A new mobilities approach to re-examining the doctoral journey: mobility and fixity in the borderlands space

Rebekah Smith McGloin

Published online: 12 Mar 2021.

Submit your article to this journal ⬈

Article views: 116

View related articles ⬈

View Crossmark data ⬈

Routledge
Taylor & Francis Group

Check for updates

A new mobilities approach to re-examining the doctoral journey: mobility and fixity in the borderlands space

Rebekah Smith McGloin [ORCID]

Doctoral School, Nottingham Trent University, Nottingham, UK

ABSTRACT

This paper explores doctoral candidates' experiences of making progress through the doctoral space. We engage concepts associated with the 'new mobilities' paradigm (Urry, J. 2007. *Mobilities*. Cambridge: Polity Press) to provide insight into the candidate experience of the doctoral journey; exploring specifically the interplay between the fixed structure provided by institutional-level progression frameworks that are commonly implemented by UK universities to measure 'timely progress' across disciplines and the borderlands space that enables and facilitates intellectual freedom, creativity, becoming and adventure. Drawing on notions of 'moorings', 'home on the move', 'connectivity and transit spaces' and 'rhizomic thinking' we analyse narrative data generated through the reflective diaries of doctoral candidates at a modern university in the English Midlands to offer new insight into how universities can provide better doctoral education, that supports: candidates to make a contribution to knowledge; protects well-being; and facilitates timely completion.

Introduction

I decided to study a Ph.D and to live it as an enduring daring adventure
You have to get lost in the woods and work out your own way through
I left it too long to tell them that I feel lost

This paper is about being a doctoral candidate and how we might theorise the doctoral space in order to understand more fully doctoral candidates' experiences of fixed structures, specifically progression frameworks and the creation of a fluid, open, borderlands space that enables them to be creative, to explore new topics, disciplines and perspectives and to generate new knowledge.

It is common in the UK for doctoral researchers to be required to submit evidence of progression on a six-monthly or annual basis. Requirements differ between institutions but often include submission of a work plan, literature review, ethics proposal, summary of work completed, chapter draft and training log. Some universities prescribe a fixed structure for the thesis with chapters to be submitted as part of progression monitoring in a prescribed order and against a fixed timeline. The progression requirements are

---

CONTACT Rebekah Smith McGloin ✉ rebekah.smithmcgloin@ntu.ac.uk

usually set out in institutional regulations and are not discipline-specific. They may be administered by a central unit called a Graduate or Doctoral School, College or Academy. Failure to meet requirements can cause doctoral researchers to undertake a period of probation or to have their registration downgraded, restricted to a lesser degree, or terminated.

In this paper we report on research with doctoral candidates at an English, medium-sized, modern university in the Midlands. This university has just completed a review of doctoral regulations, progression-monitoring and governance with a view to growth and diversification of both its portfolio of doctoral programmes and also its doctoral community.

We acknowledge the challenges and potentially inherent tensions faced by universities who seek both to maintain a high percentage of doctoral candidates submitting their theses within four years (full-time equivalent) and also to improve the mental health and well-being of doctoral candidates. We use notions of mobility and fixity that are associated with the new mobilities paradigm and the spatial turn to shed light on how institutional structures and processes and the personal agency of doctoral candidates interact with the multiplicities, interconnections and fluidity of the creative processes within the doctoral space.

Over a three-month period which began at the end of the first UK Covid-19 lockdown, six participants were requested to keep a reflective diary, particularly (although not exclusively) related to progression, learning, community, identity, and how they make use of timelines, training logs, skills frameworks and progression processes.

Five doctoral candidates completed all three consecutive months of diaries between July and November 2020. All diarists participated in institution-wide progression-monitoring processes at the university, attended supervision meetings and engaged with institutional training and development during the project. They all worked remotely at times throughout the reporting period and so their interaction with the physical structures of the university was constrained. Nevertheless, they each provide a vivid depiction of their own doctoral space through their descriptions of a complex 'enactment' (Edwards, Tracy, and Jordan 2011, 222) which sets out a network of actors (supervisors, administrators, doctoral candidates, committees), organisational structures (Doctoral School, Student Services, Library) and tools (laptops, software, alarm clocks, coffee) that they bring together to perform the doctorate across a variety of places at a variety of times (Sheller and Urry 2006, 214).

The New Mobilities Paradigm and the Spatial Turn

In working with the data generated during this project, we use theoretical understandings from the New Mobilities Paradigm also referred to as 'critical mobilities research' (Sheller 2013, 45). This Paradigm emerged across disciplines within social science as a new way of understanding the social world which embraced the role of movement (mobility) and fixed infrastructure (fixity) in ordering social relations. This conceptual shift defined mobilities in the new paradigm as spatial. It focused on flows of goods, services, objects, capital, information and people through 'physical movement such as walking and climbing, bikes and buses, cars and trains, ships and planes' (Sheller and Urry 2006, 212).

The 'spatial turn' in education research (Taylor 2009) has produced examples of the application of a critical mobilities perspective to education. These have included the enactment of the space of the university in distance learning degrees (Bayne, Gallagher, and Lamb 2014), cyberspace learning (Edwards and Usher 2007) and the classroom as an imagined and expanding geography (Leander, Phillips, and Taylor 2010). The existing literature however shows two gaps that are relevant to this study. The first is an absence of published work on the application of critical mobilities within the spatial turn to doctoral education. This is surprising given the complex physical geographies of a doctorate that are created by geographically-dispersed cohort-based doctoral partnerships in the UK which often include laboratory rotations, residential or online training and development. In addition, there is a growing number of at-distance international programmes and increasing international mobility by doctoral researchers. This is an area for further enquiry. The second, the absence of any application of critical mobilities theory to ideas beyond spatial understandings of geographical location and physical mobility, is the focus of this paper.

Engaging concepts associated with the 'new mobilities' paradigm to provide insight into doctoral candidates' experience requires us to apply a critical mobilities perspective in a new way. We define mobility for the purposes of this study as the journey through the doctoral space and fixity as the frameworks, networks and structures with which the doctoral researcher interacts as they undertake their doctoral journey.

Doctorate as a journey

The doctorate is variously conceptualised in higher education sector press, self-help blogs and university guidance as a journey, route, pathway, rollercoaster and (not an easy) ride. These travel-based metaphors for the doctorate speak to Park's (2005) articulation of a shift in doctoral education towards a new emphasis on 'process' (personal and professional development) rather than simply the 'product' (the thesis in its final version) (196).

Subsequent work on the doctoral 'process' takes it far beyond the 'combination of training the person and writing the thesis' set out by Park (197) and reveals a complex voyage. For example, the doctorate as a journey underpins Kiley and Wisker's (2010) work on conceptual threshold crossing. The 'journey' metaphor is central to Hughes and Tight's (2013) exposition of doctoral candidates' experience of change, difficulty and progress in doctoral studies. More recently, Chiappa and Nerad (2020) explore candidates' journeys into the social world of academic research in the American model of doctoral education, and call for change in how this journey of socialisation is conceptualised to meet the changing needs of an increasingly diverse doctoral population with a range of career aspirations and outcomes.

Doctoral journey and mobilities

There is little in published literature specifically exploring how doctoral candidates interact with UK-style progression monitoring as they move through the doctorate. However, two key elements of progression within the doctoral context – learning and research – are addressed in scholarly work on undergraduate students and research staff. The first

explores how learning taxonomies and alignment strategies are applied to degree-level learning (Biggs and Tang 2007; Fink 2013). The second examines how the neoliberal university organises and measures research staff activity through precise descriptions, rules and performance (Barnett 2011, 5) and the justification of the passage, use and efficient management of time (Vostal 2016; Walker 2009).

In the context of both learning and research practice, nonlinear progress, unaccounted for time, periods of Nietzschean 'darkness', which is used by Bengtsen and Barnett (2017) to explore 'liminal states, ambivalence, tension, hiddenness, unknowing-ness and even incomprehension'(129), are set out in the literature as important characteristics of both research student and staff journeys. These journeys sit, uncomfortably, within management practices that use fixed frameworks of expectation for consistent progress and prescribed outputs. We argue that the space traversed by doctoral candidates in many UK universities is particularly rigid and regulated with checkpoints, milestones, records, logs and frameworks that endeavour to map a prescribed path to successful completion.

Work on doctoral attrition in the United States (Lovitts 2002, 74–80) has demonstrated how important this clear pathway to completion is. At the same time, doctoral candidates require high levels of intellectual, emotional and professional freedom to achieve the flexibility and fluidity in thinking that Bengsten and Barnett explore in the Academy, and to make the contribution to knowledge that is required for their doctorate. This interplay has been explored in the United States through the work of the Carnegie Initiative on the Doctorate which exposed 'the hidden curriculum', found beyond the milestones and measures, that encourages and supports creativity (Walker et al. 2009) and also more generally in Elliot et al. 2020.

We argue that this interplay between a fixed progression pathway and intellectual freedom has much in common with the physical movement of people, goods and services that is theorised in the Mobilities Paradigm. We turn now to set out the three concepts from the paradigm that we used to make sense of the doctoral experiences described by the doctoral candidates in our study.

Moorings, spaces and rhizomes

The first, draws on the notion of 'moorings' (Hannam, Sheller, and Urry 2006, 3). Examples at an institutional level include progression monitoring processes, regulations, research degree committees, supervision forms. These act as the motorways, garages and stations described by Urry. Their intended function is not as 'sedentarist' infrastructure which is set in opposition to fluidity and liquidity of the journey but rather part of a 'complex, interlocking system' of 'mobility and moorings' (5). These moorings can provide fixity which facilitates mobility along the doctoral journey by providing effective validation, encouragement and a sense of personal location in a doctoral space which is experienced by the individual doctoral candidates as uncharted. Equally, these moorings have the potential to evoke frustration and resentment as an 'immobile infrastructure' (Urry 2007, 19) which is perceived to misalign or be inadequate to capture the complexity of the journey.

We use 'moorings' not just as an institutional construct but also a personal device that gives a sense of what Germann Molz, drawing on the work of Doreen Massey, terms

'home on the move' (Germann Molz 2008, 338). These individual moorings are – much as for Germann Molz' global travellers – 'embodied, embedded, and localised acts of habitability' which are performed as a way to create security, comfort and continuity through personal fixity as part of their doctoral journey. They include continuity and connectiveness through online communities, timed writing exercises, daily routines, the ritual of walks or cups of coffee.

The second connects to the idea of personal strategies for managing the doctoral journey and draws on the notions of 'transit space' and 'connectivity space'. These are theorised by Kesselring (2006) in his study on professional workers who he characterises as 'mobility pioneers' (269). The two spaces describe different mobile mindsets: one of moving through space with the least interaction and fuss, as the head is already at the destination; and the other of interacting, experiencing and living in intense relationship to others. Transit space is a means-to-an-ends approach whereas 'connectivity space' is less structured and comfortable with contingency. Within the doctoral journey, these different mobility patterns may change over time.

The third focuses more deeply on the space between the doctoral candidate and the research project which is at the heart of each doctoral journey. We draw on the notion of 'rhizomic attachment' (Hannam, Sheller, and Urry 2006, 3) which we trace to its origin in Deleuze and Guattari's 'rhizome'. The rhizome is a philosophical conception of 'lines of flight, movement, deterritorialization and destratification', changes of pace, direction, 'multiple non-hierarchical entry and exit points' (Deleuze and Guattari 1988, 3) which is used in Deleuze and Guattari's work to describe mobility, and sometimes stasis, in thinking, reasoning, theorising, data representation and interpretation. We use the idea of 'rhizomic thinking' that is characterised by Shurmer-Smith and Hannam (1994, 167) as 'root-like, musical', unstructured and endlessly wandering to look at a different dimension of mobility within the doctoral journey. Where it is referenced in the reflective diaries it can intersect in a negative way with institutional and individual moorings in the transit space mindset and this can lead to anxieties. That is, for doctoral candidates whose mental focus is on the endpoint of the journey, a perceived lack of progress can be a frightening experience. For those whose diaries depict a less structured connectivity space, they are more open to the contingency of rhizomic thinking and use additional tools and techniques to support them in this practice.

In using these concepts to analyse the reflective diaries of doctoral candidates, our aims are to:

(1) explore how mobilities interact in sophisticated and generative ways with fixed institutional structure;
(2) highlight personal strategies for creating individual moorings that sustain well-being;
(3) identify different conceptions of mobility through doctoral time and space;
(4) illuminate doctoral candidates' experiences of exploratory, creative rhizomic thinking in the context of 'making progress'.

The findings will have implications for how doctoral administrators, supervisors and candidates view the doctoral journey and the purpose and function of fixed structures such as progression-monitoring processes. They will challenge supervisors and staff in

administrative units who are responsible for doctoral education, for exampe, Doctoral Colleges, Graduate Schools, to support doctoral candidates to develop tools and techniques that promote well-being as well as good progress and they will offer insight into the way different mobility mindsets affect how doctoral candidates feel about what constitutes making progress.

The research context and methods

The research we report on took place at Nottingham Trent University in 2020. Ethical approval was gained in June and participants were recruited in July. At the beginning of the study period candidates were working from home. There was some Covid-secure access to facilities towards the end. We acknowledge that the reduction in physical mobility, meetings and events is likely to have had a negative impact on participants' experiences, particularly exacerbating feelings of isolation, frustrations related to restricted access to laboratories and financial pressures. These are referenced by study participants although they do not feature heavily. The impact of Covid-19 on the doctoral community is an area for further research and was not the focus of this study.

The growth of doctoral education in the UK is an aspiration of the majority of UK universities (Department for Business, Innovation and Skills 2013) which has actualised into 3.4% increase in the doctoral population from 2014/2015 to 2018/2019 (data provided by the Higher Education Statistics Agency). Growth has been particularly strong in modern universities where doctoral populations are typically more diverse in terms of age and ethnicity. Growth and diversity in doctoral populations sits alongside a contemporary focus on mental health and well-being in universities. The 2019 Postgraduate Researcher Experience Survey found doctoral candidates report anxiety at significantly higher levels than undergraduates. A report published in *Nature* in the same year (Woolston 2019) found that more than one-third of 6000 respondents to a graduate student survey had sought help for anxiety or depression related to their PhD. Another 2020 study has found that supervising PGRs with mental health problems has a huge impact on a supervisors' own psychological wellbeing (Blackmore et al. 2020). Meanwhile, research funders continue to require that high submission rates are maintained and to impose sanctions if rates fall, typically below 70% submission within four years, full-time.

Nottingham Trent University (NTU) is contributing to these trends in growth, diversification of the doctoral population and focus on well-being. The University has seen a 21.5% increase in the postgraduate researcher population between 2014/2015 and 2018/19. 2018/19 diversity data shows 75% of the NTU doctoral population is over the age of 25, 42% identify as of black or minority ethnicity, 51% identify as female and 9% have a declared disability. Like the majority of UK universities, NTU has expectations for timely progression which are set at an institutional level across all disciplines. Progression data is monitored at committee six times per year and reported bi-annually to the Deputy Vice-Chancellor Research and Enterprise.

We do not suggest that timely submission and good mental health are in opposition, nor that a diverse doctoral population is counter to either. However, it is clear that, if universities want to secure doctoral submission rates and ensure good mental health and well-being, in the context of an increasingly diverse doctoral community with a

wider range of backgrounds, experiences and support requirements, we must understand better the doctoral space and the individual doctoral candidate's journey through it.

In this context, we aim to make a contribution to a better understanding of doctoral progression and the individual doctoral researcher experience of it. We are interested in the multiple ways of understanding, feeling and navigating the doctoral space, which is revealed through the mobilities paradigm.

Our focus is doctoral candidates on NTU PhD programmes. NTU doctoral programmes have above sector average satisfaction ratings in the predominantly UK-focused Postgraduate Researcher Experience Survey (2019). NTU doctoral candidates were significantly more confident that they would finish their research degree within the expected timescale than the average for this 2019 survey.

We chose to undertake qualitative research as this required a person-centred approach (Holloway and Todres 2003) which fitted with the focus of the study as it reveals the individual nature of the doctoral journey and the doctoral candidates' interaction with standardised, institutional structures and processes. We initially recruited six participants to the study from Social Science, Bioscience and Business and Management and generated qualitative data, comprising 26,144 words, drawings and pictures over three months with five individuals who were at various stages of their doctoral programmes. However, all diarists participated in annual, discipline-agnostic progression-monitoring at the university, attended supervision meetings and engaged with institutional training during the project.

Participants were invited to join the study via email through Student Union representatives to all doctoral candidates. A follow-up email was sent through the Postgraduate Research Tutors network to ensure maximum dissemination. From fifteen respondents to the email invitation, six were selected. The qualitative sample size followed the recommendation from Sandelowski (1995, 183) to ensure sufficient size to allow the unfolding of a 'richly textured understanding' but small enough to support 'deep, case-orientated analysis'. An opportunistic emphasis was placed on recruiting a group of participants across all years of study, both full time and part-time study mode, Home/European Union and International fee status, from a variety of ethnicities, funded and unfunded and based in a variety of locations in relation to the University campus.

The demographic profile of the participants was broadly similar to the University's doctoral population. The group was equally divided between male and female. Four of the six participants originally recruited were over the age of 25. The ethnicity profile of the group, however, favoured individuals who identified as of black or minority ethnicity (60%). This was as a result of the ethnicity profile of the pool of doctoral candidates who responded to the email invitation to participate. All participants expressed a strong desire to pursue a career in research and/or university teaching. Whilst the group was broadly representative the study focuses on creating a deeper understanding of individual interactions with standardised institutional processes through a critical mobilities theoretical framing rather than generalising individual findings to larger populations based on single characteristics.

We selected reflective journaling as a means of collecting the data. This is a method of collecting data in qualitative research (Janesick 1999), that is commonly used in the behavioural sciences. We chose this method as it is considered to be a way to obtain

information about an individual's feelings (Cohen, Manion, and Morrison 2013). The data from reflective journals are process data (Goetz and LeCompte 1984); that is, they show what occurs as participants move through a programme – in this case, the doctoral journey. In addition, they record participants' perception of changes, such as those brought about by the University's research degree regulation review, which was communicated to all doctoral candidates in the first month of this study. Additionally, there were changes related to the pandemic.

Participants were asked to keep a reflective diary for three months. This was a pragmatic decision to give them sufficient time to explore their perspectives on a number of areas (making progress, their interactions with fixed processes such as progression timelines, paperwork, training requirements and their use of logs, skills frameworks, supervision records) without being too much of an imposition on their time. The intention was to maximise participation for the full duration of the study.

Within the diaries, participants were asked to record the transactional detail of their doctoral journey such as how they interacted with their supervisory team, trainers, other postgraduate researchers, staff, external trainers/PGR websites or blogs or discussion fora over the course of the month. They were then asked to return to these notes and record their reflections on them at the end of each week. At the end of each four-week period they were requested to go back again and revisit their reflections, building on what they had written about and writing their final thoughts for the month. They were given a series of question prompts (Appendix) to help frame their reflections which were based on Gibb's reflective learning cycle (Gibbs 1988).

In order to draw together useful conclusions from the textual data within each individual diary that can further our understanding of the doctoral journey, offer new insights and inform practical solutions (Krippendorff 2004) we undertook a thematic analysis using a constructionist paradigm (Braun and Clarke 2006). That is, we were searching for jointly constructed, shared understandings and experiences of the doctoral journey by candidates across a variety of backgrounds, ethnicities, disciplines and at a range of stages of their PhD as they interacted with standardised, university-wide processes. Whilst thematic analysis has some disadvantages in terms of providing high-quality data, as a method for exploratory qualitative research, it offers an effective and sufficiently robust approach. The analysis was based on a 'factist' perspective (Sandelowski 2010), that is, we assumed the accounts were an accurate representation of the ways in which the candidates interacted with structures and processes designed to frame and monitor progress. An inductive approach was taken as no previous studies have looked specifically at the experiences of doctoral candidates in terms of their interactions with fixed structures and processes. As a consequence, the coded categories were derived from the text data (Hsieh and Shannon 2005) even though the new Mobilities Paradigm provided an initial theoretical framework for the study. The reflective diaries were subjected to close reading and annotation by the project leader for key themes and structural characteristics. Dominant themes were identified from which coding categories were determined and refined. Diaries were then coded according to these categories and checked and re-coded as required. Exploration, mapping, moorings, movement and stasis all emerged as key themes.

We now move on to discuss our data. We analysed our data within four groupings: institutional moorings and individual journeys; personal strategies for constructing home on the move; mobile mindsets and finding a way or getting lost.

Institutional moorings and individual journeys

> I think it is very useful to have an annual monitoring, because it helps you keep on track of the tasks done during the year and the tasks you will do.

We have already touched on the notion of fixity that enables rather than opposes mobility within the mobilities paradigm. Although, in the case of progression-monitoring, sedentarist interpretations, formerly widespread in the social sciences (Hannam, Sheller, and Urry 2006, 5), persist also in parts of the doctoral community who pit fixed timelines and processes against creativity and exploration in the doctoral space.

Within the reflective diaries there was much to indicate an understanding of fixed frameworks as a necessary, valuable, generative part of the doctoral journey. It appeared to provide surety and validation: ' I feel quite happy with progress as I got a lot of compliments and encouragement about my data and what I have achieved till now'. It was also acknowledged that formal progression-monitoring can support other activities: 'actually looking forward to the seminar as it will help me prepare for conferences.' One diarists records the significant negative impact of the removal of a progression event, due to regulatory changes at the university: 'the abolition of the MPhil-PhD transfer stage had a significant toll on me and I felt that I needed some time off to relax and get over it with time.' In this case, the candidate eagerly awaits validation of his progress via the next monitoring point, which was annual review. Passing this was described as a watershed moment in his doctoral journey that significantly improved his sense of well-being: 'Then I considered myself in Year 3 and made a plan for the next 12 months. (…) I started the week with much energy and enthusiasm.'

There was some variation across diaries relating to how doctoral candidates interacted with progression-monitoring. The differences appear to relate to different individual constructions of the doctoral space, which will be discussed later under the section on mobility mindset, and also degrees of personal comfort in the more exploratory earlier stages of the doctorate. This will also be included later under the section on getting lost or finding a way.

One diary connected progression monitoring requirements with immobility: 'project approval stage had completely derailed my progress, and this (annual monitoring) is the same again'. In this case, the account was dominated by the 'system-ness' of movement through the doctorate (Simmel 1997, 184; as cited in Urry 2007, 23). Simmel defines system-ness as the rendering of individuals as 'a mere cog in an enormous organization of things and powers'. Here, the candidate's interaction with fixed institutional processes becomes almost all-consuming:

> God help me, I'd be spending half of every year jumping through the monitoring hoops like a performing seal. It's soul-crushing.

Personal agency, which appears across the themes of exploration, mapping and moorings in all diaries was less prominent in this case. The diarist describes 'being pulled in different directions' and 'being adrift in a sea of unclear expectations.' We might expect institutional moorings to provide welcome fixity, however they are described, instead, as eliciting an unresolved search for definition, marking schemes and guidance. The participant describes experiencing pain caused by the transition from previous studies and job roles which she describes as more structured than a PhD. It is also

interesting to note here that the participant reports that members of the supervisory team characterise the structure imposed by annual monitoring as 'for the purpose of meeting the demands of the Doctoral School requirements' and 'not intrinsic to the PhD as such'.

All diaries also contain descriptions of other moorings which provide virtual and physical fixed points that form part of the varied texture of movement and stasis across individual experiences of the doctoral space. These include: work on external research projects, participation in learned societies' activities, academic conferences, professional and community groups, training and career development, and use of university infrastructure like libraries, Doctoral School, financial support services, study space and laboratories.

Personal strategies for constructing 'home on the move'

In the extracts above institutional moorings are the focus of the doctoral candidates' accounts yet within the moorings theme across the diaries we find multiple examples of personal strategies that create mobility-enabling fixity for the individual. To adapt to the unknown, uncharted territory through which they journey we find participants create personal moorings that evoke a sense of home and belonging.

The first is networks of family, friends and colleagues in the doctoral community. Physical contact, social media, online team-working tools and phone calls with family and friends play an important role for some participants to create space away from the challenges they face in their doctorate.

> Yesterday it was very difficult to concentrate. I worked on the proposal for the (…) grant (the technical section), it was difficult to see the text in global (…). I needed a break. At 7.30 in the evening I went to walk next to the beach and met with my friend (…), it was a lovely time and it really helped me to put a bit of disconnect. I knew that I had not met the objectives of the day which where to finish the technical part.

They were also described as an important mechanism for sharing feelings and having familiar encounters which could be drawn on to support participants in a way that supervisions could not.

> I felt that I needed some time off to relax (…). On August 4, I thought I should instead use my time-off to catch-up more with my siblings back in (…). On August 6, I felt I would speak to my family because I got a little Nostalgic and needed to get in touch with someone who could relate to how I was feeling. I did not want to bother my supervisors with my emotions because I could not envisage how they would understand – I feared they would think that I was lazy and too emotional. From August 10, psyched me to be in a positive mood.

Additionally, diarists reported extensive peer networks that provided emotional support via social media WhatsApp groups as well as opportunities to learn and collaborate on the topic of their thesis or gain experience by working with peers on cognate projects.

The diaries also contain evidence of a variety of self-imposed temporal and physical structures, including daily routines and personal milestones. 'The rhythm of my Ph.D. studies' is a powerful motif that runs across the themes of mapping and mooring:

> I programmed myself to conduct and transcribe at least four interview in a month from March 2020 to December 2020. (…) Achieving my goals of collecting and transcribing at least 15 interviews by the end October is my focus at the moment.

Some participants described daily tasks, such as checking training opportunities and meeting 'experts' online to 'talk on my research'. Others use institutional moorings such as progression points to trigger particular personal activities that frame their doctoral journey, such as moments to take stock or celebrate achievements. Others describe creating a temporal structure as a work in progress:

> Next month I will try to focus more, set daily goals and do my best to achieve them, shortly to be more practical and less mind wondery … I also want to exercise daily or do yoga daily. Movement has always played a very important part of my life, (…) and now with my Ph.D I move much less, some days I don't even move … I really know how important it is for my mind and brain, to feel better and to work better. So I want to start the day exercising, no excuses from now on.

Physical movement and use of physical space are important personal strategies for two of the diarists. For one, Covid-19-related limitations on access to study spaces and physical activity has disrupted an important personal physical routine:

> Before Covid-19, I have a habit of switching workstations (…). By August 18, I should have a walk around the parks and recreational centres. Then I realised that I needed to keep self-isolated as often as I could to avoid contracting the virus.

For another, there is a distinct physical ritual described as a personal mooring through 'boring days of DATA organization':

> setting a nice environment makes the difference for me, I make a nice dark coffee, listen to chill out music, take some rests to stretch … DATA & music days, I take them as meditation days.

In the context of this study, we see these accounts as a way to recreate 'home on the move' (Germann Molz 2008, 338) in the doctoral space. In this sense, 'home' is moments of familiarity and recognition that offer individual moorings. In the diaries, home in the doctoral journey is characterised, for example, by catching up with old friends that pre-date the doctorate, participating in networks with shared professional interests, a repeated action and the creation of recognisable space(s) through the ritual of coffee and music. These ways to create a moment of 'home' for doctoral candidates are an enactment of a kind of mobile attachment that Germann Molz's theorises in round-the-world travellers (329). In the doctoral space, it is another example of fixity conjured through personal agency that supports both progress and well-being.

Mobile mindsets

In the first two sections we explored how the respondents interact with institutional moorings and create their own individual moorings that give shape and structure to their doctoral journeys. Here we explore how different approaches to mobility, that we term the mobilities mindset, influence doctoral candidates' perceptions of the doctoral space. Although we see that each participant moves between mobilities mindsets in the course of their narratives, we use excerpts from two diaries which exemplify two different modes of being in the world that are theorised within the mobilities paradigm by Kesselring (2006) as: 'transit space' and 'connectivity space' (277).

'Transit spaces' are characterised by directionality and linearity. Meetings and interactions are simply transitory situations of goal attainment. In the transit space

mindset, the doctoral journey must be controlled, and interactions minimised to expedite the point of thesis submission. In the excerpt below we see clear, sustained focus relating to the advancement of the research project to its endpoint. Actions are described as instrumental rather than exploratory: more reading to address a knowledge deficit, the correction of errors and the attainment of goals:

> During the process of transcribing and analysing the data collected, some aspects of a Marxism which is the fundamental approach to be taken in this research came up. I embarked on reading more literature with the assistance of my supervision team, the Library (…) and google scholar to resolve this problem. This aspect, in addition to many others kept me close to my relentless supervision team.

> On the supervision meetings (…), I prepared reports of our previous meeting highlighting on the issues raised and the resolutions arrived at then the corrections required. Each supervision meeting is based on an aspect that need resolved and this keeps me awake, prepare and ready for at least an aspect of my research. These supervision meeting act as a continuous tracker to the advancement of my research project. It informs me of the level at which I am and what I have got to do.

'Relentless' appears twice more in this diary as a descriptor of the supervisory team. However, repetition and iteration in the wider textual data suggest a relentless problem-solving in the candidate's approach which is indicative of a transit space mindset. In other diaries this mindset influences the way candidates interact with progression-monitoring activity. In one example, the drive to submission in a third-year candidate reduces time spent on monitoring documentation to three days, compared to six months in another. 'Connectivity spaces' are the opposite mindset in that this approach to mobility enjoys the journey. It is a space of 'interaction, optionality and contact' (278). In terms of the doctoral journey, the connectivity space is one where the doctoral candidate seeks frequent interactions with a wide range of individuals and groups that are associated with the topic of the doctoral project but also wider discipline areas and research end users. They are comfortable with accumulating experiences, learning new things and are open to multiple perspectives. In one diary the theme of exploration dominates the narrative. We see many references to 'fluent communications' with supervisors, other members of the research group, post-doctoral researchers and PhD candidates across three different universities as well as many researchers and teachers in the field. There remains a sense of destination, which is evident in the excerpt below and repeated throughout the diary in passing characterisations of directionality and transit space, but the mindset of connectivity and wellbeing in the journey persists:

> In my view, a Ph.D. should be an enduring daring adventure! That's the contagious attitude that awakens inner energy. Very very soon, you will say, 'I did … and did it well'.

Finding the way or getting lost

We turn finally to consider mobilities in thinking, reasoning and theorising which are central to intellectual freedom and creativity in the doctoral journey. There is a tension in the relationship between this type of conceptual mobility and progression through the doctorate because it can be characterised by 'relative slowness and viscosity' (Deleuze and Guattari 1988, 3) – stasis, retrenchment and sometimes frequent iteration.

We characterise conceptual mobility, after Shurmer-Smith and Hannam's depiction of 'rhizomic thinking', as 'root-like, musical, like wandering around Amsterdam's canals' (Shurmer-Smith and Hannam 1994, 167). In the doctoral context it is learning new ideas, understanding different perspectives, overlaying one with the other to create innovative approaches or applying and reapplying knowledge in new contexts. It is this type of mobility that enables the crossing of conceptual thresholds (Kiley and Wisker 2010) that are not easily accounted for within institutional progression frameworks, individual goal-setting and 'to-do lists'.

Within the textual data, descriptions of conceptual mobilities are not commonly found in a transit space mindset. They are more positive in tone and more expansive in the diaries that most clearly describe a connectivity space within the doctoral journey. In particular, conceptual mobilities appear vividly in descriptions of and reflections upon interactions with people such as 'professionals and other scholars who are into similar research as mine', 'experts in the field of (…) and other related fields to talk on my research', 'great researchers wanting to help', 'an extraordinary supervisory team'.

For some, the textual data shows feelings of exhilaration as definitions, structure and linear connections modulate with multiple pathways, changes in pace, instances of stasis and moments of discovery that are framed as expectations that this candidate has of the doctoral 'adventure'. This is evident in reflection passages which are interspersed with transactional detail in the diary below:

3 (August)

I have an idea for an experiment: (…)

7th September

Sometimes when I rest and do nothing but mind wandering, ideas come to my mind, our brain never stops working.

I have to consider this idea for a study. But right now I still have to finish many things. For good or for bad, I want to be part of all the projects, be in all the meetings, collaborate organizing conferences, do (…) trainings … But I need to be practical as well and save time for my Ph.D project.

30th July

Today I want to focus on my (…) proposal

7th September

This was a REAL ADVENTURE but I felt really supported by the research team.

Right then (the 30th July, after a month of work, meetings and emails with the team) I thought that in a week I would have finally finished all the proposal and written the sections (…). But it was not this way. It took us until the 27th of August to finish everything. I am learning about how many time things take … time makes one build and re-build ideas, texts need to rest, and be reviewed several times to have a good final version.

31st July

I have started the day using the pomodoro alarm clock ☺ It helps me to focus more

For others, the liquid nature of conceptual mobility is overwhelming:

> I do want to enjoy it. I really do. My household has made serious financial sacrifices for me to do this, not to mention how totally absent I am most of the time, pondering all the interlaced threads of spaghetti (…) thoughts in my brain.

Where this is the case, institutional moorings such as progression monitoring requirements or supervisor expectations appear to heighten anxiety: 'The comment that 'you've spent a year on this now and have to have something to show for it' keeps coming back to me.' In this mindset, neither the thought of the ultimate destination nor the joy of the journey itself appear to enable mobility through the doctoral space and this has a negative impact on well-being. The diarist shifts from a position of agency – 'You have to get lost in the woods and work out your own way through' to a position of needing help and support which they are struggling to access: 'I left it too long to tell them that I feel lost'.

Conclusion

Excellent doctoral education is inclusive and enabling. It supports doctoral candidates to move through their doctorate to successful completion, to make a contribution to knowledge and it protects well-being.

This paper has drawn on theorisations from the mobilities paradigm to establish a more nuanced understanding of the doctoral researchers experiences of the interplay between structures designed to ensure progression and timely completion, their own need for intellectual and professional freedom and their mental health and well-being.

We have explored the search for fixity through interaction with institutional frameworks, the negative impact of becoming submerged in the system-ness of moving through the doctorate and the role of doctoral candidates' agency in their doctoral experience. We have highlighted the importance of personal strategies for creating shape and structure in the doctoral journey and sustaining well-being and we have considered how different mobility mindsets affect how doctoral candidates feel about what constitutes making progress.

There is much scope for further research which applies critical mobilities to the doctoral space. However, our findings offer an important insight for doctoral candidates, supervisors and professional service staff in Doctoral Colleges and Graduate Schools. We suggest a number of areas for reconsideration in curriculum, pedagogy and policy. In terms of curriculum, we consider induction to be a critical point at which supervisors and administrative staff can establish the doctoral space as a holistic, inclusive pedagogical space of connectivity and exploration where the tailored 'hidden curriculum' based on personal needs and professional aspirations is made explicit and framed as a necessary departure point for the doctoral journey; extending beyond programmatic networks, training and mobility that are increasingly common in flagship programmes in Europe, the United States and the UK, yet arguably further increase tension between structure and agency. For supervisors, there are further considerations of a pedagogy of research supervision that better supports and enables doctoral candidates in their creative, intellectual pursuit within the context of formal learning structures, supervisory traditions and contemporary metric drivers. This would include thoughtful practice relating to how to encourage courageous pauses and positive engagement, not only with the administrative monitoring processes – Urry's stations on the doctoral journey – but

also with the detours and unanticipated day trips along the way. For policy-makers, the considerations relate to the current and potential future impact of standardised progression expectations at university and sector level. As doctoral programmes further diversify to respond to research, innovation and internationalisation agenda and the sector strives in the UK and elsewhere to create more diverse and inclusive doctoral communities, policy-makers should consider whether progression policies designed to address poor completion rates two decades ago now constrain future innovation to meet more contemporary objectives.

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

Rebekah Smith McGloin http://orcid.org/0000-0001-9074-4596

References

Barnett, R. 2011. *The Future University: Ideas and Possibilities*. New York: Routledge.

Bayne, S., M. S. Gallagher, and J. Lamb. 2014. "Being 'at' University: The Social Topologies of Distance Students." *Higher Education* 67 (5): 569–583.

Bengtsen, S., and R. Barnett. 2017. "Confronting the Dark Side of Higher Education." *Journal of Philosophy of Education* 51 (1): 114–131.

Biggs, J., and C. Tang. 2007. *Teaching for Quality Learning at University*. Berkshire: McGraw-Hill.

Blackmore, C., S. Ohlsen, K. Guccione, D. Elliot, and R. Daley. 2020. *Are you ok?' Mental Health and Wellbeing of International Doctoral Students in the UK: an Investigation of Supervisors' Understanding and Existing Support Provision*. London: UKCISA.

Braun, V., and V. Clarke. 2006. "Using Thematic Analysis in Psychology." *Qualitative Research in Psychology* 3 (2): 77–101.

Chiappa, R., and M. Nerad. 2020. "Doctoral Student Socialization." In *The SAGE Encyclopedia of Higher Education*, edited by Marilyn Amey and David Miriam, 392–395. Thousand Oaks: SAGE Publications.

Cohen, L., L. Manion, and K. Morrison. 2013. *Research Methods in Education*. Abingdon: Routledge.

Deleuze, G., and F. Guattari. 1988. *A Thousand Plateaus: Capitalism and Schizophrenia*. London: Bloomsbury Publishing.

Department for Business, Innovation and Skills. 2013. *Exploring Student Demand for Postgraduate Study*. London: Department for Business, Innovation and Skills.

Edwards, R., F. Tracy, and K. Jordan. 2011. "Mobilities, Moorings and Boundary Marking in Developing Semantic Technologies in Educational Practices." *Research in Learning Technology* 19 (3): 219–232.

Edwards, R., and R. Usher. 2007. *Globalisation and Pedagogy: Space, Place and Identity*. 2nd ed. Abingdon: Routledge.

Elliot, D. L., S. S. Bengtsen, K. Guccione, and S. Kobayashi. 2020. *The Hidden Curriculum in Doctoral Education*. London: Springer Nature.

Fink, L. D. 2013. *Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses*. Chichester: John Wiley & Sons.

Germann Molz, J. 2008. "Global Abode: Home and Mobility in Narratives of Round-the-World Travel.'." *Space and Culture* 11 (4): 325–342.

Gibbs, G. 1988. *Learning by Doing: A Guide to Teaching and Learning Methods*. Oxford: Further Education Unit.

Goetz, J. P., and M. D. LeCompte. 1984. *Ethnography and Qualitative Designs in Ethnographic Research*. New York: Academic.

Hannam, K., M. Sheller, and J. Urry. 2006. "Editorial: Mobilities, Immobilities and Moorings." *Mobilities* 1 (1): 1–22.

Holloway, I., and L. Todres. 2003. "The Status of Method: Flexibility, Consistency and Coherence." *Qualitative Research* 3 (3): 345–357.

Hsieh, H. F., and S. Shannon. 2005. "Three Approaches to Qualitative Content Analysis." *Qualitative Health Research* 15 (9): 1277–1288.

Hughes, C., and M. Tight. 2013. "The Metaphors we Study by: The Doctorate as a Journey and/or as Work." *Higher Education Research & Development* 32 (5): 765–775.

Janesick, V. J. 1999. "A Journal About Journal Writing as a Qualitative Research Technique: History, Issues, and Reflections." *Qualitative Inquiry* 5 (4): 505–524.

Kesselring, S. 2006. "Pioneering Mobilities: new Patterns of Movement and Motility in a Mobile World." *Environment and Planning A: Economy and Space* 38 (2): 269–279.

Kiley, M., and G. Wisker. 2010. "Learning to be a Researcher: the Concepts and Crossings." In *Threshold Concepts and Transformational Learning*, edited by Jan H.F Meyer, Ray Land, and Caroline Baillie, 399–414. Rotterdam: Sense Publishers.

Krippendorff, K. 2004. "Reliability in Content Analysis: Some Common Misconceptions and Recommendations." *Human Communication Research* 30 (3): 411–433.

Leander, K. M., N. C. Phillips, and K. H. Taylor. 2010. "The Changing Social Spaces of Learning: Mapping new Mobilities." *Review of Research in Education* 34 (1): 329–394.

Lovitts, B. E. 2002. *Leaving the Ivory Tower: The Causes and Consequences of Departure from Doctoral Study*. Lanham: Rowman & Littlefield Publishers.

Park, C. 2005. "New Variant PhD: The Changing Nature of the Doctorate in the UK." *Journal of Higher Education Policy and Management* 27 (2): 189–207.

Sandelowski, M. 1995. "Sample Size in Qualitative Research." *Research in Nursing & Health* 18 (2): 179–183.

Sandelowski, M. 2010. "What's in a Name? Qualitative Description Revisited." *Research in Nursing & Health* 33 (1): 77–84.

Sheller, M. 2013. "Sociology After the Mobilities Turn." In *The Routledge Handbook of Mobilities*, edited by Peter Adey, David Bissell, Kevin Hannam, Peter Merriman, and Mimi Sheller, 45–54. Abingdon: Routledge.

Sheller, M., and J. Urry. 2006. "The new Mobilities Paradigm." *Environment and Planning A: Economy and Space* 38 (2): 207–226.

Shurmer-Smith, P., and K. Hannam. 1994. *Worlds of Desire, Realms of Power: a Cultural Geography*. London: Edward Arnold.

Simmel, G. 1997. "*Simmel on Culture*." In *London: Sage as Quoted in Urry, John. 2007. Mobilities*, edited by D. Frisby and M. Featherstone, 20–26. Cambridge: Polity Press.

Taylor, C. 2009. "Towards a Geography of Education." *Oxford Review of Education* 35 (5): 651–669.

Urry, J. 2007. *Mobilities*. Cambridge: Polity Press.

Vostal, F. 2016. *Accelerating Academia: The Changing Structure of Academic Time*. London: Palgrave Macmillen.

Walker, J. 2009. "Time as the Fourth Dimension in the Globalization of Higher Education." *The Journal of Higher Education* 80 (5): 483–509.

Walker, G. E., C. M. Golde, L. Jones, A. C. Bueschel, and P. Hutchings. 2009. *The Formation of Scholars: Rethinking Doctoral Education for the Twenty-First Century*. NJ: John Wiley & Sons.

Woolston, C. 2019. "PhDs: the Tortuous Truth." *Nature* 575: 403–406.

Appendix

The process reminder and question prompts below were sent to all diarists at least three times over the course of the three-month study period via email.

Process reminder

1. **Make a few notes over the course of a week** which outline the transactional detail of your doctoral journey mid-July to mid-October. By transactional I mean **factual snippets** that will help you to remember the ways in which you interacted with your supervisory team, trainers, other postgraduate researchers, Doctoral School staff, other University staff, external trainers/PGR websites or blogs or discussion fora etc.

   Please date your entry

2. Please try to go back to your notes once a week (I'll send a reminder) with any reflections you might be able to capture on your notes

   Please date your entry

3. At the end of each four-week period **please go back to your reflections** and, building on what you've already written about, **write down your thoughts for the month.**

   I'm **particularly interested to read your thoughts on the following areas**, but please don't consider this to be an exhaustive list. Neither should you feel obliged to touch on everything!

1. making progress
2. getting to grips with new ideas and concepts
3. becoming part of a research community
4. identifying as a researcher
5. flexibility, fluidity and change
6. how they interact with fixed processes, such as progression timelines, paperwork, training requirements and structures
7. how they make use of training logs, skills frameworks, supervision records

   Questions to help with reflections
   A few prompts which might help you frame your reflections, which are based on Gibbs (1988) reflective learning cycle.
   Description: what happened? (Transactional detail/factual snippets that I hope you're jotting down already)
   Feelings: what were you thinking and feeling?
   Evaluation: what was good and bad about the experience?
   Analysis: what sense can you make of the situation?
   Conclusion: what else could you have done?
   Action plan: what would you do differently if you could?