Learning spaces in the countryside: university students and the Harper assemblage

by Robinson, P.A.

Copyright, Publisher and Additional Information: This is the author accepted manuscript. The final published version (version of record) is available online via Wiley. Please refer to any applicable terms of use of the publisher.

This article may be used for non-commercial purposes in accordance with Wiley Terms and Conditions for Self-Archiving

DOI: http://dx.doi.org/10.1111/area.12379



Accepted version to be published in the journal *Area*, August 2017

Learning spaces in the countryside: University students and the Harper assemblage

Dr Philip A. Robinson

Harper Adams University

Abstract

Using the concepts of affect and assemblage, this empirical paper expands the boundaries of

geographies of education by shifting the student focus from the urban to the rural,

demonstrating how a multiscalar and diversely constituted network of material and non-

material things (including buildings, animals and plants) coalesce with students to create

affective atmospheres of learning in a specialist agri-food and land-based rural university. This

learning is underpinned by a sense of attachment to historical tradition through more than a

century of agricultural education on the campus, giving students a strong sense of identity in

corporeality. Animals are enrolled in teaching and learning through embodied sensory

engagement with their states of health, welfare and disease. Students learn both with and from

their student peers, centred on a mutual interest in the science and practicality of caring for

production animals and pets. This mutual learning and sharing takes place both within, and

informally beyond, the geographies of the classroom. The paper draws out wider cautionary

lessons for ongoing university expansions; the praxis of university education within fieldwork-

and vocationally-based domains; and the role of both formal and informal assemblages of

teaching and learning within the academy.

Key words

affect; assemblage; higher education; learning spaces; sociomateriality; student interviews

1

Introduction

Human geographers have created a burgeoning field of enquiry in the geographies of education, particularly over the last decade (Thiem 2009; Cook and Hemming, 2011; Waters 2016). Much of this work has been focussed on higher education at various spatial scales, analysing the macroscale political economy of educational reforms in a globalised world (e.g. Jöns and Hoyler, 2013), but also increasingly centred upon students themselves at the micro-level everyday living of the individual in urban environments (e.g. Holton 2017).

Questioning what makes a 'good' learning space from the perspective of *rural* university students, this paper evaluates the co-constitution of learning spaces in a non-urban university setting by delineating the sociomaterial collaborations of human and nonhuman assemblages of higher education at Harper Adams University. Harper Adams is the largest university in the United Kingdom specialising in only agri-food and land-based subjects, and with a working farm as an integral feature of the campus, could therefore fit Kraftl's (2013) description of an 'alternative' learning space in the heart of rural Shropshire.

Although Hopkins (2010) once criticised a dearth of scholarship in critical geographies considering the construction and internal geographies of university campuses and the embodied identities of the students within them, this gap has increasingly been filled by research within social and cultural geography. Despite such progress, there is an ongoing need to explore the 'where and how' of student life (Holton and Riley 2013, 62), including the diversity of experiences, through giving voice to students themselves (Holton and Riley 2013). Holton (2015a, 2015b) argues that a sense of place has been neglected in the geographies of students, and his ethnographic research addresses how students evolve existing, or develop new, attachments to place in the city campus. In a similar vein, Brooks *et al.* (2016) expand work on

university campuses by focussing particularly on the materiality of the students' union on campus.

In examining areas for the future expansion of geographies of education more broadly, Mills and Kraftl (2016, 25) suggest that 'materiality, affect, embodiment, representation and built form – should surely have an important place'. Similarly, Bauer (2015) contends that there is a need for more research informed by affect and socio-materiality, and taking inspiration from actor-network theory, calls for the consideration of networks of humans and non-humans in education. In doing so, she suggests that such an approach can 'bring to the surface the social-and-material enactments that are co-producing knowledge' (Bauer 2015: 624). Indeed, Kullman (2015) demonstrates the value of analysing what she calls 'pedagogical assemblages' in the context of children's traffic education, and posits that the approach can have wider applicability and potential outside childhood research, for 'learning is the outcome of assembling' (Kullman 2015, 263), whatever the context.

Heeding these calls, this paper begins with a brief consideration of its theoretical underpinning in geographies of affect and assemblage; moves on to present empirical data from the student interviews under the themes of campus, animals and other students; and finally considers what this means in terms of creating and sustaining 'good' learning spaces for students in higher education, not just in this rural case study, but elsewhere.

Pedagogical assemblages

Fundamental to this paper is a *relational* emphasis, with human and non-human relations creating affects which influence the learner and the learning experience. A useful conceptual way of thinking about these sociomaterial relations and their affects is the notion of *assemblage*, developed by philosophers Deleuze and Guattari in their work *A thousand* plateaus (1988). Wise (2005, 78), interpreting the Deleuzian understanding of assemblage,

thinks of it as a 'heterogeneous collection of elements', but to describe and annotate an assemblage is not enough, for Deleuze rather emphasized thinking about what it can do, and what emergent affects it might have inside and outside the individual elements of the assemblage. He suggests that rather than looking at the essence of what something *is*, it is more interesting to unravel 'the circumstances in which things happen: in what situations, where and when does a particular thing happen, how does it happen, and so on?' (Deleuze 1995, 25).

Our interest here is therefore in exploring how and when and where learning spaces happen through the bringing together of diverse elements in multiple assemblages in a different university environment. Agreeing with the opinion of Waters (2016, 6), 'learning is grounded, emplaced, and dependent upon various materially embedded assemblages of people and things [italics mine]'. There is variety, but as Dewsbury (2011, 150) argues, 'the assemblage is less about what it is ... and more about what it can do, what it can affect and bring about [emphasis mine]'. These affects do not need to be consciously thought into existence, indeed they 'can be, and are, attached to things, people, ideas, sensations, relations, activities, ambitions, institutions, and any number of other things' (Sedgwick 2003, 19). In keeping with the Deleuzian idea of linking affect to assemblage, 'the elements that make up an assemblage also include the qualities present (large, poisonous, fine, blinding etc.) and the affects and effectivity of the assemblage: that is, not just what it is, but what it can do' (Wise 2005, 78).

Methods

The empirical research presented here is based on interviews with 23 students at Harper Adams, the majority of whom were taught by the author (a vet) as undergraduates on animals-related courses, but also included 4 postgraduate students who attended a class on research methods in the social sciences. The animals-related degree courses represented included agriculture with animal science, animal behaviour and welfare, bioveterinary science, veterinary nursing and

animal health and welfare. The interviews consisted of 3 focus group interviews involving 17 students (biovets, vet nurses, postgraduates) and 6 individual semi-structured interviews conducted by the author between March and April 2016, and all were recorded with consent. The interviews lasted up to one hour each, and were transcribed using *f4* software (audiotranskription.de), and coded and analysed in *NVivo* (Version 11, QSR International) using a grounded theory approach (Glaser and Strauss 2008).

Following Adriansen and Madsen (2014), students were interviewed as a way of integrating reflective practice with pedagogic action research, where teacher and taught became coresearchers (Bauer 2015). The aim was to understand the life-world of the students' learning spaces, and to reflect on how our creation of the relational spaces within and beyond the boundaries of the classroom could be enhanced. The following sections of the paper consider these assemblages and affects and what they can do to facilitate and produce student learning spaces, beginning with the university campus.

The campus assemblage

Shropshire farmer Thomas Harper Adams died in 1892 and bequeathed his estate 'for the purpose of teaching practical and theoretical agriculture in England' (Williams 2000, 5). Fulfilling his vision, the Harper Adams Agricultural College welcomed its first student intake in April 1901 with an enrolment of 6 students, the family farmhouse, a new red-brick state-of-the-art main building, and a 178-acre farm on the doorstep (Harper Adams, 2016). From those early days, the College 'prided itself on the practicality of all its teaching and its usefulness to the real world' (Williams 2000, 33). The student enrolment, courses on offer, and the facilities have been hugely expanded since 1901, but this section of the paper evaluates how the make-up of the present campus constitutes a rural learning space with affective qualities.

On driving through the campus entrance, the Victorian main building, designed by Cardiff architect Harry Teather and finished in 1900, stands tall as the most notable and central feature of the campus. Students spoke of how on university open days they were struck by first sight of the building. The combination of the building with cricket green in the foreground created what one student described as a 'postcard-like' (Int B4) scene, suggesting rural tranquil and quintessial Englishness. But it was not just the main building that created an early affect; it was also the gardens, and particularly the flowers, which students first noted, as demonstrated in this interchange between veterinary nursing students in a focus group discussion:

Vet nurse 4: 'And the flowers are really nice - they definitely do the gardens - which I think makes a big impression.'

Auth: 'So why does that make a difference?'

Vet nurse 4: 'If it's just weeds and stuff you just think //

Vet nurse 5: 'Or just grass //'

Vet nurse 4: '// If they don't care about the plants, they're not going to care about the students!' [All laugh] (Int B9)

For the vet nurses, the care of the plants provided evidence of an institutional care and nurture of students, a theme echoed across other interviews, but this particular human-nonhuman assemblage was expanded by others in the group to include the main building in the creation of positive impressions and a welcoming atmosphere on campus at an open day:

Vet nurse 3: 'And it's the first impression ... as soon as you go into the road, you're like: "Oh, flowers, main building – this is good".'

Vet nurse 6: 'It just adds to the close-knit kind of thing, doesn't it?'

Vet nurse 5: 'Everyone was really friendly – they would answer any question, go out of their way to help you.' (Int B9)

Others spoke of feeling 'at home' as soon as they came onto the campus. The closeness to plant and animal life on campus was seen as being an important part of coping with the pressures of student life, and seeking the companionship of animals a means of relief and relaxation:

Biovet 3: 'It sounds stupid maybe, but final year is such a stressful year that actually doing something different and going out on farm and getting to be in with the animals - it's actually probably quite beneficial.'

Biovet 2: 'I've been helping with the lambing and milking because it's something I like doing, and it's very good stress relief [*Laughs*].'' (Int B1)

Here was another form of student work, but it wasn't the taxing mental strain of lectures or bookwork, but instead a companionship with nonhuman others. Taking part in on-farm tasks meant that the animals became part of a therapeutic assemblage which had the effect of easing pressure. But what is also notable is that the animals themselves created an affective atmosphere on campus signified through the senses, as illustrated by this postgraduate student who described how she felt when arriving on campus from city life in London:

'What is really nice is that when I get here I step onto campus and smell the animals – that takes me back to my childhood. Grandad had a dairy farm a few miles away, and I grew up raising pigs and chickens for fun.' (Int B3)

The smell of the animals triggered warm feelings of family memories and childhood experience. But beyond personal history and life stories, creating the future is always an essential part of what the university focusses on. With Harper's place in agri-food and land-based education firmly established for over a century, how important was this sense of history

Accepted version to be published in the journal *Area*, August 2017

and tradition to students in the present, and how did that blend (or not) with the ongoing drive

to build and modernise? What came through very clearly was a desire for both tradition and

modernity:

Auth: 'What's more important - a sense of history and tradition, or being modern and

up-to-date?'

Vet nurse 7: 'You need a good mix.'

Vet nurse 6: 'You need the sort of old style ... it's nice to look at and it's aesthetically

pleasing and everything, but you need the modern for the courses. You need to have all

the modern interiors and equipment and state-of-the-art labs - you need all that, just

because everything's progressing, isn't it?' (Int B9)

Opinions differed on how much tradition was important, and what affect buildings had on their

student occupants. Several thought that older teaching rooms lacked sufficient light or warmth,

creating atmospheres which failed to inspire. Whatever the mix of the old and the new, it was

deemed important enough for most of the interviewees to have something to say about it, and

as one student put it, the buildings 'all work together somehow' (Int B4). The combination of

sociomateriality - buildings, animals, plants, people - created something which the

bioveterinary science students struggled to articulate:

Auth: 'You said that as soon as you stepped onto the campus you knew this was the

place you wanted to be, so what is it about this campus?'

Biovet 4: 'I don't know ... It was just like ... I don't know, it just felt like //'

Biovet 3: 'It's got like a *feel* to it, doesn't it?' (Int B1)

8

There was an obvious struggle to find a vocabulary to adequately describe the affective intensity of this sociomaterial assemblage, reinforcing the notion of affect as a 'bodily sensation' which is difficult or impossible to express in language (Kenway and Youdell 2011), and the agency of materiality's 'there-ness, that words cannot convey' (Rose, 2008, 156).

Learning with animals

The campus farm has always been an integral part of what makes Harper Adams what it is. At the opening of the college in 1901 the local newspaper, *The Newport Advertiser*, described the farm's resident animals and their purpose-built accommodation:

'There are three open yards with shelters all round, so that cattle can be protected from cold winds, and yet enjoy sufficient air ... The piggeries ... [are] fitted with troughs so constructed as to allow of their being filled with food from the outside ... The poultry are lodged in movable houses' (Cited in Williams, 2000, 25).

The aim was for students to learn from observing animals and production systems in situ, and take best practice beyond the confines of the college farmyard. Agricultural research was an important part of the mix, and remains so today, but the university's degree portfolio has widened beyond agriculture to incorporate all species of animals through courses such as veterinary nursing, veterinary physiotherapy, and animal welfare and behaviour. Expanding far beyond the species resident on the farm of 1901, the animals now encompass everything from reptiles to horses and sheep. This animal assemblage plays a vital role in reinforcing what is delivered to students in lectures and tutorials, and handling and observing animals is highly valued by the students. Emphasized most strongly was the importance of engaging their sensory register in knowing animals. For example, *seeing* animals in their environment meant that students were able to apply the theory of health and welfare presented in the classroom:

'Every time I've gone [to the farm] I've seen something new ... it's all a completely foreign world to me, so it's always really, really interesting' (Animal behaviour and welfare student, Int B2)

Biovet 2: 'I like being able to see what it is – why we do something.'

Biovet 1: 'It's always nice rather than having just a picture showing you – I mean that's really important so you can get the theory behind everything, but actually being able to look at it there in person, that's really good.' (Int B1)

Sight was emphasized repeatedly, preferably beyond the screen of the lecture theatre or personal computer, but other senses were also engaged. This could be a distinct advantage for learning more effectively, and the touch of a diseased bovine udder was one vivid example: 'It's all well and good learning about mastitis, but until you *feel* an udder and see how hot it is ... [*emphasis mine*]' (Biovet 2, Int B1). But sensory engagement could also detract from learning, and one student argued that there was no benefit on being on farm if the students were distracted by the 'smell and noise' (Int B2) of the pigs. Overwhelmingly though, the desire to get out of the classroom and into the companion animal house or onto the farm was emphasized across all student groups, and the benefits of having the convenience of these facilities on the campus was welcomed. The *doing* of animal husbandry and healthcare was viewed as a better way of learning:

Vet nurse 3: 'I also think it's the practical opportunities you can get here - I don't think at any other university you can go over and milk a cow [laughter]' (Int B9, focus group)

This practice-based approach was not just confined to the university, but also extended beyond the confines of the campus back home to the farm, or into the veterinary clinic where student vet nurses further honed their practical skills and developed their knowledge under the tutelage of qualified vets and vet nurses:

'I still do quite a lot of hands-on practical experience back home. You take things that you've learned in lectures, and you sort of replay them in your mind.' (Agri with Animal Science student, Int B8)

Vet nurse 6: 'At the end of the day we're on a practical course - there are practical outcomes - so it just makes more sense to be doing things rather than sitting and learning about things.' (Int B9)

Vet nurse 2: 'A couple of the vets [during placement] were asking questions while you were doing anaesthetics and stuff.' (Int B9)

The animals therefore were enrolled in the *doing* of education, and the hands-on experience with the materiality of veterinary practice and equipment - anaesthetics, sutures, blood analysers and X-ray machines - coupled with animals, was seen as a vital part of knowing animals while learning to become a registered veterinary nurse. While all were agreed that lectures, tutorials and e-based learning were an integral part of teaching and learning in higher education, little, it seems, could engender the desire and capability to learn better than affective connection with the material embodiment of animal life.

Learning with (and from) others

Reviewing progress in the geographies of education, Holloway et al (2010) argued for the need to broaden the field by looking at alternative spaces of education, investigating the lifeworlds of students and alternative student identities, and looking at modes of learning. If animals have such a profound influence on student learning experiences, what about people? Here we

consider student peers, and the impact learning with (and from) others (both formally and informally) can have on student motivation and performance.

Looking back to the early days in 1901, that initial enrolment of 6 students had risen to 49 by the end of the first academic year (Williams, 2000). Many of these students were studying short courses on agriculture rather than the more intensive two year programme; attending Harper in short periods allowed work on the farm to continue, with study as a part-time activity as home concerns allowed. Short course student Jesse Wadlow recorded his testimonial to the value of his education in his local newspaper: 'Every lecture and demonstration was full of interest ... [things] which every farmer wants to know' (Williams, 2000, 33).

Today's student body numbers just under 5,800 full-time and part-time, is fifty percent female, and just forty percent originate from rural areas. It is therefore a much larger, gender-balanced, and predominantly urban student population in stark contrast to the pioneering agricultural students of 1901. Yet despite these contrasts in the demographics of the student population, there was also a very powerful sense of a kindred bond expressed by the students interviewed. Their love of animals made their commonalities greater than their differences. There was a pride in following in the footsteps of kith and kin. A farmer's son expressed it like this:

'I am very proud to be here. There is a massive spirit and an image that I suppose goes with Harper, and throughout country people or rural people, without just stereotyping people, Harper is well known ... a lot of people in farming or horses or that kind.' (Biovet, Int B7).

Mention of Harper amongst these farming or rural folk seemed to provoke an emotional response. The smaller size of the university created a sense of knowing everyone, and a closer community bond between students on the campus:

Biovet 3: 'People [at other universities] who did different courses never came across each other, or they didn't mix particularly well, whereas here //'

Biovet 1: '// Everyone's got the same interests //'

Biovet 3: '// Yeah, it's like a communal //'

Biovet 2: 'It's quite nice to have people with similar interests, instead of going somewhere that's really big, and there's such a diverse range of interests that you don't really get to connect with anybody.' (Int B1, focus group)

Although this 'sameness' could initially marginalise the now majority who originate from urban areas (see Holloway *et al.* (2010) and Hopkins (2010), for example, for other student differentiations on grounds of alcohol consumption and religion), the increasing diversity of the course portfolio and attendant student diversity meant that accommodation was already taking place within the campus community. This was particularly mentioned by the vet nursing students, none of whom came from farms, and who were predominantly pet-orientated:

Vet nurse 1: 'But yeah, I'm proud ... I know we talk about all these divides and stuff, but actually if it was Harper versus another uni, Harper would always win - it doesn't matter whether you're an agric or a vet nurse or anything.'

Vet nurse 6: 'We've got that sense of community, haven't we?' (Int B9, focus group)

The commonality of interests in animals meant that students learned from each other both inside and outside of the classroom as they shared their experiences, especially amongst the agriculture students. This could consist of after-lecture comparisons of the scientific theory presented in the lecture room to the earthy realities of farming in the field. Such discussions extended into farming chats over a pint and acquaintances in the students' union or pub had the potential usefulness of becoming authoritative sources of farming knowledge across the year

groups. This farming network linked the lifeworlds of academia to the home farm and even social life beyond the campus in a rhizomatic assemblage of formal and informal student learning, illustrated in these two quotes:

'You know, you'd be surprised how many people, when you're sat in the pub, will talk a lot more personally about what's going on at home - you know, problems or successes to do with agriculture because everyone is like-minded' (Agric with Animal Science, Int B6)

'All of my friends back home are in Young Farmers as well, and they'll always be "So what have you learned?" And we'll be like "Oh, we had mastitis, and we dissected an udder." And they'll say "We had a case, and it didn't look like that", and you'll be quite interested on why it was different.'

Auth: 'So you do that in your time off at home?'

'Yeah [laughs], sounds really sad doesn't it?' (Agric with Animal Science, Int B8)

Nevertheless, more heterogeneity between students sharing modules were thought to be useful to encourage debate and for the sharing of contrasting views on, for example, animal welfare:

'Some people are very animal rights-orientated, and some people are very utilitarian ...

I think it's healthy for everybody to hear other people's opinions rather than just being stuck with their own little mind-set.' (Int B4)

Despite different backgrounds, interests and career aspirations, there was much to be learned by listening to others share their opinions, and there was most certainly a learning *from* as well as a learning *with*.

Discussion

Hopkins (2010) calls for research on the experiences of students living and working on rural university campuses to rebalance the predominant focus on urban educational environments, and given that such places have a potentially very different array of materiality, there is merit in moving the student focus out of the city and into the countryside. While Wiborg (2004) interviews students originating from rural areas in Norway, the interest is on their sense of connection (or disconnection) to home having moved to the city, rather than their experiences of higher education or learning.

This paper has demonstrated the conceptual value of an affective assemblage approach to further understanding the geographies of higher education by connecting theory to practice in a rural context. The research has been collaborative, where students and teacher work together to understand lifeworlds, and where the teacher reflects and analyses how best to sustain, improve and develop the learning experience for the present and future student cohorts. I draw out three lessons combining theory, empirical findings and praxis – for university administrators, for university teachers, and for students as both learners and 'teachers'.

First, it has become obvious that the student learning space is assembled and reassembled with each student intake, and involves a campus made up of its plants and buildings and creating atmospheres of welcome, care and nurture. Kraftl (2006: 495) states that 'architectural forms themselves hold gestural, performative qualities', and we have seen how the main building on campus had the power to affect as soon as students arrived onto the campus: they were immediately drawn in by the red-bricked façade and sense of historical tradition, and felt 'at home'. But tradition and history on their own were not enough, and there also was a need for keeping up-to-date with modern buildings with bright lights and technological advancement. The challenge here for university decision-makers is how to advance with care; how to progress through continued expansion of student numbers and infrastructure, without losing the soul of the campus and its unique blend of quaint rurality and state-of-the-art technology in building

design and equipment. Driven forward in an era of globalisation and internationalisation (Holloway and Jöns, 2012; Jöns and Hoyler, 2013), what does this mean for all universities as they try to create an assemblage which attracts students to their campus, and also makes them feel welcome and part of a body in which they have both individual and corporate identity? Students must remain at the centre of higher education as *persons*, not numbers. Where students display the strength of attachment to their university, its campus and each other, that's a cause for celebration and ongoing consolidation.

Second, learning spaces involving animals demonstrate the need for materiality and embodiment in the geographies of education, particularly in practical and vocational subjects such as veterinary nursing and agriculture, but across many other university subjects. This includes geography, where fieldwork and seeing and feeling beyond the classroom is under threat through capital expenditure cuts and ever-expanding staff workloads (Hope, 2009; Herrick, 2010; Fuller, 2012). For Harper students, animals were enrolled in learning experiences which provided interest and enjoyment, and helped students to understand and remember what they had heard in the classroom setting. Hope (2009, 179) so aptly expresses this need for active and embodied learning: 'When we act, we engage with the world with our whole self. We give it our full attention and achieve a deeper understanding that integrates thought, feeling and the senses.'

Third, the students have revealed how they are both learners and teachers in the learning spaces they inhabit and create both inside and beyond the classroom. Perhaps unsurprisingly, for many students in this rural case study the process of learning merges with social space; the crossfertilisation of information crosses barriers of background and interests in a communal student experience. As Escobar and Osterweil (2010, 190) state, 'individuals possess an openness and capacity to affect and be affected and to form assemblages with other individuals (organic or not)'. Students, as individuals and as groups of individuals, can affect the learning experience

of other students in positive and affirming ways through sharing their knowledge in classroom debates, but also passing on embodied skills in the lambing shed, or even standing in a queue in the students' union, confirming what Bauer (2015, 622) suggests: the co-production of knowledge involves 'formal and informal learning within and beyond classrooms'. Further research in other disciplines could unveil how important that is outside of agriculture, and whether this is unique to this particular body of students or much more widely applicable.

Acknowledgments

The project was approved by a research ethics committee at Harper Adams University. The opportunity for the research arose from a teaching and supporting learning in higher education course at my own institution as a new entrant to academia. Sincere thanks are due to all of the student participants for their willingness to participate, and to the editor and reviewers for their very helpful comments.

References

Adriansen HK and Madsen LM 2014 Using student interviews for becoming a reflective geographer *Journal of Geography in Higher Education* 38 595-605

Bauer I 2015 Viewpoint: Approaching geographies of education differANTly *Children's*Geographies 13 620-627

Brooks R, Byford K and Sela K 2016 The spaces of UK students' unions: extending the critical geographies of the university campus *Social & Cultural Geography* 17 471-490

Cook VA and Hemming PJ 2011 Education spaces: embodied dimensions and dynamics Social & Cultural Geography 12 1-8 **Deleuze G** 1995 On A Thousand Plateaus In *negotiations* 1972-1990 Columbia University Press, New York pp. 25-34

Deleuze G and Guattari F 1988 A thousand plateaus The Athlone Press Ltd, London

Dewsbury J-D 2011 The Deleuze-Guattarian assemblage: plastic habits *Area* 43 148-153

Escobar A and Osterweil M 2010 Social movements and the politics of the virtual: Deleuzian strategies In *Deleuzian Intersections: Science, Technology, Anthropology* Eds Jensen CB and Rodje K Berghahn Books, New York and Oxford p. 187-217

Fuller IC 2012 Taking students outdoors to learn in high places *Area* 44 7-13

Glaser BG and Strauss AL 2008 *The discovery of grounded theory: strategies for qualitative research.* Aldine Transaction, New Brunswick and London

Harper Adams 2016 Harper Adams University website – History of the university. http://www.harper-adams.ac.uk/about/history.cfm. Accessed 06 April 2017

Herrick C 2010 Lost in the field: ensuring student learning in the 'threatened' geography fieldtrip *Area* 42 108-116

Holloway SL and Jöns H 2012 Geographies of education and learning *Transactions of the Institute of British Geographers* 37 482-488

Holloway SL, Hubbard P, Jöns H and Pimlott-Wilson H 2010 Geographies of education and the significance of children, youth and families *Progress in Human Geography* 34 583-600

Holton M 2015a 'I already know the city, I don't have to explore it': Adjustments to 'sense of place' for 'local' UK university students *Populations*, *Space and Place* 21 820-831

Holton M 2015b Adapting relationships with place: Investigating the evolving place attachment and 'sense of place' of UK higher education students during a period of intense transition *Geoforum* 59 21-29

Holton M 2017 A place for sharing: the emotional geographies of peer-sharing in UK university halls of residences *Emotion, Space and Society* 22 4-12

Holton M and Riley M 2013 Student geographies: exploring the diverse geographies of students and Higher Education *Geography Compass* 7 61-74

Hope M 2009 The importance of direct experience: A philosophical defence of fieldwork in human geography *Journal of Geography in Higher Education* 33 169-182

Hopkins P 2010 Towards critical geographies of the university campus: understanding the contested experiences of Muslim students *Transactions of the Institute of British*Geographers 36 157-169

Jöns H and Hoyler M 2013 Global geographies of higher education: The perspective of world university rankings *Geoforum* 46 45-59

Kenway J and Youdell D 2011 The emotional geographies of education: Beginning a conversation *Emotion, Space and Society* 4 131-136

Kraftl P 2006 Building an idea: the material construction of an ideal childhood *Transactions* of the Institute of British Geographers 31 488-504

Kraftl P 2013 Towards geographies of 'alternative' education: a case study of UK home schooling families *Transactions of the Institute of British Geographers* 38 436-450

Kullman K 2015 Pedagogical assemblages: rearranging children's traffic education *Social & Cultural Geography* 16 255-275

Mills S and Kraftl P 2016 Cultural geographies of education cultural geographies 23 19-27

Rose G 2008 Using photographs as illustrations in human geography *Journal of Geography in Higher Education* 32 151-160

Sedgwick EK 2003 *Touching Feeling: Affect, Pedagogy, Performativity* Duke University Press, Durham NC

Thiem CH 2009 Thinking through education: the geographies of contemporary educational restructuring *Progress in Human Geography* 33 154-173

Waters JL 2016 Education unbound? Enlivening debates with a mobilities perspective on learning *Progress in Human Geography* Published online before print March 23, 2016, doi: 10.1177/0309132516637908

Wiborg A 2004 Place, nature and migration: Students' attachment to their rural home places *Sociologia Ruralis* 44 416-432

Williams H 2000 The Lure of the Land: A Century of Education at Harper Adams Harper Adams University College Newport

Wise JM 2005 Assemblage In *Gilles Deleuze: Key Concepts* Ed Stivale CJ Acumen Publishing Ltd Durham pp 77-87