduces. Crucially, this overlap in images – such as those at the East Side Gallery - provided a platform to prompt students to consider why they had different interpretations of the same thing:

> "It was good to be able to look at other people's photos under the hashtag and made you tease out the key concepts... [this was] useful for deconstructing things and thinking critically"

> "I've enjoyed looking at the other photos taken by students. I probably wouldn't have had the chance without Instagram"

We thus found that the use of Instagram provided a space for students to observe and discuss their peers' photographs and thoughts throughout the day whilst working and later reflecting more fully in the evening group workshop discussions. The space/platform of Instagram does not replace the importance of discursive sessions, but augmented the learning processes throughout the whole trip. This, too, raised an issue whereby the circulation of other group members photographs get 'taken' by the whole group. As such, this method presents further insights into the 'ownership' and plagiarism of ideas within new fields of learning, as well as the reinforcing of particular accounts of the city.

On challenging and perpetuating socio-spatial inequalities

As has been noted elsewhere (Rose 2003), whether in popular culture or academic work, images are rarely without accompanying text. For this learning experience, by harnessing the role of digital photography and including hashtags, we sought to encourage students to challenge their own social media practices. Instagram, Boy and Uitermark (2017: 622) argue, is a platform which 'constitutes a distinctive way of seeing that composes an image of the city that is sanitized and nearly devoid of negativity'. Representations of the city through applications such as Instagram risk selectively curating desire and consumption, as well as denying the entrenched exclusions that make up urban life.

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Given how ubiquitous photographs have become in contemporary society, there is a risk that students post photographs online in replacement for prolonged consideration and critical analysis in their field notes, leaving the power relations that make up urban life unchanged. When invited to comment on how the digital visual method has affected how they researched, this drew varied responses, although a recurring theme related to their positions during the field course as 'tourists':

> *"I enjoyed seeing Berlin in a way other tourists wouldn't, by visually engaging with the material through Instagram it made it a lot easier to understand"*

> *"I've always liked Instagram especially on holiday so not too much"*

> *"I would often Instagram pictures of the city anyway"*

The practice of making, circulating and interfacing with photographs in the space of a fieldtrip, however, allowed for a momentary 'pause' enabling an affinity between the rapid pace of fieldtrip and the slower rhythms of critical academic analysis (Mountz et al 2015). This practice helped both students and us as geography practitioners to consider why we might take photos and to think through not only the production of images but their reproduction. As two students commented:

> *'It made me realize that what I see on Instagram isn't necessarily a true representation of what is in the real world, it's just an interpretation of it'.*

> *'It helped me think deeper about the ways in which the visual effects people. Also by understanding better how places can be seen in different ways than just the superficial'.*

Undoubtedly the process of taking photographs and posting them on Instagram engaged the students. To put it bluntly, for many it was a 'fun' way of exploring the city, which reflects recent geography scholarship calling for more openness towards the 'creative and playful' side of geography field courses (Phillips 2015: 621; also see Fuller & France 2015; Pánek et al 2018). Furthermore, incorporating the toolkit of Instagram into teaching geography follows a call from Rose (2016a) to not shy away from popular uses of photography in the lives of young people. As one student commented, it was: "Good using technology in a different way to that we use in everyday life with the Instagram project. This type of geography was completely new but very interesting." Another student reflected that:

> *"Trying to get good photos that actually say something rather than your usual tourist photos was a fun challenge"*

As articulated above, however, there is a danger that students post photos as a replacement for more prolonged analysis, that they 'consume' the city through quick snapshots. Problematically, one student commented: "Geography is a visual discipline, so it just makes life easier than writing or reading very long essays and articles." In this way, we might raise concerns as to how instant visual methods may undermine appeals for 'slow scholarship' (Mountz et al 2015), and even how the instantaneous demands of social media feeds into the metrics agenda and increasing neoliberalization of education (Pusey & Sealey-Huggins 2003; Harrowell et al 2018; Leibowitz & Bozalek 2018). Relatedly, several scholars have argued that the ubiquity of technology within teaching – including email - has added further pressure to immediately respond to students' concerns, with 'the line between caring about student's learning and spoon-feeding….becoming increasingly vague in practice' (Kemp et al 2014: 19).

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Nonetheless, in this field course we found that it was precisely through challenging the way in which cities are represented through digital photography and drawing this directly into our group discussions in the evenings that allowed us work through the ubiquity of digital social media practices to challenge the students. In this way, the fast-photographic method of Instagram encouraged a slower pedagogical reflection, forcing students to pause and reflect on the decision process behind the construction of their images. As one student articulated, using Instagram in this field course: "made me think *why* I'm taking the photo".

Conclusion

As Carter (1901) demonstrated at the start of this paper, visual methods have been a feature of geographic practice and pedagogy since the discipline's inception. The extent to which visual practices have been integrated into the mainstream of the discipline is questionable, however. This paper is the first known academic study which reports on implementing Instagram on a field trip at higher education level. We therefore promote more research into using Instagram within field teaching. Based on the reflective journals of our students and interviews, we found that students positively evaluated their learning experiences in light of using Instagram. However, we encourage a constructive, yet critical and careful use of instant visual methods within field learning.

In the 'Rephotography' student task, Instagram allowed for students to notice the 'small grain' of their urban setting, overlaying their conceptual geographical knowledge with real-world examples. In this way, students noticed, and were prompted to elaborate upon notions including gentrification, the right to the city, and themes surrounding reunification. The vantage of distance afforded by the generation or capturing of images sat in regular tension with students' physical proximity to the space, which was again in tension with absences from their own recent historical knowledge.

In the case of the *Hashtag Geography* project, the use of Instagram allowed interactive, real-time prompts from staff while students enjoyed literal geographical distance and independence. This apparent proximal-distance facilitated in-depth discussion on a number of relevant themes. The requirement for students to both create their own images, and then to speak to the processes underpinning their creation, helped generate active-learning through this visual medium. That tutors were able to intervene in the semi-independent visual investigations helped to ensure that the approach was not too detached (see Golubchikov 2015). This methodology also opened up space to explore people's emotional responses to the fieldwork.

Instagram is a very intuitive app – which partly explains its global popularity – and students will doubtless be very familiar with using similar social media tools. That said, from a practical standpoint we strongly encourage educators interested in adopting similar field teaching techniques to become very familiar with using Instagram *before* expecting students to use it in the field. Like any technology used within teaching, Instagram is not a pedogeological panacea, but it can nevertheless prove useful if used alongside a wider curriculum design. As Welsh et al (2013: 413) rightly suggest, 'fieldwork practitioners should be encouraged to embrace the potential of existing and new technologies in order to enhance fieldwork learning for their students.'

Running in parallel to the onwards march of technology, and partly in response to it, geographers have highlighted the need to slow down our academic practices (Mountz et al

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2015). While we also lament the pervasiveness of instantaneous 'neoliberal logics and technologies' (ibid, 1243) highlighted earlier in the paper, some technological advancements – at least within visual practice - are worth preserving, utilizing, and bringing into our pedagogical toolkit.

Commenting on the new 'glass geographies' (Garrett 2016: 136) that have emerged as we increasingly live and create our lives through screens and cameras, Garrett calls on students themselves to pioneer new visual research methods. Speaking directly to his student audience, he states: 'As undergraduate and graduate researchers, you perhaps have more facility with these methods than many established geographers. This puts you in a strong position to lead the way in their use' (Garrett 2013: 136). We support this aim, yet also suggest geography practitioners can push forward with new techniques too. Like Carter's late Victorian comments that we opened with, this article will doubtless be out of date before long, as technology and the discipline of geography mutates towards a faster future. But we nevertheless suggest it is important for geographers to keep pace with technological opportunities and 'vivify' [our] work' (Carter 1901), while still remaining true to the philosophy of 'slow scholarship' (Mountz et al 2015). As one student remarked during an interview: 'Of course, we all use *Snapchat* now, anyway'.

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Notes

[i] Though we give an example of a *human* geography field course in this paper, similar instant digital photography methods can be used to teach physical geography (see Thornes 2004; Fraile-Jurado et al 2018).

[ii] *Figures for number of photos unavailable, so this is the daily number of tweets http://www.internetlivestats.com/twitter-statistics/. Corroborated by: Orescovic (2015) (http://uk.businessinsider.com/twitter-tweets-per-day-appears-to-have-stalled-2015-6)***Views per day. Includes 'Stories' consisting of videos and stories* Frier (2016b) http://www.bloomberg.com/news/articles/2016-04-28/snapchat-user-content-fuels-jump-to-10-billion-daily-video-views****Information for table sourced from social media companies' own statements, (see Highfield & Leaver 2014;* Dredge 2015; *Krallman et al 2016; Hunt 2016).* ***Frier (2016a) (http://www.bloomberg.com/news/articles/2016-06-02/snapchat-passes-twitter-in-daily-usage); also http://www.vanityfair.com/news/2016/06/instagram-500-million-monthly-active-users

[iii] This information was garnered through geography department websites as well as a #Hivemind request on Twitter that received feedback from twenty geography staff.

[iv] For a useful discussion of flâneurial practice within higher education, see Cutcher et al (2018).