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The small voices of geographers-in-the-making: investigating an archive of undergraduate dissertations (1954-2014)



Mette Bruinsma Thesis Submitted for the Degree of Doctor of Philosophy (PhD) July 2021

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Abstract

This thesis provides insights into the knowledge productions and research experiences of many generations of undergraduate geography students. One collection of undergraduate dissertations, ranging from 1954 to 2014, forms the empirical heart of this research. By taking an object-oriented approach, this one collection, from one discipline and one institution, is explored as a composite intellectual, social and cultural source. This research brings together questions from the fields of the history of geography, the history of higher education, and the sociology and geography of knowledge production. Historiographies of geography often emphasise the works of established geographers and generally overlook the many contributions of student-geographers, even though this latter group makes up the majority of the disciplinary community. By acknowledging these students' first independent research projects, written down in undergraduate dissertations, the existing narrative about the history of geography is complemented, and partly reshaped, by these many 'small' knowledge productions of novice geographers. Besides this intellectual approach to the dissertation archive, this project focuses upon the social and spatial networks that student-geographers are working in and with, and how these networks sometimes offer opportunities, and other times challenges, for their knowledge production. Exploring the social and spatial elements of dissertation research demonstrates the 'situatedness' of knowledge productions, shining a light too on changing educational practices and traditions. With the undergraduate dissertation as a recognisable experience for many academics, the dissertations are furthermore researched here as cultural sources: as a significant 'rite of passage' within a transformation from 'geographer-in-the-making' to 'real', qualified geographer, a first and often formative encounter with doing independent research. Writing this disciplinary history 'from below' recognises and acknowledges the contributions of many geographers for three reasons: first, they are produced by an overlooked but central group in the geographical community; second, the rich archival collection of dissertations contains many excellent geographical knowledge productions that have remained barely read, until now; and third, there is a wish to encourage others to explore similar collections of student knowledge productions held elsewhere.

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In January 2017, I stumbled upon an advertisement for a PhD position, bringing together so many elements I loved: intellectual history, the experience of being a university student, archival research, questions about academic skills and traditions...I was quite certain this would be something interesting, but it was a position far, far away: with a child in the first year of primary school, a newborn, a secure job and a house, this would not be a reasonable option, would it? I asked Jochem, my partner: "If we would plan to live abroad, what countries would you consider?" His answer was: "I am not sure, there are only a few countries I would consider. I guess only...only the Scandinavian countries, Belgium and Scotland would be an option for me." Fast forward a few months, and there we went, driving our 1998 Saab all the way from Utrecht, the Netherlands, to Glasgow, Scotland. A car full of boxes, a baby and a four-year-old, to a city we never visited, quite an exciting move! Although we are back in Utrecht by now, the decision to live in Glasgow and to do this specific PhD project, is something I do definitely not regret. There are many people to thank for this. First of all, my supervisors, Chris Philo and Cheryl McGeachan:

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Author's declaration

I declare that, except where explicit reference is made to the contribution of others, this thesis is the result of my own work and has not been submitted for any other degree at the University of Glasgow or at any other institution.

Signature:

Name: Mette Bruinsma

CHAPTER ONE INTRODUCTION

"First and foremost, I would like to thank my mother and father, for acting as my unpaid research assistants, without whose help in the field, this project could not have been carried out. I hope all those long hours of surveying weren't too much excitement to bear! Thanks also to my sister Leanne, who helped me out for one whole day before refusing to carry on, giving the simple reason that it was just too boring and too cold. In the middle of September as well! Gratitude must be expressed to a dog that was being walked on the marsh, but took greater amusement in running away with my wooden pegs than actually running around on the marsh." (Jackson, 1998: i)

Dissertations as sources

Disciplinary histories of geography often emphasise the works of established academic geographers. Such works are often envisaged as taking place in grand scholarly spaces, such as monographs, academic journals and conferences. Students who complete their geography undergraduate degree studies vastly outnumber 'professional' academic geographers. However, their works normally remain invisible, unconsidered, seemingly of no account in the making of academic geography or, more broadly, geographical knowledge. Of course, their works – their essays, practicals, groupwork and other products – are for the most part ephemeral, destroyed or deleted by their institutions after a given time period. The only works that might escape this fate are the so-called dissertations, which sometimes remain stored for longer, perhaps becoming a nuisance clogging up departmental cupboards or filing cabinets. My thesis here takes just such a store or 'archive' of dissertations as its point of departure, allowing me to ask how disciplinary histories of geography might be supplemented, and perhaps in some respects changed, by focussing directly on these otherwise forgotten works by many novice or apprentice (but still, I would argue, academic) geographers.

Undergraduate dissertations demonstrate the geographical interests of many cohorts of students, but also offer a window on the educational contexts in which they were formed. The practice of doing research for an undergraduate dissertation as well as the practice of writing-up this 'proof' of independent research is a recognisable 'rite of passage', undertaken by many, myself included. Indeed, in the spring of 2010, I wrote my Bachelors dissertation, the final exercise of my BA Philosophy programme at Utrecht University. Even though the dissertation was a relatively small part of the degree (only 7.5 European Credits, approximately 210 hours of study), I remember this time well. It was very different from

other forms of coursework and assessments, because of the freedom to choose any subject within the broad context of academic philosophy. I can still remember the wide variety of foci of inquiry that I considered: from classical political philosophy to premodern philosophy of science, and from the concept of responsibility assigned to groups to Thomas More's Utopia and the epistemological status of fiction. Finally, I ended up with the latter (Bruinsma, 2010)¹. Why did I make that choice? Looking back now, more than ten years later, I think it is impossible to identify just one reason. By analysing More's famous work and the status of fiction in philosophy, I could combine my interests in history, literature and philosophy. Choosing this subject would also mean that I could be supervised by one of the professors in the Philosophy department who I knew would be a great supervisor. Furthermore, I had already read Utopia. Maybe the wish to graduate as soon as possible made me choose the easy, or at least somewhat known, way. Not only the actual research undertaken in the undergraduate dissertation, but also the many hours in the university library, the doubts and the worries and the 'yes-I-have-submitted-my-dissertationcelebrations in the pub' are aspects that I recall vividly, and they are undoubtedly ones very familiar to many.

In this thesis, I focus on dissertations produced by many generations of undergraduate geography students at the University of Glasgow. What I call the geography undergraduate dissertation 'archive', comprising over 2,600 dissertations from 1954 to 2014, offers the opportunity to conduct a longitudinal study of formally similar – they are all undergraduate geography dissertations – but actually, in practice, highly variable sources. I use the word 'dissertation' for all these sources, even though the documents themselves are not consistently named 'dissertations' until 1975. These changes in vocabulary hint at changes in the curriculum, rules and regulations, and expectations of what a 'dissertation' should encompass. This archive's size and scale bring distinctive opportunities for historical research, allowing sound comparisons to be made across time, theme, cohort and more, as I hope becomes apparent from the chapters that follow. As far as I can judge, moreover, the Glasgow collection is itself distinctive, if not entirely unique, in its historical depth and comprehensiveness (there is very little missing from it).

¹ In this thesis, I explore the use and value of undergraduate dissertations as fully-fledged intellectual, cultural and social sources. This also means that I treat undergraduate dissertations similarly to other academic publications. The undergraduate dissertations referred to here are mentioned in the bibliography of this thesis and as in-text references, with the details of the author and year of submission of the dissertation given as would be the case for any other academic source.

An archival collection of such dissertations arguably encompasses three kinds of sources: *intellectual sources*, because every dissertation includes an original piece of academic research, however modest in concept and execution; *cultural sources*, because the dissertations are often experienced as rites of passage in the process of moving from being an undergraduate geography student to being a 'real' qualified geographer; and, lastly, as *social sources*, whereby the dissertations illuminate diverse personal networks of peers, family, supervisors, other departmental staff members, research participants and external collaborating individuals and organisations. In this thesis, I address the methodology for using this extensive collection of dissertations both as an archive full of individual sources – particular dissertations that ideally should each be read from cover to cover – and also as a singular source, one collection, as a whole – a source that is the quantitative sum of all these 'small' knowledge productions. Acknowledging the epistemological value of these small knowledge productions, as well as the formative and recognisable experience of becoming-a-geographer, enriches the history that can be told of academic geography.

These undergraduate dissertations are not entirely 'free forms' of writing, since there are indeed many rules and regulations with which a student needs to comply in order to be able to produce a successful and acceptable dissertation. Power relations – between supervisory staff and student, between university and student, and perhaps between expectations of parents and their studying adult children – are central to this inquiry into the geography dissertation. It is in the cross-pollination of concepts and ideas from the history of geography, the history of higher education, and the geography and sociology of scientific knowledge production that the coordinates for this study are therefore located. Knowledge productions in undergraduate students' dissertations obviously hold potential for pedagogical inquiry, but these novice voices also speak of disciplinary trends, traditions and innovations within a complex, hybrid and situated social space. The dissertation archive bears witness to changes in how students were instructed about the dissertation process, about what exactly they could expect from supervisors (and vice versa) and how 'dictated' has been the structure of the dissertation itself. The 'small voices' of the ostensible authors – the students – speak of innovative, or sometimes not so innovative, research projects: small in their scope, but even smaller in their audience. Not all these knowledge productions perhaps add a new view to our discipline, but studying a wider collection of the dissertations surely does tell us something fresh as a potential new perspective on disciplinary histories, traditions, cultures, sociologies and more.

The size of the Glasgow collection of undergraduate geography dissertations and the opportunities offered for a longitudinal study of these similar, yet distinctive sources also enables the recognition of notable overall trends and breaks. The archival cupboard full of dissertations comprises a collection of personal memories, intellectual knowledge productions and clues in shifts and changes in what it meant to be a geographer-in-themaking. Whereas geography is often seen as a discipline that is difficult to define, these shifts – as well as some striking continuities, such as the practical challenges encountered while doing fieldwork and the use of visual materials such as photos to support the research – demonstrate changes in dominant conceptions and expectations of what a geographer should know, what skills a geographer should possess, and what kind of questions one should ask: changes occurring sometimes abruptly, other times slowly and almost silently. Studying geography is a shared basis for becoming-a-geographer. Based on the undergraduate dissertation archives of Glasgow Geography, this thesis hence provides a bottom-up, student perspective on the history of geography². With these geographersin-the-making and their knowledge productions as a starting point, I intend to complement the existing historiographies of geography with these 'voices from below'.

Geography's disciplinary identity

Without any previous academic training in geography myself, I conducted this research as, to some extent, an 'outsider'. I had always been interested in the history of science in general and, more specifically, in the twentieth-century history of social sciences and humanities. Geography as a discipline caught my attention somewhat 'accidentally', after I had worked at the Faculty of Geosciences at Utrecht University in an administrative role for a while in 2016 and 2017. The Faculty offered three undergraduate/Bachelor degree programmes: Earth Sciences, Human Geography and Spatial Planning, and Global Sustainability Sciences. The combination of a natural sciences-like Earth Science, an urban and planning focussed Human Geography programme, and a (then brand-new) environmental programme led to marked and intriguing differences in educational

² The geography curriculum comprises both human and physical geography, as I discuss thoroughly throughout this thesis. Although I address shifts, developments and examples from both these 'pillars' of geography (as well as the *many* hybrid works of geography that are found in the archive), my own intellectual background leads, at times, to a more in-depth analysis of human geography dissertations in comparison with physical geography dissertations. For instance, when comparing conceptual frameworks of dissertations, the roots of human geography in the social sciences and humanities are more recognisable to me than the conceptual frameworks of physical geography. In other sections, though, such as the discussions on fieldwork and foci of inquiry, this preliminary knowledge and understanding was of less influence.

practices and emphasised methodologies. My conception of geography as an academic discipline was shaped by this structure of geographical degree studies in the Netherlands (or, more specifically, at Utrecht University).

The undergraduate Geography degree in the UK, as it is taught in many British universities, distinguishes itself from Earth Sciences, but does combine human, physical and environmental geography in the undergraduate curriculum. This geographical disciplinary and educational 'unity' unavoidably evokes questions about the historical and philosophical identity of the discipline:

"With the development of disciplines, many of the practices that were once considered part and parcel of geography gradually became autonomous fields. For instance, geology, meteorology, cartography, but also sociology and environmental sciences all have antecedents in pre-disciplinary geography. Debates have periodically flared up after these disciplines broke-off, about whether the residue, what still was called geography, had not become an empty vessel. This question was exacerbated by geography's status as a discipline overarching the science– social science–humanities divides. When universities subdivide into schools and faculties, geography tends to have trouble in finding a respected home in many places. Consequently, many histories of geography are also written to convince the outside world of the continued relevance of geography." (Van Meeteren & Sidaway, 2020: 43)

Although this thesis argues for the potential value of undergraduate dissertations as sources for disciplinary history, as well as being potentially innovative and insightful sources for contemporary research in a variety of disciplines, I think that the dissertations are particularly telling in respect of *geography*'s disciplinary history and identity. The adjectives to describe geography are complex, diverse and sometimes a 'bit much':

"Geography is a sprawling, ragged, gorgeous, discipline. It ranges across the physical and social sciences into the humanities and the performance arts. It's a discipline with a whole heap of different ways of doing what it does. It maps and models. Critiques and exposes. Drills and digs. Surveys and measures. Talks and hangs out with. Theorises. Analyses. Deconstructs. It's a discipline that both knows what it's about, and yet were you to ask a group of academic geographers what exactly it is that defines geography each would give a different answer. Stuffy and hip, it's a discipline with too much difference for some and yet not nearly enough for others." (Geoghegan *et al.*, 2020: 462)

In this thesis, I discuss how such questions of 'geographical identity' and also the (self-) positioning of geography and of geographers become perceptible in the longitudinal study of the collection of undergraduate dissertations. This internal debate within geography about what geography actually *is*, or what it *should be*, makes the discipline particularly

interesting for this exercise of including the many new voices appearing within the discipline over time: the voices of geography students, who, at some point, decide that geography (following their interpretation of what geography actually entails) is really what they want to do.

The roots of geography are tangled in many disciplinary traditions but, above all, the discipline has been strongly influenced by convergences to and divergences from the natural sciences. This historically recurring emphasis on the kinship of geography to the natural sciences underlies the identity struggle of geography: to what extent is geography actually one discipline if its roots and ambitions are scattered? Of all the different ways to try to grasp the discipline, finding some kind of core or unity, and any way of structuring geography's past, has its own limitations. In the search for this core, the identity of the discipline is troubled, because geography does not have one or even a few central concepts or practices, but rather it has many (Clifford *et al.*, 2009). Trying to 'fit' geography into the discourse of natural laws and emphasising quantitative methods has often been undertaken to "reinforce ... scientific authority" (Livingstone, 1992: 326). In this thesis my starting point lies in the 1950s: a decade when academic geography was strongly influenced by the classic 'scientific method', as well as by the lingering appeal of the more descriptive practices integral to regional geography. In later chapters I discuss these influences and traditions further. The experiences and knowledge productions of novice geographers provide a unique perspective on such questions. Authors of the dissertations position themselves on various perches in the shifting landscape of disciplinary allegiances to natural sciences, social sciences and, more recently, the arts and humanities. Considerations concerning the status and identity of the discipline are implicitly, and sometimes explicitly, expressed by many undergraduate students. Their reflections, yielding examples of students 'self-positioning' their work within the discipline, thereby enrich the traces and intellectual kinships that can be found within the history of geography.

Thesis aims

Most undergraduate dissertations are probably read by no more than a handful of people: the supervisors, markers and maybe the odd parent or friend. This is a vast amount of geographical knowledge, some of it potentially of considerable interest and relevance, that remains almost entirely unknown and lost, never leaving the archive (in fact, in many universities the dissertations do not end up in an archive at all!). Examining the shared

experience of becoming-a-geographer within a complex knowledge site such as the Geography department at the University of Glasgow offers the potential for taking seriously the intellectual, social and cultural histories of the discipline in its educational context. Studying the collection allows a close view into the direct personal experiences of dissertation students as well as a unique, educational perspective on geography as an academic discipline. In this thesis, the focus is hence on one undergraduate curriculum – Geography – in one department, part of one university: the University of Glasgow³. Inevitably, there are local influences and trends, sometimes even connected to an individual staff member, playing upon what can be discerned from the collection: this means that this study is not a *pars pro toto* for the entirety of the Anglophone history of geography, but what it does is add a unique close-up of the many voices in geography and the many 'small knowledges' produced.

Elaborating that theme, science is not a 'view from above' (Haraway, 1991). Knowledge is situated, both spatially and socially, in a diversity of spaces and places (Shapin, 1998). The 'situatedness' and 'localness' of knowledge and of knowledge production means that the questions of who, why, where and how knowledges are produced cannot but shape these actual knowledges. As I discuss in Chapter 2, situating knowledge productions is itself a vital step towards enabling the inclusion of the voices of marginalised groups, ones perhaps not always perceptible in 'canonical' histories. This aim of including geographical knowledge produced by marginalised groups is not unique: many historiographers have presented accounts that emphasise the contributions of female geographers (eg. Domosh 1991; Maddrell, 2009), non-Anglophone geographers (eg. Oldfield & Shaw, 2015) and studentgeographers (eg. Philo 1998; Lorimer, 2003a). Philo (1998) explores student knowledge productions as 'middle-order' geographical knowledges, influenced by the academic community (by dissertation supervisors and other lecturing staff) yet still not seen as 'fullyfledged' geographical knowledge, part of the intellectual discourses, networks and spaces (for instance in journals and at conferences). The undergraduate dissertation as a starting point for becoming-a-geographer is nonetheless, as stated, a crucial shared and recognisable experience. If it is not the individual small voice of every single student that should be recognised as part of disciplinary history, then at least the choir of them all together should be allowed fuller prominence.

³ See Appendix 1 for a table of key dates and events in the history of geography at Glasgow, compiled for the celebration of the centenary of Geography at Glasgow in 2009 (Philo *et al.*, 2009: 224-225).

Thus, the aims of this research are as follows:

• To recover the otherwise under-represented voices of the many studentgeographers that are a central and fundamental part of geography as an academic discipline. Without undergraduate students, many professional geographers would not be able to do their own research. This is not only a matter of finances and appointments, but also a matter of the important social and intellectual role that students hold in university departments. Undergraduate geography students are geographers-in-the-making, and in this role they produce 'real' geographical knowledge that is often overlooked. Acknowledging the centrality of undergraduate degree studies means in particular that the unique knowledges produced towards the end of the degree, nearing the end of the student apprenticeship, should be recognised as valuable contributions to the discipline;

• To demonstrate the use of undergraduate dissertations as intellectual, social and cultural sources. By exploring one archival collection in-depth, following an object-oriented approach, I provide a discussion of the value of using dissertations as sources along these three axes, as well as addressing the methodological and conceptual benefits and drawbacks of using such sources in disciplinary history;

• To consider the connections between these dissertations and the history of geography, the history of higher education, and the sociology and geography of geographical knowledge production. This cross-pollination provides some answers as well as evoking many questions never given or asked before. Considering the history of educational practices, relationships, networks and knowledges from a historiographical perspective accounts for the shared experience of becoming-a-geographer.

The aims of this thesis are broadly framed, leaving enough room for 'accidental findings' in the archive as well as small detours. However, the threefold aims of this thesis, as expressed above, form the starting-point of this journey through the history of small geographical knowledges, produced by a large assembly of past geographers-in-themaking.

Thesis structure

Following on from this introduction, Chapter 2 lays out the theoretical foundations of this thesis, by offering an extensive literature review of contributions by geographers, social and cultural historians, historians and philosophers of science, and historiographers of geography. The chapter consists of two sections. In the first section, I discuss how the history of geography has been approached by others, and how certain 'complementary voices' and competing narratives have begun to enrich the canonical histories of geography over recent years. This in-depth engagement with historiographies of geography provides a necessary contextualisation of the voices who I stage in this project: the voices of many undergraduate geography students. In the second section I explore the sociology and geography of science and other knowledge productions. The 'spatial turn' in the history of science, and more specifically the role of historical geographers in this spatial turn, is addressed. By means of an analysis of 'microhistory' as a historical practice and the theoretical approach of prioritising the 'situatedness' of knowledge, the foundations of this project, focussing on one academic discipline as it has been taught within one university department, are explained. This chapter as a whole hence clarifies the value of this thesis, by adding the knowledge productions and experiences of an often-overlooked group of geographers to the historiographical literature: those of many geography undergraduate students.

Chapter 3 reflects upon the methods used and sources researched in this thesis. My research is object-oriented and has the Glasgow undergraduate geography dissertation archive as its empirical heart. This 'almost-archive' differs from the other archive consulted, the University Archives. A fundamental factor of this research is the concept of 'nearness': the spatial nearness of 'my' archival collection to the intellectual and educational networks within the department is practically and methodologically beneficial to this project, but, at times, turned out to be a complicating factor. In Chapter 3 I discuss ethical considerations related to researching historical undergraduate dissertations and knowing some of the producers of these sources personally and professionally. Besides the analysis of archival methods and ethical considerations, I briefly address the secondary research method of interviewing, chiefly of longer-term and retired staff members. Based on a small number of interviews, the trends, shifts and constants found in the dissertation archive are enriched with, and to an extent triangulated against, individual memories. Lastly, this chapter assesses the methods deployed for the collection and analysis of the undergraduate dissertation archive. Researching an extensive collection of 2,614 dissertations required a

sampling strategy as well as a template to make notes 'along the way'. The choice manually to code the rich qualitative data is also discussed in this chapter. The combination of indepth qualitative data analysis with some basic quantitative data analysis required systematic surveying and note-taking methods to do the collection of dissertations justice.

From **Chapter 4** onwards, I turn to the empirical analysis of the dissertations, loosely asking in turn about the 'where', the 'what' and the 'how' of these dissertations. Starting with one of the very first items found in many of the dissertations, the acknowledgements, I explore the spatial, social and educational contexts for many cohorts of dissertation students. The *spatial* contexts are the physical locations where students did their research: the fieldwork locations – locally, nationally, internationally – but also the laboratory facilities, libraries and archives that students visited. It is possible to identify some changes over time, for instance in how the 'virtual world' has become a space studied in and by geography students and how in certain years, for quite specific reasons, relatively large numbers of students went abroad for their dissertation research. The causes and consequences of such changes are discussed. By combining quantitative and in-depth qualitative research into the 'whereabouts' of geography dissertations, the diversity of what 'the field' actually constitutes for dissertation students and the practicalities of independent fieldwork, as well as organised field expeditions, are discussed. Subsequently, I explore the social networks of dissertation students, both within and outwith the department. What role did family, friends and strangers play? Peers are often mentioned in acknowledgements and demonstrate that supportive roles in writing dissertations are not always intellectual, but often very personal as well. The *educational* context is the last emphasis of this chapter. Within the department, the role of the dissertation supervisor has clearly been highly significant to students, as well as to their dissertations. Supervisor-student relationships have always been 'open-ended', but changes in rules and regulations, as well as student numbers, might have formalised this relationship, particularly the supervisorial role, to some extent. Changes in the curriculum and how the dissertation is positioned within the undergraduate curriculum also relate to both changes in the context of British higher education, in general, and Geography in Glasgow, in particular.

This thesis aims not only to complement the historiography of geography with the research practices and experiences of geography students, but also explicitly to include their *knowledge productions* within the disciplinary historiography. In **Chapter 5**, I address the question of what geography students have been studying and what these small knowledge

productions potentially add to the research done by established, professional geographers. I treat the dissertations as intellectual sources by first exploring the 'what' of the undergraduate dissertations, addressing trends and shifts in the content and emphases of dissertations on different levels: taking different subdisciplines, specific concepts and particular foci of inquiry as the basis for investigating differences and similarities in students' knowledge productions over time. Here, I present both quantitative trends and some in-depth analysis of specific examples of subdisciplines such as urban, social and transport geography, as well as environmental, glacial and fluvial geography. Furthermore, I analyse the hybrid relationship between physical geography research and human geography research, and explore how this relationship recently and not-so-recently experienced convergent and divergent motions. This fifth chapter as a whole explores the richness of geographical knowledge that has been produced by many generations of geography students.

Chapter 6 is to some extent a continuation of the themes discussed in Chapter 5, but in this chapter I do not explore the changing foci of inquiry, but rather students' reflections on both the discipline itself and shifts in its conceptual and theoretical frameworks. The chapter thus addresses two different themes, the first being the disciplinary awareness of students, exploring how students have positioned their own research in a wider geographical disciplinary framework. Both the presence or absence of such disciplinary reflections and the specific ways in which these reflections are written up disclose something about how geography has been taught and how disciplinary reflection, introspection and self-critique has changed over time. The second aspect is the conceptual framework that students have adopted, more or less explicitly, and then used as a justification for what follows in their inquiries. A comparison of the timeline that my analysis of undergraduate dissertations provides with existing historiographical timelines of conceptual and philosophical shifts within academic geography offers insights into the interactions and relations between professional geographical research and geographical (academic) education, and addresses the 'routes' taken by geographers-in-the-making into the discipline of which they are part, as well as showing how, along the way, they may change, reshape and challenge that same discipline.

In the last two empirical chapters, I address the 'how' of undergraduate dissertation research. **Chapter 7** explores methods of data collection and of data analysis. The methods of data collection, such as questionnaires, interviews, participant observation and surveys,

are inexplicably connected to the foci of inquiry and conceptual frameworks discussed in previous chapters. The longitudinal nature of my research means that numerous technical developments over time are captured in the archive, influencing the devices used as well as the field and information technology (IT) skills needed to work with (or without!) such devices. In this chapter, I also consider the increasing evidence of formal and informal ethical considerations and procedures connected to specific subject-matters and research methods. This aspect highlights that the dissertations, as hybrid spaces, are telling of not only disciplinary shifts but also of educational practices.

Chapter 8 explores how students reported and documented their research projects, both in written and visual form⁴, as well as how the final physical dissertation travelled from student to marker, finally ending up in the archive. The bound documents represent endless days spent in the library or elsewhere writing, typing, drawing and/or mapping. Literacy and 'graphicacy' (Balchin, 1970) are considered in this chapter, paying specific attention to mapmaking and drawing skills of the many generations of students. My research is object-oriented, and hence I stay close to the dissertations as material objects: observing attachments such as Ordnance Survey maps, CD-ROMS and USB-sticks helps to illuminate changes in data-processing methods. In the five empirical chapters, including indepth analysis as well as a multiplicity of examples from the dissertation collection, I hence traverse 'the dissertation' from cover to conclusion: from acknowledgements, via methods, fieldwork practices, conceptual frameworks and research findings, to submitted, bound dissertations.

Chapter 9 is the conclusion of this thesis. In this chapter I bring together the different facets of my research. This thesis makes key contributions to conceiving, studying and writing the history of geography scholarship in several ways, and in the conclusion I reflect upon these potentially valuable contributions. Firstly, I make a unique connection between disciplinary history and educational practice, by studying the efforts, contributions and experiences of many geographers-in-the-making. Secondly, I stage the voices of these many geographers who are often neglected in disciplinary histories: students finishing their

⁴ Throughout this eighth chapter in particular, but also on some occasions in other chapters, the photographs displayed are, unfortunately, of low quality. These photos of archival material were taken as 'preliminary' visual data collection, ones that were supposed to be replaced by high-quality digital scans of the relevant archival material. However, the Covid-19 pandemic led to sudden restrictions of access to archives and university buildings (in which 'my' main archive is located), which meant that it was impossible to replace all of the 'sloppy' photographic material.

undergraduate Geography degree are arguably, after all, fully-fledged, just-as-real geographers as geographers with employment in academia. Finally, the knowledge productions written down in dissertations are often overlooked, even though some of them are wonderfully rich and innovative pieces of research. Highlighting some of these works is a call to treat dissertations seriously: they are important rites of passage, writings that were part of assessment but, most of all, themselves intellectual knowledge productions by geographers. This threefold contribution to the field of history of geography is emphasised in the conclusion to my thesis. Lastly, I hope to evoke some thoughts about how knowledge developed by students, usually immediately getting lost after the production of this knowledge, might be better curated and maybe made more widely accessible.

CHAPTER TWO EXPLORING HISTORIES OF GEOGRAPHY AND THE CONTEXTS OF GEOGRAPHICAL KNOWLEDGE PRODUCTION

"Disciplines are often considered conservative forces because they shape the organization of education, careers, and funding. Yet that picture is due to a narrow understanding of their role: behind their static appearance, one quickly finds a rich variety of practices. The history of this variety is contingent, dynamic, and full of epistemic crossovers." (Bod *et al.*, 2019: 484)

Introduction

The archival cupboard full of undergraduate geography dissertations written at the University of Glasgow forms the methodological and empirical heart of this research project. It is a dive into the small, the micro, the minor. Methods to deal with archives are versatile, dependent on the extent of the archive, the aims of the researcher, and the practical and often ethical-political control of the archivist. Before turning to these questions concerning methodology and the specifics of the source material, in this chapter I address the theoretical and conceptual underpinnings of this study. This is essential to grasp the value of this endeavour: to understand fully what all these undergraduate research projects individually and collectively mean or could mean, I discuss the academic foundations underpinning the historiography of geography as well as of the history, sociology and geography of science.

Specifically, I explore literature from within geography and from outside its (presupposed) disciplinary boundaries. I discuss the theoretical context and the position of my research project within this broader context, paying attention to the academic contributions of geographers, social and cultural historians, historians and philosophers of science, and historiographers of geography. This review is split into two sections. The first section addresses the historiographical foundations of this study. I address thinking about the role of 'canonical' literature in the history of geography. Such thinking about the existence or recognition of an obvious body of literature that comprises the historiography of a discipline evokes questions about inclusion and exclusion of certain voices. Who is actually part of the history of geography? And who decides that? Does shifting the emphasis from specific voices to a *concept*-based or *practice*-based approach of history offer solutions concerning exclusion? The second section emphasises the discussion about where scientific knowledge is produced. In this part of the chapter I address the bases of this research that

are found in the fields of sociology and geography of science and wider knowledge production. This chapter in its entirety explains the academic foundations of this located and situated historical study of geography as an academic discipline: a scene-setting to be undertaken before entering the cupboard full of undergraduate geography dissertations.

Historiographies of geography

History of what, exactly?

The history of geography is in part a history about a discipline struggling to define its unity and, related to that, its identity. This struggle is not a purely intrinsic one with, or indeed between, the distinguishable pillars of human geography and physical geography. Even more than other academic disciplines, perhaps, geography is not isolated. This is perceptible in the administrative place of Geography⁵ in British universities:

"there has been a clear trend towards multidisciplinarity in the nature of the administrative units within which Geography is managed in British universities ..., and the majority of Geography departments in the UK are now multidisciplinary in some form." (Hall *et al.*, 2015: 58)

Geography degrees regularly share administrative units in universities with disciplines such as Environmental Science, Sociology and Geology, but also with more surprising disciplines: for instance, Chemistry and Design and Technology (Hall *et al.*, 2015: 61). This administrative diversity in where Geography is located within academic institutions mirrors the hybridity of interdisciplinary roots and connections carried by geographers, in terms of research collaborations, shared methodologies and conceptual and theoretical frameworks.

In Inkpen's paper on the 'smugness' of both human and physical geographers, he urges physical geographers to engage with the philosophical 'side' of their discipline. He addresses how both the human and physical 'camps' try to connect to other traditions and canons:

"When I started as a postgraduate, discussing the philosophy of the subject prompted people to fall into two badly defined, but smug, camps. Human geographers had a diversity of philosophical positions to occupy from which they claimed to understand the complex essence of reality, while physical geographers either just 'got on with it' or claimed the objectivity of science as their route to understanding reality." (Inkpen, 2018: 46)

⁵ On occasion I use the upper-case 'G' convention to denote Geography as an institutionalised presence: an academic discipline taught in universities and the title of undergraduate degree programmes. Elsewhere, though, and even when speaking of geography as an academic discipline with a recognisable history, I deploy a lower-case 'g'.

It is this diversity in supposed roots of what 'a geographer' should be doing that creates this divide. Inkpen's call to get more physical geographers interested in the philosophy of their discipline is recent. It is indeed a lot more difficult to find historiographical material on physical geography than on human geography. Most works emphasised in this chapter focus largely, or solely, on human geography. Textbooks on physical geography often reflect but briefly on the history and philosophy of the discipline in their introductions, but the historical and epistemological context then given is often rather limited and blunt (eg. Petersen *et al.*, 2016). More historically focused works on physical geography are books such as *A Short History of Geomorphology* (Tinkler, 1985), but, to reiterate, the literature on the history of physical geography is scarce.

Although the caricature of 'camps' between human geographers on the one hand and physical geographers on the other, as sketched by Inkpen, is recognisable within institutions and from the relative presence or lack of historiographical literature offered by the different camps, some geographers have actively tried to search for the unifying elements within geography. Matthews and Herbert (2004), themselves respectively professors in physical geography and human geography, seek to identify some unifying factors, yet affirm the divergence of human and physical geography:

"Human and physical geography have diverged because they deal with fundamentally different subject matter (Johnston, 1986) and find their inspirations from different bodies of knowledge. Whether those bodies of knowledge will converge into some common ontology (Massey, 1999) is unlikely, but is yet to be tested." (Matthews & Herbert, 2004: 14)

This hybridity of the discipline can be seen as a problematising factor in terms of fixing 'the' identity of the discipline among other disciplines. Others are not looking for a unification of geography, however, but are embracing the heterogeneity and see it as potentially beneficial:

"Instead of insisting on a unitary identity for the discipline, forging productive relations between different traditions, specialities and subfields seems to be a more viable strategy for enhancing the status of geography because each may have its appeal in different segments of the academic community and funding sources and each may strengthen others in interdisciplinary initiatives." (Kwan, 2004: 757).

The theme of hybridity and unity within geography and geography's relationship with other disciplinary traditions returns in the analysis of the undergraduate dissertation archival collection: not only on a microlevel – how particular students reflect upon the discipline of which they are effectively members – but also on a macrolevel – how the archival collection as a whole might reveal a changing disciplinary awareness and ambition over

time. The undergraduate degree programme that comprises human and physical geography might even be cast as the unexpected primary unifying practice that makes geography one discipline. Putting a central focus on both students' experiences and students' knowledge productions in this bottom-up narrative of the history of geography hence provides an opportunity to approach geography as a hybrid but unified discipline.

Considering canonicity

In my aim to approach the history of geography from a bottom-up, student perspective, engaging with the concept of the 'geographical canon' is inevitable. What are the key texts – the supposedly canonical texts – to look at when you want to understand, or at least get to know, the disciplinary history of geography? Are such texts even 'the place to go'? The desire or urge to speak of a canon is probably a practical one. Being able to allocate a central body of texts to and for a discipline, a list of must-reads, is particularly useful regarding teaching. The composition of this canon is problematic, however, as Powell addresses:

"The problem with canons is that they provide more questions than answers. The language of canons is common but uneven across the humanities, social sciences and, to some extent, the natural sciences. Geography, typically, has had an ambivalent relation to its canon. Many geographers would dispute that there is, or ever was, a geographical canon." (Powell, 2015: 2)

The discussion about a disciplinary canon is ubiquitous among many disciplines, Powell explains here, yet the presupposed absence of such a geographical canon distinguishes geography from many related disciplines⁶. This comparison between canonicity within geography and other related disciplines is made by others as well:

"Whilst neighbouring disciplines such as sociology, anthropology, and political science actively (at times incessantly) engage with their textual canons and founding figures, geography rarely, if ever, has anything but scorn or bemused eyerolling for the Ritters, Ratzels, Semples, or Sauers of its past. It would be wrong to assume, of course, that academics in any other discipline are able straightforwardly to define 'the core of their field', but the tendency of human geographers so routinely and enthusiastically to exclude and reject texts, ideas, and individuals from earlier phases of the discipline's history as irrelevant or beyond the pale is notable and worthy of consideration." (Keighren *et al.*, 2012: 297-298)

Some go a bit further, and even speak of "an obsession with the 'novel' and the

'fashionable'" (Agnew, 2012: 321). The quotation from Keighren et al. (2012) addresses not

⁶ For instance, in a discipline such as sociology some obvious names are Marx, Weber and Durkheim, the canonicity of their texts remaining largely unquestioned. Similarly in western philosophy, thinkers such as Aristotle, Kant and Locke are undisputedly canonical.

only the different attitudes of geographers, but also mentions some of the 'big names' that potentially could be considered to be part of the geographical canon, if something like that would be constituted. There are other names conceivably to connect to the potential canon, examples being Humboldt, Vidal de la Blache and Hartshorne. These are a few names that are mentioned in almost every historiography of geography (eg. Livingstone, 1992; Johnston & Sidaway, 2004), and are, thus, perhaps – implicitly – canonical geographers. The 'collective amnesia' of founding figures and textual canons is disputed in several commentaries on Keighren *et al.*'s (2012) exploration of canonical geographies, for instance by Hubbard (2012), who argues that these figures are not forgotten but need to be the subject of more thorough dialogue, not only by *historical* geographers, but by all geographers (Hubbard, 2012: 333).

The writing of 'a' history of geography 'is a profoundly political act' (Van Meeteren & Sidaway, 2020: 42). The canon is complicated, entangled with dubious questions about knowledge, ethics and power. Power is expressed in making the selection for the canon (Monk, 2012), with the inevitable inclusion and exclusion of certain voices. This selection affects how geographers think and learn about the identity of the discipline of which they are a part:

"This [selection] in turn has implications for our collective sense of family identity and our respective individual place within the family and heritage, but also ultimately for the gendering of geographical knowledge." (Maddrell, 2012: 325)

The canon not only influences thinking about geography's past but also about its pedagogical influence on the future of the discipline (Keighren *et al.*, 2012). Designing a canon is complex and dynamic, and anything but straightforward:

"We are well beyond searching for the univocal origin myth that traditional canons suggested; our critical attention to power and the crisis of representation have ensured that." (Schein, 2012: 336)

Although *the* geographical canon is perhaps non-existent, the question of what *a* geographical canon should or could look like still plays a fundamental role in my own research: whose voices, ideas and practices are reckoned to have shaped geography as an academic discipline? The theme of the geographical canon relates to the historiographical question whether there is *one* history of geography – maybe with flaws and missing voices and contributions – which contemporary and future historiographers can correct or add things to, or whether there are multiple, dissimilar histories of geography. The context of geography with its lack of an obvious canon, Powell suggests, offers opportunity for "the

revivification of discussions around the purpose, identity and practices of geography" (Powell, 2015: 3). In the 2015 *Journal of Historical Geography*'s thematic issue on the geographical canon, Norcup describes the establishment of geography's disciplinary canon as a 'top-down enterprise' (Norcup, 2015: 61). She examines how there is a widely encountered form of geography – school geography – which is largely overlooked in the discussions concerning the geographical canon. It is a similar bottom-up perspective that I engage in this thesis. I emphasise the academic practices of geography, wherein undergraduate students are unambiguously central actors, by looking at their shared experiences of becoming-a-geographer.

Canons and classics: how the history of geography has been approached

The nature of my research causes a sometimes complex 'double layering' of concepts used and questions discussed. I am researching the history of geography and its potential or hypothetical *geographical* canon, but to ground my study in its academic foundation I am at the same time researching the historiography of geography and its historiographical canon. The intermingling of this historical research itself and a meta-level of texts and injunctions *about* this historical research sometimes has a confusing effect (for myself, at least), but it offers opportunities as well. Addressing certain key sources on the history of geography provides explanations for certain trajectories of what I research as well as how to write about the history of geography. For instance, over the last three decades the research-based textbook The Geographical Tradition (Livingstone, 1992) has been visited and revisited, appraised and reappraised. Recently, the journal Transactions of the Institute of British Geographers (2019, 44:3) published a themed intervention on this classic. It is beyond dispute that every British historiographer of geography will have encountered the book and that will make it an obvious candidate for membership of the canon of geography's historiography. However, constructing a canon – here, of the historiography of geography, not geography itself – is, as discussed, problematic. In this section, I address the voices emphasised and scope of research in Livingstone's key work and some other potentially canonical publications to explore how the history of geography has been approached.

The scope of every historiography influences the voices and contributions that are prioritised. Livingstone's *The Geographical Tradition* (1992) covers more than 2000 years of history, during only a relatively small period of which geography was institutionalised in research centres and universities. Because of this, Livingstone includes a colourful collection of voices and sources: contributions of voyagers, navigators and scientists from

both the humanities and the natural sciences are prominently staged. Other classic historiographies, such as Geography and Geographers (Johnston, 1979; republished several times, e.g. Johnston & Sidaway, 2004, 2016), take the university as an education and research institution to be the central place in the history of geography, which necessarily shortens the history that is told. Ground-breaking research by certain individual academics based in such 'central places' is here highlighted as the cornerstone of human geography in the second half of the twentieth century. Getting to know the work of these researchers is presented as the starting-point to getting to know human geography as a discipline. The bibliography is intensely rich and could indeed be used as a prompt for further research, but Geography and Geographers does not give many insights into the reception or development of geographic thought outside of academia or within different parts of its own hallways. Johnston and Sidaway argue from the 'inner circle' of academia to the outside world, and not the other way around. This does not mean that Johnston and Sidaway completely overlook the social context of science. Indeed, they describe the discussion within academic geography about the need to be more socially relevant to preserve human geography's status in the academic world (Johnston & Sidaway, 2004: 38).

There is hence a distinction – to an extent captured in the contrast between *The* Geographical Tradition and Geography and Geographers – between two kinds of historiographical sources: works on the history of geographic ideas versus works on the history of geography as an academic discipline. This distinction is not always black-andwhite: for instance, Cresswell's Geographic Thought (2013) can be placed at a midway position on the spectrum. In Cresswell's historiography the emphasis is on the history of ideas, but he still discusses geography from within academia. He presents easy-to-read introductions to apparently crucial shifts in approach taken in human geography, accompanied by some practical examples from the human geography literature. He combines discussions of methodology and theory in human geography with practical examples. The voices staged are those of other historiographers of geography, influential philosophers and key thinkers on the methodological and theoretical foundations of human geography: this way Cresswell combines analysing the history of geography as well as tackling the historiography of geography. This approach makes for diverse company, but, in trying to be inclusive, the rendering of theoretical and methodological debates perhaps lacks in-depth insight.

'Doing' disciplinary history presupposes the existence of a somehow demarcated discipline, although the setting of boundaries and the justification for calling something a 'discipline' is

an obvious follow-up question. A central theme in addressing the history of geography is thereby its relationship with other disciplines. It is not easy to pinpoint where one discipline ends and another one begins. It is important to realise that the concept of geography as a discipline is constructed, not somehow naturally arising from the world beyond. In both Science, Philosophy and Physical Geography (Inkpen, 2005) and Approaching Human Geography (Cloke et al., 1991), the demarcation of geography is a key question. These books encompass the voices of many social theorists, philosophers and historiographical predecessors. Authors of both works explicitly acknowledge the influences that other disciplines have exerted on the development of geography. For instance, the debate on postmodernism in geography is placed in a much broader intellectual context, comprised of, for instance, French poststructuralists (Cloke et al., 1991: 179). To these historiographers, disciplinary history means studying the continuous interaction between individual researchers, broader research communities and in some measure society as a whole. It is an ongoing process with many different voices and 'powers' which, altogether, make up the development of a discipline. These two works cover the position of respectively physical and human geography set loosely in a broader societal context.

Whereas some historiographies present a chronologically structured narrative, others take certain concepts or methods as central ordering principle within their research. In the collection of 'classic' or even canonical essays in the reader Theory and Methods (Philo, 2008a), concepts such as time, space and landscape and how they have been defined and used over time take a central position, while changing foci of enquiry are also emphasised: for instance, the emergence of research focused on nonhuman actors, emotions, technology and inanimate objects. The collection of primary texts in Theory and Methods underscores the contributions of individual theorists of human geography to the development of the discipline. The format of such a collection of essays – primary sources – leaves little space for an approach not emphasising the work of individuals. However, the structure of the book, clustering articles based on their relatedness in approach by starting with an 'early statement' of a specific approach followed by articles which refine or critique that work, gives insights into the debates and development of certain trends and approaches, more than each article ever could do on its own. The voices of theorists of human geography are directly heard, but indirectly other voices resound as well. The reader starts off with a substantial introductory essay (Philo, 2008b) that present an organising frame for the historiography that is told via the individual readings: it 'clusters' –

both schematically and textually – the approaches and foci of inquiry within the discipline over time.

The justification of the narrative that a historiographer is telling is complex: what should be included? the masterpieces of each era? the approaches followed by a majority in a discipline? the methodology that has sustained for the longest time? the theories most influential in contemporary works? The historiographies discussed here all have a different means of justification, related to their respective aims and target audiences. In analysing the voices presented in these (and other) historiographies, four variations can be discerned, from broad to narrow: first, presenting 'anyone' contributing to geographical thought, independent of affiliation or specific role (eg. Livingstone, 1992); second, presenting a diverse group of academic voices, including geographers, philosophers, social theorists, natural scientists and others (eg. Inkpen, 2005); third, presenting geographers focussing on theory and methodology (eg. Cloke et al., 1991); and last, presenting examples of geographers 'in the field' (eg. Hubbard et al., 2008). The type of sources that historiographers deploy differs as well. In Approaching Human Geography (Cloke et al., 1991) the authors often let the primary sources, the original (canonical?) texts, speak for themselves. They clarify that they do not want to "run the risk of obscuring both the originality and the complexity of theoretical materials" (Cloke et al., 1991: ix). Livingstone (1992) is much more hesitant in using paraphrases and citations. This makes his historiography consistent in style for the reader, but at the same time leaves questions hanging about the choices that the author has made. Cresswell also uses personal experiences as source material, as he reflects on his own experiences as a geography student (Cresswell, 2013). There are some parallels between Cresswell's approach and my own emphasis on student experiences and voices, although Cresswell 'reworks' his own student experience from a 'geographer-now-made', not one 'still-in-the-making'. The scope, voices heard, structure and presentness of the author hence are all highly varied, and yet still, in the actual content of each narrative about the history of geography, there are obvious similarities: ultimately, there are certain more prestigious voices - expressed from an academic or other established institutional setting – that are being *published* in written form.

Criticising the historiographical canon

Critique of the 'standard works' in the historiography of geography sometimes focuses on the voices that are addressed within these publications. By offering alternative narratives,
the view on who 'the' geographer is, or who is 'enough of a geographer', gets broadened: both in feminist accounts, adding the contributions of female travellers, explorers and geographers to the history of geography (eg. Maddrell, 2009), and in other works, for instance the annual series of *Biobibliographical Studies*, which provides biographical accounts of geographers who were "also businessmen, administrators, or only part-time or peripatetic practitioners of the subject" (Lorimer & Withers, 2016: 2). There is, however, also criticism about the theoretical underpinnings of these classic historiographies. These critiques can be distinguished in three different arguments: first, focussing on the question whether historiographers should study *the* history or *one of the* histories of geography; second, whether they should address the history of geography as the history of the field *we know now* or of all the different conceptions of geography that have previously existed; and third, how much 'context' is indeed needed in exploring the history of an academic discipline.

In the 1995 series of commentaries and responses to Livingstone's *The Geographical Tradition*, also published in *Transactions of the Institute of British Geographers*, Driver emphasises the heterogeneity of geographical knowledges. He argues that the unity of the geographical establishment can be questioned, which implies there is not one history of geography but many (Driver, 1995). In another contribution, Matless argues that the academic discipline of geography is just one of the many genres of geographical knowledge potentially available for inspection (Matless, 1995). The 'search for descent', searching for a justification of contemporary academic geography and hence genealogies stretching from 'now' back to 'then', shapes what historiographers write down about the discipline's history:

"If we seek to use histories of geography to broaden and challenge our sense of what geography might be, is it useful to scan the neglected corners or scorned past practices of the discipline in a spirit of legitimation? Should histories aim at the legitimation of past practices as geography, legitimating in turn their authors as geographers in retrospective descent?" (Matless, 1995: 408)

In the same issue, Rose argues that not only the contributions of female thinkers but also the *practice* of exclusion itself is erased because of their complete invisibility (Rose, 1995: 414). Writing geography's histories without considering what has been constructed as 'not-geography' is only telling half the story. Rose elaborates that the feminist history of geography is not a complementary narrative, some nice addition or 'neglected corner' that could be benignly recovered, because the existing narrative is so fiercely territorialised. What might be needed, Rose continues, is: "... an analytic space which can articulate boundaries, distinctions and disjunctures instead of erasing them, a space which can acknowledge exclusion as intrinsic to the process of inclusion, a space through which the difference that gender makes to the production of geographical knowledges can be recognized. Maybe that means we need an analytic space which refuses the mimetic transparency of the mastering gaze: instead, this project might require the kind of partial space in which situated knowledges can be located (Haraway 1991)." (Rose, 1995: 416)

In reply, Livingstone distances himself from the then recent trend towards pluralisation, which speaks about multiple histories instead of *the* history of geography: these are, he explains, merely 'different renditions of the tradition' (Livingstone, 1995a: 422).

What do alternative histories have to offer, then, besides the representation of different, earlier excluded voices? What is this geography we actually talk about? Who is a geographer and who is not? And, more general, how can we present or represent the past? For every historian, the relationship between the studied past and the historian's present is central to 'doing history' and is connected to different theoretical and epistemological assumptions. Accepting that the history of geography is not 'timeless', but reflecting contemporary preferences (Maddrell, 2015: 33), means that the history that is being written says something about the current 'state' of a discipline. However, it is important to distinguish the ambition to write *all* history of geography, or the history of geography as the field that it is *now*:

"the new contextual and critical histories of geography tend to assume too easily that all geography in the past is the past of today's geography, sweeping any questions about the nature of the historical relation under the cover of expanded notions like 'geographical discourse' or 'geographical knowledge'." (Barnett, 1995: 418)

Contextualised history had its criticism outwith but also within the field of the history of geography. Matless argues that until recently the debate on histories of geography has tended to line up so-called 'Whig' history against contextual history (Matless, 1995). For Matless, and more obviously for Barnett and Rose, a question remains about the extent to which contextual accounts – Livingstone's is taken as the exemplar – *really* radicalise the narrative, with a danger being that simple continuities (an ongoing 'conversation' between still-largely elite, probably male, figures) outweigh the specificities of multiple different contexts.

In the introduction of her book *Complex Locations*, Maddrell underlines that the contextual view has become normalised within historical geographical writing, but also recognises limitations of contextual and critical history writing (Maddrell, 2009). She argues that there

is still the 'trap' of presentism – how can historians *not* apply modern concepts and conceptions to the past? – and the risk of letting the context determine all historical developments. These questions are also of major importance to the earlier discussed historiographies, but by adding alternative contributions and contextualisations these questions became more prominent. My research, emphasising the many small knowledge productions by undergraduate students is explicitly contextual, and explores the diversity of contexts that students were researching and researching in: there is a need for a greater attentiveness to different contexts, complete with their power-laden inclusions and exclusions and hence the different voices speaking in these diverse contexts. These voices present a potential different view on what geographical knowledge actually is.

Complementary voices and competing narratives

An analysis of the history of geography can commence with some contemporary accounts considered as 'the usual suspects', such as Livingstone's The Geographical Tradition (1992) and Johnston's Geography & Geographers (1979), as I did earlier in this chapter. These accounts are useful starting points, each with their own specific approach and scope. The influence of the previously discussed accounts should not be underestimated. However, there are many other publications besides the contemporary canonical works in the historiography of geography, offering alternative or complementary viewpoints on geography's history: both in terms of voices that are prioritised and in terms of methods to present, or represent, the past. In the more or less conventional historiographies of geography, the prioritised voices are mainly academic voices, especially in the accounts focussing on twentieth and twenty-first century geography. In recent years, some historians of geography have presented arguments that provide a stage for complementary voices. Many of these 'uncommon' voices are from within the academic community. Their voices are not obscure in any way; but, for whatever exact reason, they are not discernible, or strongly under-represented, in some of the well-known historiographies of geography. This includes voices from female geographers, 'dissident' geographers, non-Anglophone geographers and geography students.

Looking at many of the existing historiographical narratives about geography, it may seem that the discipline is, or was, an entirely male enterprise. From the late-twentieth century, feminist contributions to the history of geography emerged. In her 1991 essay, Domosh argues that female voices are not absent from the histories because women were not interested or involved in geography, but rather end up unfairly and even actively *excluded* from the historiographies. This claim also energises Rose's earlier-mentioned critique in the *Transactions of the Institute of British Geographers* (1995), who, as I noted, stresses that the history of geography should do more than just address the need to widen 'the geographical stage' by emphasising new groups of voices. Rather, the exclusion *itself* should be studied, because this act of erasure is itself erased as well:

"... this erasure of those others ignored as outsiders from accounts of the tradition also works to erase the practice of exclusion itself. Their invisibility makes the practice of their exclusion vanish. And this process of exclusion and erasure is at work even in more recent histories of geography which reject purely disciplinary or purely evolutionary narratives." (Rose, 1995: 413)

After revealing how exclusion happened, these excluded voices and contributions itself should be the focus of inquiry:

"Yet to dwell on why women were excluded from the discipline is to risk ignoring their potential contributions. Given recent attempts to reconceptualize human geography, it is worthwhile to reflect on what geography could have been and could be if it included women's experiences and women's ways of thinking into its own canon." (Domosh, 1991: 102)

Responses to the call for a feminist historiography of geography were not univocally affirmative. For instance, Stoddart, in his response to Domosh's 1991 paper, replies that there is already 'ample scope for research on the role of women in the development of our discipline' (Stoddart, 1991: 486). He questions the overlooking structures and acts of exclusion rife within disciplinary history-writing, failing to see that this 'scope' has itself been dramatically limited precisely by the fact that, until relatively recently, women have *not* become – have in various ways not been allowed to become – established, professional, academic geographers leaving behind a body of published geographical writings. Maddrell's pioneering effort to include the works of female geographers in the narratives about geography's past is not only a call to 'add' these voices to the existing historiographies, but also to dismantle the widespread institutional sexism endemic to the discipline's past and to add the concept of gender as a category of analysis into the historiography of geography (Maddrell, 2009).

With respect to gender, the dissertation cupboard is hardly a male-dominated space. As I address in Chapter 3, the sampling size of the qualitative data collection and analysis for my research project consists of a coincidental yet almost exactly 50/50 distribution of dissertations written by female and male geography students. Although there is a gradual shift perceptible from a minority of female students per cohort to a majority of female students per cohort, the student population has always been mixed, consisting of always at least 30% female students (the lowest percentage of female students occurred in the early-

1960s). My research demonstrates that geography as it has been taught and learned has not been a male-exclusive educational context at all – at least, from the 1950s onwards. However, standard accounts about mid- to late-twentieth century geography still express or infer a stronger male dominance than the student numbers would suggest; thus, bringing students into these accounts is itself a small step towards challenging their entrenched masculinism.

Another category of overlooked voices is those of 'dissident geographers', as discussed in Blunt and Wills' (2000) edited collection on radical geography and its antecedents. The authors explore the history of geography as a discipline that is affected by events and struggles beyond academia, emphasising the relationship between geography as an academic discipline and broader political movements. By paying attention to radical geographers who explored power relations, inequalities and disciplinary as well as societal hierarchies, they widen the scope of voices who should get attention, but also address the structures which excluded those voices in the first place:

"Less hierarchical, more inclusive, relations within the discipline are argued to be important in determining *who* is attracted to being a geographer, *what* they are able to do once they enter the discipline, and their ability to take up positions of power. Dissident geographers seek to overturn traditional power relations and attract working class people, women, sexual dissidents and people of colour to a discipline in which they can flourish and progress to play leadership roles." (Blunt & Wills, 2000: xi)

As this quote expresses, historiographies can and will change the discipline as it is now or how it will develop, and Blunt and Wills explicitly embrace the conception of 'wielding' the history for present-day activism and change. This call is similar to Keighren *et al.*'s (2012) valuation of enlarging 'the geographical canon'. Barnes and Sheppard (2019) focus on the histories of radical geography as well, but their aim is more specific than that of Blunt and Wills. Barnes and Sheppard look to curate a series of essays retelling the early years of the emergence of radical geography, explicitly named as such, between the mid-1950s and the early-1980s, whereas Blunt and Wills aim to contextualise radical geographical ideas in broader geographical traditions. The difference in historiographical aim is also recognised in the 'justification' that Barnes and Sheppard give for their research: "A central motivation for the volume was to record these voices while they still are available" (Barnes & Sheppard, 2019: 372). The possibilities for oral history and interviewing as historical method are limited by the extent to which researchers can tap into the first-hand presence and experiences of 'protagonists' or 'witnesses' from the researched contexts. In the

conclusion of their book, Barnes and Sheppard address the development of a canon of radical geography (Barnes & Sheppard, 2019: 382). It is interesting, in the light of earlier discussions about canonicity, that it may be easier for a subfield – or, better, approach – such as radical geography to specify its founding canon than is the case for geography as a whole (although matters of excluded voices do also ring through the Barnes and Shepphard collection). This observation nonetheless raises, once again, the question whether the history of geography as one discipline can be told in 'one' narrative or one history, or whether it is, or should be, a gathering of co-existing or clashing histories. A third ensemble of less present voices is that of non-Anglophone geographers from histories often purporting to recount the global story of an emerging and mutating discipline, and being only dimly aware, if at all, of the partiality of what is then told. Language is of course a potential barrier in this respect, a partial explanation of this absence, in that much relevant writing is simply not readable by the Anglophone historiographers. The further question is whether the history of Anglophone geography is indeed a different history than the history of the discipline set in a continental or global viewpoint, or whether there is a shared history of which only one side, that spawned by the texts of those writing in English, is told. In the earlier-mentioned special edition of the Journal of Historical Geography, Oldfield and Shaw shed their light on the Russian geographical canon (Oldfield & Shaw, 2015). Such examples of studies of non-Anglophone geographical contexts published within Anglophone geography are nonetheless still scarce. With the transition over several centuries of the widely hegemonic academic language from Latin to English, the condition to be included in 'the' history of geography seems to be that work has been published (translated or originally) in English. This also calls for non-Anglophone geographers to publish about non-Anglophone geography in English. De Pater's De Ontdekking van de Geografie: Sociale Geografie als Wetenschap, for instance, tells the continental-European history of geography, transcending country borders (De Pater, 2015). He makes connections between Anglophone, German and Dutch developments within universities, but, by publishing his work solely in Dutch, the role of geography in the Netherlands and Germany is perhaps less visible than if De Pater had presented this 'outsider's voice' to the international community in English. By including several European language areas, this historiography is nonetheless an example of how it is possible to cross languages, depending on the language skills of the historiographer. Besides the prevalence of an Anglophone history of geography over the continental-European history of the discipline, the other continents are even more overlooked. There is

some recent work on the history of geography in British colonial universities (eg. Craggs & Neate, 2018), notably in Africa, suggesting a 'hybridity' between colonial geographers' perspectives and that of 'native' populations. It indicates a very recent opening up to the other continents not only as a focus of inquiry, but also as active networks of knowledge production and exchange.

Geography as a discipline is practised by a relatively small group of academics, but is also practised by a much greater number of students, these numerous apprentice geographers, every day. Students, in their roles of geographers-in-the-making, get to know the discipline through textbooks, besides, of course, from the direct influence exerted by academic staff members within their department: "Textbooks, it has been argued, shape disciplines (Johnston, 2006). They certainly reflect disciplinary mores and fashions" (Sidaway & Hall, 2018: 34). Research on the history of geography taking textbooks as a starting point inherently position the geography students using these textbooks as merely consumers of geographical knowledge. There are also, however, examples of studies that take seriously geography students as independent geographical knowledge producers. Examples of giving a voice to students in the history of geography can be found in an account of the studentled annual journal Drumlin of the Glasgow geography department (Philo, 1998), and also in the 'restorying' of a 1951 school field trip to the Glenmore National Park (Lorimer, 2003a). Philo's analysis of the journal pays attention to how student-geographers receive, respond to and perhaps reject the geographical knowledges presented to them by their academic teachers. He argues that, in contrast to what occurs in most other historiographies, not only the production of geographical knowledge by established academics should be studied, but also its consumption and then *reproduction by students* (Philo, 1998). Addressing earlier literature on the geographical knowledges of students, Philo states:

"Yet little appears to have been said about how academic visions of geography have been received by the countless students who filter through 'our' lecture theatres, tutorial rooms and libraries. It seems to me that this is an omission of some magnitude, and that more might be done to ascertain how all manner of shifts in academic geography, as fostered by small numbers of 'visible' professional geographers, translate into the thinking, writing, fieldworking and murmurings of the many 'invisible' student geographers whose responses are almost never afforded sympathetic scrutiny." (Philo, 1998: 345)

This quotation displays three distinct elements that are also essential to my own research project based on the archive of undergraduate geography dissertations. First, the 'countlessness' of students: the fundamental viewpoint that in studying the history of a specific discipline, the greatest number of 'practitioners' of this discipline should not be overlooked. Students graduating from a geography undergraduate degree vastly outnumber professional academics in geography, and these many students are nonetheless still surely, very legitimately, called 'geographers'. Second, the spaces in which this transaction or exchange of knowledge happens, including these spaces within geography departments or school buildings. In the second part of this chapter, I directly address the geography department as a space of knowledge production. Third and last, the 'academic visions of geography that have been received' are arguably even more fully digested and considered in the choice and execution of every student's independent research project: the undergraduate dissertation.

In his narrative about the 1951 field trip and present-day field courses, Lorimer explores the history of geography education and the recollection of geographers-in-the-making. This paper is an 'alternative' historiography because of the alternative protagonists (secondary school pupils) and alternative focus on sensory experiences. Lorimer approaches the practice of geography as a process:

"Robin's and Margaret's narratives demonstrate how we must be alert to the practice of geography as *process*, and more sensitive to its affective or emotive dimensions. When we track the movements of mobile agencies within, and across, differing sites of practice we can usefully remind ourselves that our stories should retain their human aspect; even if this leaves them as 'messy' or 'partial'." (Lorimer, 2003a: 214)

The two examples discussed here broaden the content and rework the methodology of the history of geography; the shared experience of becoming-a-geographer is uncovered to include new voices as well as to explore the 'hybridity of academic and student voices' (Philo, 1998: 344) in geographical knowledge production. As Philo addresses, adding the student knowledge productions to the narratives about the history of geography does not necessarily offer 'entirely surprising new species of geographical knowledge' (Philo, 1998: 361), yet the emphasis on the small knowledge productions in the undergraduate dissertations are nonetheless exactly that: knowledge productions. Some of these do add something innovative or surprising to the discipline. Others are merely 'small stories' (Lorimer, 2003) in themselves: adding institutional, intellectual, personal and educational perspectives on what it means to be a geographer-in-the-making. Encountering these knowledge productions of students in the historiography of geography touches on the intellectual and social experience of every student: the process of coming up with a research topic, doing independent research, and finally the writing-up of the dissertation. It

is a fundamental and formative process in becoming-a-geographer, and both these practices and the actual knowledges produced in these undergraduate dissertations are valuable but overlooked elements in the historiography of geography (Bruinsma, 2021).

Spaces, places and situatedness of geographical knowledge productions

In this section of the chapter I address the 'situatedness' of my research. In emphasising the value of undergraduate geography dissertations for the understanding of the history of geography, the spaces and places in which all these dissertations are created, written up, supervised and marked are pivotal. I address the specific trends and changes in study areas and social contexts of the student-geographers in Chapter 4, but, before doing that, it is important to examine the academic foundations for thinking about scientific spaces and places, as well as the theoretical underpinnings for conducting situated and local histories. In this section, I argue for taking the 'small names' or 'small voices' in geography seriously and explore how this approach is connected to their 'small places' of knowledge production.

Social and cultural history

Before I examine the spatial and social contexts of knowledge production, I address the academic foundations of situated histories and histories of 'the small'. To do this, I start with an analysis of developments in social and cultural history from the second half of the twentieth century onwards. From approximately the 1960s, a shift in the emphasis of academic history writing is discernible. The developments can be roughly divided in two movements: first, a shift within social history, and second, the new research topics and methods of 'new cultural history'. This first shift was fostered by two other strands in historical thought: Marxism and the 'Annales' school (Biersack & Hunt: 1989). Marxism's influence in social sciences was hardly something new of course, but at the end of the 1950s and into the early 1960s some Marxist historians began publishing works on 'history from below': the formative contribution of Thompson, notably his book The Making of the English Working Class (1963), epitomised the experiences, agency and self-consciousness of 'the working class' (Featherstone & Griffin, 2016). The history from below contested "the passivity to which ordinary people have been consigned by so many historians" (Tosh, 2002: 71). This was different from earlier social histories, which mainly focused on social problems such as poverty and disease, elaborating on these problems in society and their 'structural' causes, rather than digging into the actual experiences of the people afflicted by these problems (Tosh, 2002). So, the 'old' social sciences history differed both in topic as well as in methods from this new social history, but the issues at stake were expressed by

different historians in different ways:

"These differences can be expressed in many different ways: as a contrast between structure and narrative, determinism and agency, science and humanism, grand narratives and microhistories, or as a difference in the poetics of history. Of course the way in which these contrasts play out in individual historical works often involves a more complex amalgam of ideas." (Brewer, 2015: 90)

The French Annales school, with its ideas about *histoire totale* and the recognition of several different *durées*, scales of time, to excavate the past, influenced social history's wish not to look to 'isolated' elements of society and societal problems, but to acknowledge all aspects of a society as part of historical reality (Green & Troup, 2016: 107). Crucially, though, the Annales School introduced a sensibility alert to the time of 'everyday life', of routine, banal and often overlooked daily living, which, notwithstanding the impulse to see 'wholes' and 'structures' at a macro-scale, still placed the minutiae of the small, the micro-scale, on the historian's agenda.

In the 1980s a strong revival of cultural history was distinguishable. This 'new cultural history' saw all different domains of humanity, or human life, as expressions of culture (Bod, 2010: 331). The new cultural history introduced both new concepts and new methods: for instance, a renewed emphasis on oral history and biographical studies. Sharing the broadened scope of 'whose history is worth being studied' with social history, the new cultural history opposed the 'elitist' and political emphases of earlier historical work. Sketching the development of late-twentieth century cultural history, it is impossible to isolate history from related disciplines in the humanities and social sciences. There are many 'competing bodies of theory' that are shared by cultural history, on the one hand, and areas such as psychology, literary theory and anthropology, on the other (Tosh, 2002: 258). Literary theory's focus on language and discourse brought up fundamental questions about the presentation and representation of the past. Epistemological questions concerning realism versus social constructivism were at the forefront of debates between philosophers, linguists and other social theorists. These debates were not an impediment for cultural history: on the contrary, thanks to analysing the (im)possibilities of representation, the interpretative 'task ahead' was a call for exactly this new cultural history: "Cultural history is the principal beneficiary of this shift in historical thinking because the priority it gives to language makes questions of meaning and representation more important than anything else" (Tosh, 2002: 269). Another way of conceiving this shift would be to propose that the small spaces of language came more clearly into view: the dynamics and subtleties of what is said, how, by who, when and where, as the crucial

elements to be addressed by the historian.

Besides these connections between literary theory and history, the relationship between anthropology and history is also one that is important in understanding the developments concerning the emergence of a new cultural history. In the next parts of this chapter, I examine the 'practice' of microhistory, a term (pluralised) found in the quote above from Brewer (2015), followed by considerations concerning local, or 'situated', knowledge. Before I start more directly explaining my approach and the related methodology of this study, it is important to dive a little deeper into the histories and debates concerning studies of the 'small': the small locations, the small life stories, and then the 'small', yet many, knowledge productions of geographers-in the-making. Along the way, I reflect further on the relationship between history and anthropology.

Situated knowledge

"I am arguing for politics and epistemologies of location, positioning, and situating, where partiality and not universality is the condition of being heard to make rational knowledge claims. These are claims on people's lives; the view from a body, always a complex, contradictory, structuring and structured body, versus the view from above, from nowhere, from simplicity. Only the god-trick is forbidden." (Haraway, 1991: 195)

This so-called 'god-trick' that Haraway forbids historians of science to play is explaining science as a 'view from nowhere', as Shapin (1998) later also described the universalist notion of science as unearthing and speaking 'truth' as if it comes from nowhere (in particular) and yet applies to everywhere (in general). Haraway is the classic originator of the notion of 'situated knowledge'. From a feminist point of view she argues for embracing the possibilities that *situating* research can offer:

"We do not seek partiality for its own sake, but for the sake of the connections and unexpected openings situated knowledges make possible. The only way to find a larger vision is to be somewhere in particular." (Haraway, 1991: 196)

Situatedness enables the inclusion of marginalised groups, but also obviously captures the geographer's concern for how social processes cannot but always come from *somewhere* and be in some way marked by their place of origin. Discussing the value of 'local knowledge' as a historian, a sidestep to the related discipline of anthropology is insightful in many ways. In his opposition of 'thick description' and 'thin description', anthropologist Geertz presents immersion in placed communities as a central aspect in the search for meaning and getting to know everyday worlds and everyday lives (Cloke *et al*, 2004, Chapter 11). He recognises many layers of meaning in every simple act in daily life: "Geertz

argued, it is impossible to reconstruct the possible meaning of a wink. The goal is to get beneath surface behaviour to reach an emic (insiders') understanding" (Green & Troup, 1999: 201). Immersion is thus characterised by the act of 'becoming an insider'. This is already complex for any anthropologist, but a historian not only has to deal with the spatial and cultural distance usually obtaining between reseacher and their subject-matters, but also with temporal distance. What, then, can a historian of geography take with her from this related disciplinary approach? Green and Troup explain the influence of anthropology on historical inquiry as the emphasis on "the inclusion of 'the people without history' within the written historical record" (Green & Troup, 1999: 201). This reference to Wolf's *Europe and the People without History* (1982) refers to Wolf's central argument about how scholars capture entire civilisations (eg. indigenous civilisations) or groups of people 'into neat boxes', and also to Wolf's methodology as a continuous shift from the intimate, situated and local to the regional and macro-scale, to see how "even the largest global processes of colonialism, imperialism, and state-building were embedded in local settings where they were intensely contested and laden with new meanings" (Hämäläinen, 2018: 878). Changes in anthropological methodologies, from an emphasis on archival, formal sources to the emphasis on oral and material source material, has also strongly influenced methods used by historians.

Microhistory

From the debates and developments within history and historiography in the second half of the twentieth century, the question of scale of inquiry – both spatial and temporal – comes to the fore. Starting with Ginzburg's *The Cheese and the Worms*, the microlevel as a scale of inquiry becomes increasingly common for historians:

"In the past historians could be accused of wanting to know only about 'the great deeds of kings,' but today this is certainly no longer true. More and more they are turning toward what their predecessors passed over in silence, discarded, or simply ignored. 'Who built Thebes of the seven gates?' Bertolt Brecht's 'literature worker' was already asking. The sources tell us nothing about these anonymous masons, but the question retains all its significance." (Ginzburg, 1976: xiii)

Microhistory's central argument is about the necessity of a variation of scales of analysis from – to put it simply – the big to the small, for this will potentially lead to new interpretations of commonly accepted grand narratives (Trivellato, 2015). As an antidote to the usual emphasis upon writing histories of the elites, these microhistories present a different operating model for new social historians and others, including perhaps geographers. The shared feature of microhistories obviously is the scale: a reduced scale of observation for prizing open the past, microscopic analysis and intensive, in-depth scrutiny of documentary material (Burke, 2001: 99). In Ginzburg's classic inquiry, the life and lifeworld of one sixteenth-century Italian miller are examined. It is the narrative of this one 'ordinary' man, in one village during one lifetime that is under scrutiny. It is a small narrative on its own, a story worth telling, even without explicitly addressing the grand narrative of the Inquisition and the existing religious and social structures. What is identified as beneficial of this approach is that microhistories can be appealing to the general public, realistic and a way of conveying personal experiences (Szijártó, 2002).

Whereas *The Cheese and the Worms* is an 'ideal' microhistory, the question of scale is prevalent in the work of every historian: "Every work of history strikes some kind of balance between the individual and society, between the material and the mental, and between the local and the global. Where that balance is struck is the choice of the researcher" (Tosh, 2002: 84). Most grand narratives include some detail, and many microhistories, and also most local and situated histories, include some broad-brush contextualisation. Microhistory, as a historical 'form', is hence in itself ambiguous: "the debate over microhistory has not been based on theoretical texts or manifestos. Microhistory is essentially a historiographical practice whereas its theoretical references are varied, and, in a sense, eclectic" (Burke, 2001: 97).

So, microhistory can be seen as a *practice* within the discipline of history, but perhaps not a univocal *approach* or *methodology*. The considerations and attributed values with which historians have to work at the microlevel are manifold. Microhistory does address certain epistemological problems and dilemmas: how do historians gain access to knowledge of the past? or what exactly is the meaning of 'historical knowledge'? Using metaphors from other academic disciplines, different historians describe the possible, or perhaps desirable, relationship between microhistories and grand narratives:

"It is as if biologists were to judge the cleanliness of a lake by looking over the side of the boat as they traversed the surface, rather than by dipping an ounce of the water for microscopic and chemical analysis. Yes, gross visual inspection, like grand narrative, tells you some important things that you could never learn by dipping an ounce of water – but it also conceals important realities." (Brown, 2013: 17-18)

Here Brown argues that historians should engage with both macro-level and micro-level: these different scales complement each other. One is not better than the other, and perhaps both do not provide us with 'definite truths', but studying close-up the 'landscape cluttered with the detritus of past living' makes our truth claims perhaps at least persuasive (Brown, 2013: 20). In the following quotation, Burke argues for much the same interconnectedness of different scales of engagement with the past:

"It may be that historians like physicists will have to learn to live with alternative and apparently incompatible concepts, the particles of the microhistorians coexisting with the long waves of the macrohistorians. ... [W]e ought at least to be asking ourselves, as some historians, sociologists and anthropologists have been doing, whether or not it is possible to link the microsocial with the macrosocial, experiences with structures, face-to-face relationships with the social system or the local with the global." (Burke, 2001: 116)

If this interplay of the scales is what historians should pursue, microhistories can still add something else than 'just' another level of inquiry. Indeed, microhistory provides 'a consideration of who and what counted as history' (Brewer, 2015: 99), a claim that clearly resonates with what I have said already to justify retrieving student-geographers and their dissertation from the cramped confines of the dissertation cupboard.

Intriguingly, Brewer draws on the work of humanist geographers and landscape theorists such as Tuan (1974, 1977, 1979) and Appleton (1975), who are concerned with the psychic and social properties of different sorts of environment. Appleton's ideal-types of landscape, 'prospect' and 'refuge', could be applied to the analysis of historical writing:

"Its [refuge history's] emphasis is on a singular place rather than space, the careful delineation of particularities and details, a degree of enclosure. It depends upon the recognition that our understanding of what is seen depends on the incorporation of many points of view rather than the use of a single dominant perspective. Within the space of refuge historical figures are actors and have agency, motives, feeling and consciousness. They are the subjects not objects of history. The emphasis is on forms of interdependence, on interiority and intimacy rather than surface and distance. The pleasures of refuge history derive not from a sense of control of history but from a sense of belonging, of connectedness – to both persons and details – in the past." (Brewer, 2015: 89)

Working on a microlevel not only presents, or represents, different 'historical objects', but also lets historians see these objects as subjects, active historical actors. This humanist approach is not ubiquitous in all microhistories *per se*. However, the historiographical practice of focusing on the micro and the conceptual approach of studying individual figures as actors with emotions, choices and motives go together well: a microhistory not only examining the factual events, but at least acknowledging the personal and the intimate, and identifying actors, can be an enriched account of the past. Again, a comparison between the historian, the anthropologist and perhaps the geographer as well can be made here. It is the movement from studying the 'big names', examining and trying to explain social structures and patterns, to the particular and the internal lifeworlds of individuals, the 'small names', that slowly entered the social sciences and the humanities (Bod, 2010). The questions of scale, of space and place or 'situatedness', and about who and what 'deserves' to be studied, are hence shared considerations within the disciplines of history, anthropology and geography. The broader debate and developments in social and cultural history, the small scale emphasised by the twentieth-century microhistorians and the epistemological value of local and situated knowledge thereby form, in my mind, the necessary framework for both the broader conceptualisation and the more specific methodology of this research project, the latter of which is tackled in the next chapter.

Sociology of scientific knowledge

Whereas scientific spaces can be seen as physical, bounded places, assignable on a map or globe, the social spaces in which scientific knowledge is produced and shared are less easily defined (Barnes *et al.*, 1996). Emphasising the 'socialness' of science, as many have recently done in various ways, is perhaps not enough; it should go hand in hand with the idea of science as a *practice*. Practice implies actions, connections and exchange and thus a different kind of science than the universalist, fact-revealing notion of science. This universalist conception is well explained by Danziger's Sleeping Beauty analogy:

"The objects with which ... science deals are all present in nature fully formed, and all that the prince-investigator has to do is to find them and awaken them with the magic kiss of his [*sic*] research." (Danziger, 1990: 3)

Fairy tales and old-fashioned notions of 'doing' science not only share a gendered standard, but an aspect of awakening or revealing as well. Contemporary subdisciplines such as STS (both in its Science and Technology Studies meaning as well as its Science, Technology and Society meaning), science communication and the sociology of science acknowledge the multiple layering of social practices concerning scientific knowledge: it is not just about knowledge production, but also about circulation, communication and reception. In their influential case study on the dispute between Hobbes and Boyle in the seventeenth century, Shapin and Shaffer explain their research as "an examination of method understood as real practical activity" (1985: 14). In the conclusion, the difference between the Sleeping Beauty interpretation of science and their conception of scientific practice is obvious:

"As we come to recognize the conventional and artifactual status of our forms of knowing, we put ourselves in a position to realize that it is ourselves and not reality that is responsible for what we know. Knowledge, as much as the state, is the product of human actions." (Shapin & Schaffer, 1985: 344)

Practice and actions make science, not the things, or indeed 'the truth' itself. Ten years after this ground-breaking work on the sociology of scientific knowledge, Shapin reflects on

the history of the discipline of which he is part: he argues for 'localist' research, by emphasising the embodied character of scientific knowledge and the physical situatedness of scientific production (Shapin, 1995: 306). This call for localist research thus denotes the spatial as well as the social component of science.

Embodiment and practice mean that science is done by collaborating people coming together and making use of instruments, which already include existing or innovative concepts and ideas. These exchanges also influence the scientific 'outcomes'. In his paper 'Knowledge in Transit' (2004), Secord addresses the importance of researching these transactions within scientific practice. Some central questions of history of science are, according to Secord: "'How and why does knowledge circulate?' 'How does it cease to be the exclusive property of a single individual or group and become part of the taken-for-granted understanding of much wider groups of people?'" (Secord, 2004: 655). If 'doing' science is a social action or practice, and if it is agreed that looking at these interactions and the many relevant factors in social situations is pivotal to describe and understand science, the suggested entry-point to approach science is less the already established scientific knowledges, but rather: "... through the back door of science in the making, not through the more grandiose entrance of ready made science" (Latour, 1987: 4).

The Latourian science-in-the-making approach is recognisable throughout my research, expressed, for example, in the description of undergraduate geography students as 'geographers-in-the-making'. Latour's *Science in Action* as well as his introduction to Actor-Network-Theory (ANT; Latour, 2005) exemplify constructivist approaches to the sociology of science and of scientific knowledge. It is the exposure of many new linkages between humans and non-humans, ideas and artefacts, that duly creates a new 'map' of science: "Borrowing a metaphor from cartography, I could say that ANT has tried to render the social world as *flat* as possible in order to ensure that the establishment of any new link is clearly visible" (Latour, 2005: 16). This 'flat' approach is also argued for in scholarly debates by contemporary human geographers about ontology: in their influential arguments for a so-called 'flat ontology', for instance, Marston, Jones and Woodward identify deficiencies in hierarchical models of scale as well as in their 'horizontal' replacements in the form of network theories (Marston *et al.*, 2005: 422). Instead, they argue for human geography without scale: "We have made an argument for studying humans and objects in their interactions across a multiplicity of social sites" (Marston *et al.*, 2005: 427).

Although I have only discussed the sociology of science briefly here, I think it is important

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to be conscious of the relative novelty of this field and these types of research: mainly in my interpretation of what former undergraduate geography students write about their practices as elements of their dissertation research, as particularly covered in Chapters 7 and 8. The social context of how all the undergraduate geography dissertations were produced is, along with opening out to the new knowledges contained within the dissertations, one of the main emphases of this research project. It is not just about knowledge-use, but about the knowledge productions, presupposing a complex admixture of social, temporal and material contexts. Ways of knowing are embodied in the workings of institutions (Pickstone, 2000), and 'the' university is one useful place to turn to as a place to see the map of knowledge production processes unfold.

The spatial turn in history of science

These developments within the field of the sociology of science are to some extent connected to the so-called 'spatial turn' in the history of science and the history of knowledge. This spatial turn has meant a shift from studying scientific knowledge itself to explicitly, often forensically, investigating the spatial and social practices – or, better, the entanglements of social and spatial dimensions – integral to the producing of scientific knowledge. The premise of taking seriously the locality of knowledge production might seem self-evident, but is actually very recent:

"The recognition that science is produced in place is hardly novel or metaphysically challenging: things do have to be somewhere. The fact that the nature of science is conditioned by place, is *produced through place* as practice rather than simply *in place*, is of greater significance." (Withers, 2009: 653)

Recalling Haraway's critique of science's 'god trick', scientific knowledge has commonly been seen as 'placeless', and it was not until the 1970s that the idea of a contextualised or situated dimension of scientific knowledge was at all widely recognised (Ophir & Shapin, 1991). The implications of accepting this spatiality in the production of scientific knowledge were massive for the status of science. If a material or social context, set unavoidably within a nameable place or a specifiable type of space, shapes scientific knowledge production, what about the latter's value as universal truth? The 'outcome' of science is inextricably connected with the processes of science-making, themselves unavoidably placed or, in Haraway's words, situated:

"What if knowledge in general has an irremediably local dimension? What if it possesses its shape, meaning, reference, and domain of application by virtue of the physical, social, and cultural circumstances in which it is made, and in which it is used?" (Ophir & Shapin, 1991: 4)

The discussion about what kind of science actually deserves status and credibility is an ongoing debate, but some call for acceptance of the diversity and messiness of the practice – we might now say practices, in the plural – of science:

"the production of knowledges is not a direct and unencumbered representation of external reality, but it is rather the product of thorough-going, certainly messy, and sometimes compromised and compromising practices." (Dewsbury & Naylor, 2002: 254)

This approach of not necessarily refuting the outcome of scientific knowledge because of its diverse practices, but instead embracing precisely this variety in scientific practices, is a massive shift from the notion of science as the 'view from nowhere', as Shapin described the prevailing notion of science over twenty years ago (1998: 5).

Recognising a spatial dimension of science has consequences for the epistemological value of science and is inconsistent with intuitive ideas about what science is:

"We have been told that science is an enterprise untouched by local conditions: a universal undertaking. Even geographers have been inclined to exempt science from the imperatives of spatial significance." (Livingstone, 2003: 1)

The socio-spatial conditionings of science were, as Livingstone addresses, not only overlooked by historians and philosophers, but also by those who generally researched 'the socio-spatial' (Finnegan, 2008). Geographers themselves overlooked the 'scientific domain' as a focus of inquiry, accepting this broadly shared notion of science's essential 'placelessness'. However, just as sociologists and anthropologists are now discussing science, so are social, cultural and historical geographers. In his widely discussed article on the spatial turn, Finnegan (2008) mentions numerous examples of both geographers and sociologists who have shown such attention since the mid-1990s: for instance Harris (1998), Naylor (2005a, 2005b), Agar and Smith (1998) and, already mentioned, Livingstone (1995b, 2003) and Shapin (1995, 1998).

There are several different emphases that are apparent in research on the spatiality of science. Some discuss the 'locationality' of the production of knowledge (eg. Livingstone, 2003; Latour, 1987; Kuklick & Kohler, 1996), others emphasise the circulation of scientific knowledge (eg. Naylor, 2005a; Secord, 2004), the movements of academics themselves (eg. Jöns, 2010), or the spatiality of the 'consumption' of scientific knowledge (eg. Keighren, 2006). Some geographies of science take a specific site as a starting point such as 'the laboratory' (eg. Doing, 2004) or 'the museum' (eg. Naylor, 2002). Later in this chapter, I address some examples of research into specific sites of geographical knowledge

production, emphasising 'the field' and 'the university': these two distinct sites look straightforward, but are both complex in their specific locations, meanings and networks.

Besides the different foci of inquiry when studying the spatialities of science and scientific knowledge production, there are also different approaches distinguishable. Livingstone recognises two such approaches: one addresses certain polarities, the other specific materialities (Livingstone, 2010). The 'polarities approach' takes presupposed oppositions such as nature-social, scientific-political and local-global as its starting-point, with the tensioning between the local and the global introducing a spatial dimension of sorts. The 'materialities approach' comprises research that starts with, unsurprisingly, specific materials, such as tissue, samples, artefacts and species (Livingstone, 2010: 8), which necessarily derive from, get assembled in and then dispersed around specific spaces. This second approach is strongly related to an emphasis on the circulation of science and scientific knowledge. Another kind of material that plays a significant role in the analysis of circulation is the book:

"In the wake of the great flurry of interest in the history of the book ... there has been a growing recognition that there is a spatiality as well as temporality to textual productions of all kinds." (Livingstone, 2010: 12)

As Livingstone addresses here, the history of the book is an emerging interdisciplinary subfield. It does not only focus on the production of books, but also on the histories, cultures and geographies of reading. Books are "apparently silent and inert, … magnets for dust; at once dead wood and a dying medium" (Keighren, 2013: 745). Yet, as Keighren argues, the book as a travelling materiality offers insights in the interpretation and assignation of textual meaning. The dissertations in the cupboard can be regarded as a very specific type of 'book' or text, which means that certain principles for a spatialised history of the book could be translated into my own research, although, if regrettably, there is very little circulation occurring in the story to be told of these dissertations.

Besides the journeys of materials, academics themselves are often travelling as well:

"Studying geographical movements of academics therefore helps reveal the wider geographies of academic work and intellectual exchange, and of the knowledge and networks involved." (Jöns, 2010: 96)

Examining these journeys can indicate the spatial shape of research cultures and the location of research 'hot spots'. Again, exploring the geographic journeys of academics, ideas or knowledges is not limited to spatial analysis: it also means exploring "the epistemic hurdles associated with transmitting science from place to place" (Finnegan, 2008: 371).

Sharing knowledge, just as every form of communication, can be haunted by intentional or unintentional misunderstandings. Exploring the 'routes of science' will hence often need to be connected to broader social, cultural and political explorations. This angle is central to my own research project, where I explore the power relations between academic staff and students as well how personal, economic and social backgrounds perhaps influence geography students' dissertation projects. Furthermore, the foci of inquiry and methodologies adopted in undergraduate geography dissertations will inevitably be shaped by themes that are deemed politically and socially urgent and relevant by students.

There are other potential foci of inquiry within the spatialities of science that are not discussed here. Both Naylor and Livingstone suggest several options: for instance, "the effect of place on science, considering the way landscapes, regions and places inform scientific theories and practices" (Naylor, 2005b: 11), and emphasising 'talk' instead of text' and 'life geographies' of objects (Livingstone, 2005). This last-mentioned potential focus of inquiry has to some extent been realised between 2005 and now: there is range of publications on specific objects or objects in general within work on the histories and geographies of science (e.g. Driver et al., 2021; Geoghegan & Hess, 2015; Birth, 2012; Hill, 2006). Objects are also regularly discussed at academic conferences. For instance, the Annual Meeting of the History of Science Society (HSS) in 2019 held specific sessions on objects, such as 'Objects and Methods between the Sciences and Humanities' and 'Correspondence Networks: Exploring Space, Class and Gender through the Material Object' (HSS Annual Meeting Programme, 2019). As stated previously, I conceive of my own project as object-centred, where the objects in question are the dissertations themselves, as material presences in the archive whose variable forms across the years – in terms of covers, bindings, page layouts, inserts and more – immediately disclose so much about the kinds of geography that they 'carry'. In Chapters 3, 7 and 8 these materialities are foregrounded in some detail.

Besides an emphasis on the circulation of scientific knowledge and scientists, geographers have often taken a specific site as their starting point:

"Common among such proposals is the suggestion that sites of scientific knowledge production – be they museums, gardens, laboratories, field stations or other less customary examples – provide a definite geographical focus for discerning *in situ* the closely linked spatial and social character of scientific practice without ignoring wider channels of scientific exchange." (Finnegan, 2008: 372)

Research on scientific production sites is obviously different in scope and scale from research on the circulation of scientific knowledge:

"By challenging traditional view of the automatic universality of scientific knowledge, historians of the sciences have increasingly looked to social and cultural contexts for explanations of scientific change and practice. And as their discipline has moved away from free-floating ideas and philosophical abstractions, including 'big picture' generalization, so the historical focus has shifted to 'local' contexts." (Agar and Smith, 1998: 2)

Naylor addresses how foci of inquiry are related to questions of scale, from "microgeographies of science: the intimate although often mundane spaces in which scientists have gone about their work" (Naylor, 2005b: 3), to regions and cities as 'the public' of civic sphere, where science might relate to the domain of politics and governance. For me, the small, enclosed space of the dissertation cupboard is a very particular (and peculiar) site of scientific knowledge, here as knowledge stored, but the dissertations themselves are hugely suggestive of multiple sites of knowledge production, from field study locations to laboratories to computer suites to streets, and family homes. In Chapter 4 such sites are centralised, but they feature at many different points throughout my thesis.

The role of historical geographers in 'the spatial turn'

Many of the existing historiographies of geography are structured by means of certain individuals (eg. Lorimer & Withers, 2016; Hubbard et al., 2004), concepts (eg. Clifford et al., 2009) or methods (eg. Philo, 2008a; Clifford & Valentine, 2003). Another way to analyse a discipline – as introduced above – is by addressing the spaces and places where this branch of science 'happens' or from where such knowledges 'emerge'. The SAGE Handbook of Geographical Knowledge (Agnew & Livingstone, 2011) exemplifies this kind of structuring method. This book is not a historiography, although some attention is paid to the historical developments within geography as well as to how history of geography has been written. Some of the venues discussed in this book are unsurprising, such as the laboratory; while others require more explanation, such as the category of places named 'centres of calculation'. This concept was developed by Latour in Science in Action (Latour, 1987). As Jöns explains in her chapter on the concept of a centre of calculation, there are three defining processes that happen within one of these 'centres': the mobilisation of resources, stabilisation of new knowledge claims, and the extension of knowledge networks for the validation, dissemination and perseveration of knowledge and its products (Jöns, 2011: 159). A centre can be a variety of things:

"... centres of calculation are defined by particular practices, they are not bound to specific geographical sites or areas but may emerge in a variety of places and contexts, often being linked by hierarchical relations that are subject to change." (Jöns, 2011: 168)

Such a centre of calculation can be, among others, an institution, an individual or a city. 'The university', or a university department, is also a potential type of a centre of calculation. Later in this chapter, I return to this notion of a university department as a centre of calculation, whereby the defining practices, hierarchies and power relations will be central to the contextualisation of, as well as the justification of, my research.

The notion of place and ideas about how space becomes (a) place changed during the late-1980s and in the 1990s. Geographers engaged more with social theory, cultural studies and related disciplines, and connections between place, identity and meaning were drawn into the picture (Withers, 2009: 641). This also meant that historical geographers started to combine spatial and temporal approaches to scientific knowledge, but Powell explains that the emphasis generally was on 'particular spatial understandings of accounts presented by historical sociologists and cultural historians', instead of developing their own empirical studies of scientific activities (Powell, 2007: 321). Since the late-1990s, however, such studies, undertaken by historical geographers, started to emerge:

"Geographers have taken much from a range of fields in the humanities to help them think about knowledge in different historical-geographical contexts. However, it is encouraging to this author at least that fruitful theoretical ideas from philosophy, postcolonial theory, science studies, cultural history and so on are not allowed to overextend – are thoroughly situated and grounded within – the spaces and times they are being used to unpack. In turn it is good to see that historicalgeographical approaches to the knowledge business are being circulated in journals beyond the geographical discipline." (Naylor, 2005b: 632)

Arguably, then, geographers became 'full-fledged' participants in science studies; and this thesis is envisaged as just such a participation.

Sites of geographical knowledge production

From the 1970s onwards historians of science hence began to account for the spatial element of making science, an endeavour to which – by the 2000s – historical geographers started usefully to contribute to and even, in the case of scholars such as Livingstone, Naylor and Withers, to lead. Yet, the extent to which this perspective was then turned *back* upon the history of geography itself, as academic discipline or more diffuse subject, has actually been quite patchy. There have been some exceptions, initially ones mainly focused on one specific scale of inquiry, namely studying geographical traditions at different national scales (Livingstone, 1995b), but it is only relatively recently that the geography *of* geography – or the historical geography *of* geography – has opened up to all manner of possibilities, including taking seriously a diversity of routes and sites in the manner just

identified. There is a distinction sometimes made between places that geographers research and those that they research in, the former being incredibly broad, while the 'binary divide' (Cloke & Johnston, 2005) in geography and its associated practices – loosely, between human and physical geography – broadens the spatial range of the latter even more. Some geography 'happens' in the laboratory, an exclusively scientific domain. However, a lot of the research undertaken in geography takes place outside, in 'the field'. This distinction between 'closed-system' research and 'natural field locations' (whether these are actually more natural or more cultural) is an important one, because it distinguishes exclusively scientific spaces from other kinds of spaces: "Unlike laboratories, natural sites can never be exclusively scientific domains. They are public spaces, and their borders aren't rigorously guarded" (Kuklick & Kohler, 1996: 4). The different foundations of natural sciences, on the one hand, and most of the social sciences and the humanities, on the other, are hence strongly connected to questions about status and credibility (Kohler, 2002). An exclusive scientific space makes research verifiable, replicable and supposedly certain, whereas just another space out there 'in the field' is contingent, unstable and susceptible to all kinds of internal and external influences. The field, however, offers possibilities concerning the involvement of the public as 'incidental' research assistants: not as hired field assistants, but just by residency (Vetter, 2011). Such assistants are essential to the production of scientific knowledge, but are usually hidden from the public view (McCook, 1996): we encounter a few of them in the undergraduate dissertations.

Another feature of the field as site of geographical knowledge production is the collision of 'the personal' and 'the professional'. As Richards (2011) describes, some field scientists become strongly attached to 'their' field. Fieldwork means travelling, living and even just 'surviving' in a sometimes unfamiliar environment: this makes doing fieldwork different from 'closed system' research. Another key characteristic of the field as scientific site is that it asks for specific skills: specifically in physical geography, the value or skill of 'the eye for landscape' is central (Richards, 2011). This skill of observation, of having this 'eye for landscape', is strongly connected with other geographical skills that are – over time to a greater or lesser extent – part of the undergraduate geography curriculum and expressed in the undergraduate geography dissertations. As I address in later chapters, the fieldwork activities, especially during the 1960s and 1970s, included lots of activities that relied on students' 'graphicacy': "the educated skill that is developed from the visual-spatial ability of intelligence, as distinct from the verbal or numerical abilities" (Balchin, 1970: 28). This included the drawings of maps, but also the art and craft of landscape sketching:

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"The object of making a drawing is to secure for yourself or for others the likeness of something you have seen. ... The likeness of which we aim is not photographic likeness: rather something better than that, which may be called the essence or the essential likeness of the subject." (Hutchings, 1960: 129)

The field as a site of specifically geographical knowledge production thus evokes discussions concerning the development of specific skills in the undergraduate curriculum, as well as changing practicalities of 'going into the field', and such themes are ones that become crucial in Chapter 4 and then again in Chapters 7 and 8 below.

The geography department within a university can be examined as a 'field' as well, a space where knowledge is produced:

"Why should anyone be interested in knowing about departments, those academic spaces in which we and others 'do geography'? One answer lies in wanting to know more about the sociology behind the production of contemporary British academic geography (Sidaway, 1997). Another arises from those persons with research interests in the social spaces of knowledge making. If the laboratory and the archive can be examined geographically as sites of knowledge production, why not the geography department itself?" (Withers, 2002: 306)

It might even be an obvious place because, looking at papers in academic journals, monographs and conferences, the affiliation of researchers is always mentioned, implying that this location indeed matters in some way. It becomes part of the identity, or at least status or image, of a researcher, because every academic institution evokes certain ideas about 'what kind' of research is undertaken there. A department is an example of an 'everyday site' (Lorimer & Spedding, 2002) of knowledge productions. The department (of geography, but as mentioned elsewhere often a shared institution with other disciplines) broadens the potential scope of whose voices could or should be included in the histories, sociologies and geographies of a discipline. It is a place where these 'big names' – the established academic geographers – do much of their salaried work, often emphasised in narratives about a certain discipline, but there are far more 'small names', as it were, associated with such places. There is, then, a lot of potential for researching departments as 'everyday places' with the 'everyday people' in it: for instance, as I propose in my research, the many student geographers-in-the-making. This does not mean that the 'big names', the 'famous individuals', will be ignored:

"We do not wish to disparage or ignore tales of privileged individuals (the Newtons, the von Humboldts, the Darwins and the Mackinders) researching in privileged spaces of primary knowledge production (principally the laboratory or the field). We do, however, want to reveal modest geographical practice: the labours and leisures of the everyday people (students, lecturers, cartographers, technicians, porters, etc.) who act out the department's different routines. The discipline's reproduction depends, in part, on these circulatory processes of translation, transformation, resistance and consumption." (Lorimer & Spedding, 2002: 300)

In their 'excavation' of geography departments, Lorimer and Spedding argue for more grass-roots versions of the history of geography.

In my own research, I thereby focus on one specific place, the School of Geographical and Earth Sciences (the School has had different names and statuses (eg. Department) over time) at the University of Glasgow: one changing department, a changing curriculum and many different students and staff members 'inhabiting' this physical and social space. Changes in the discipline are not just about intellectual changes, but also about changes in the people doing the research and changes within institutions (Hall *et al.*, 2015: 56). Formally, teaching and researching Geography in Glasgow started in 1909 (Philo *et al.*, 2009). Things that could be called 'Geography' were taught before 1909, but in this year, the first officially titled Lecturer in Geography was appointed. The special edition of the *Scottish Geographical Journal* on the centenary of that appointment in 2009 offers an insight into history of Geography as institutionalised in the University of Glasgow. The specifics of the changing department and changing discipline are discussed in later chapters, but one of the papers in this special edition reveals an important distinction regarding different kinds of sources traceable within the history of a department:

"... it is that the most conventionally ordered accounts, those cleaving to the 'institutional history' genre, drawing as they do upon the most official, bureaucratically-collected and 'governmental' of sources, may also be the ones that miss what is most important: the stories from below or, indeed, from within, the feelings, the joys, the frustrations, the elations, the angers, the senses of accomplishment or loss, the passions of pleasure or despair, that arguably linger more palpably in certain sources than in others." (Lorimer & Philo, 2009: 250)

A 'story from below' can combine some of the questions asked within the domains of the fields of history of geography, history of higher education, and the sociology and geography of knowledge production. Whereas I discussed earlier a specific article (Philo, 1998) about *Drumlin*, the student-led annual journal of the Department of Geography at the University of Glasgow, as an example of representing the small voices of geography students in the history of geography, it is also a valuable example of how the specific site of a university department is not only a place where staff members – professional, established geographers – produce knowledge, but students as well. It is this connection of emphasising the small *voices*, speaking within these small *spaces* that is at the heart of my research as well.

Conclusion

In this chapter I have delved into the themes concerning the history of geography and of the social, spatial, temporal and institutional contexts of geographical knowledge production. Narrating the history of geography from a student perspective started by exploring existing historiographical narratives, from 'usual suspects' to complementing or competing narratives. This exploration evokes questions on whose 'voices' should be included, and who actually 'makes' the discipline. Engaging with canonical historiographies as well as other narratives demonstrated a clear gap in the voices that were staged. My research is perhaps more a 'supplemental' historiography than an alternative one, although my research reveals the influence of 'pedagogical authority' (McDowell, 1994) and existing hierarchical structures. It takes an alternative starting point, aimed to answer a different 'question' than other historiographies of geography: what did it mean to be a geographerin-the-making, and how has this changed over time? Studying dissertations from one discipline from one department might not be indicative of the experiences of all studentgeographers, but this local scale of inquiry is very valuable: knowledge is always situated, and approaching science as a 'view from nowhere' (Haraway, 1991) would ignore the social processes integral to the production of knowledge and only emphasise the contributions of those established, well-known, 'elite' individuals. Exploring the dissertation archive, then, addresses many 'micro-histories' in a specific social and educational context.

The university department acts as a centre of calculation by mobilising resources, stabilising knowledge claims and being a network for the validation and communication of knowledge. The department connects with other places, for instance by researchers presenting their work in other universities or at academic conferences and by the diffusion of ideas by means of monographs, journal articles and tweets. The balance between researching and teaching is a difficult one, yet looking at the sheer number of people 'inhabiting' the departments, undergraduate students vastly outnumber staff members. All these students travel to places for their dissertation research (nearby or far away) and talk to family, friends, supervisors, peers and people who they meet on their travels. In conceiving such a bottom-up narrative for inspecting the history of geography, the knowledge productions of all these students as well as their practices of becoming-a-geographer are central. In the next chapter, I move on from the theoretical underpinnings of 'the' university department as a place of knowledge production to my own practical, methodological approach within this research project. Although there are multiple contexts in which my research is grounded, it all starts with a small space: this cupboard on the

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fourth floor of a geography department.

CHAPTER THREE

METHODS AND SOURCES: THE GEOGRAPHERS IN THE CUPBOARD

"Nothing starts in the Archive, nothing, ever at all, though things certainly end up there. You find nothing in the Archive but stories caught halfway through the middle of things; discontinuities." (Steedman, 2001: 45)

Introduction

The daily routine of academics undertaking archival research with conventional archival holdings is strongly determined by questions concerning access, for instance opening hours of the archive, maximum number of records allowed to be reserved at a time and photography restrictions or prohibitions. However, these limitations go hand-in-hand with the incredible service provided by formal archives. The sources here are usually indexed, categorised, tagged with keywords and sometimes even made digitally available. It is this effort, combined with the specialised knowledge and skills of archivists, that makes the labour of archival researchers immeasurably easier. In this research project, the University Archive of the University of Glasgow met my expectations of what an archive entails, how an archive 'works' and what an archive looks like. Visiting the collections at Thurso Street was a similar experience to my earlier archival endeavours at the RKD (The Netherlands Institute for Art History) and the National Archive in The Hague during my Master's studies: I consulted the Archives Enquiry Service beforehand, and requested a number of documents from the collection of exam papers and the collection of University Calendars for a specific date and time. However, the University Archive was not the pivotal archive for my research, but rather my focus has been the collection of undergraduate geography dissertations, held by the School of Geographical and Earth Sciences, University of Glasgow. Stored in a cupboard, this almost-archive definitely comprises an archive-worthy collection of source material, but lacks the usual 'archivist's mark', notwithstanding that a former geography PhD student, Richard Lowdon, briefly took on the role of archivist for this collection over some weeks in 2014⁷. He did tremendous work in the indexing of all the sources into one spreadsheet, including some general data such as student names,

⁷ The formation and formalisation of the dissertation archive was financed by a Chancellor's Trust Award, awarded to Hayden Lorimer, Chris Philo and Simon Naylor (Application Form Equipment/Staff Funding, Philo, personal archive, 2015). In one of the first weeks of my PhD research, I met with Lowdon to discuss the collection and his contributions to the establishment of the archive.

dissertation title and cohort year. Without his efforts, my research project would have entailed a lot more organisational and administrative activities at the outset.

This chapter outlines the methodology of the research project, which is dominated by archival methods enriched with individual and collective memories gathered through a number of conversational interviews. Central to this methodology is the theme of 'nearness' in both the spatial and temporal senses of the concept. I transition from the analysis in the previous chapter on the epistemological value of historical research focusing on the 'small' and minor into discussion of my methods and considerations concerning how to track, trace, analyse, interpret and represent the 'small' voices of the student-geographers. I distinguish several methods of doing archival research, applied to the main archival collection with which I have worked as well as the 'secondary' archive that I have consulted. Subsequently, the method of organising, categorising and sampling the grand collection of small voices is outlined, with a detailed analysis of the quantitative element in this predominantly qualitative research project. This chapter will then consecutively examine the interview design and interview practice, as well as the methods employed in the analysis of the qualitative data.

The 'nearness' to the archive and my research topic in general continuously affected my research. Sometimes in a helpful way: for instance, getting to know the academic curriculum of the undergraduate Geography degree by being a tutor and lab leader, accepting of course that it has changed considerably over the years, whereas at other times this nearness led to some complex considerations: how can I – and if I can, do I want to? – keep a certain distance from the materials if some of the 'authors of the archive' are my peers⁸? Despite the fact that this research is explicitly not focusing on the quality of undergraduate dissertations from the past – no attempt is made to evaluate or 're-mark' the academic merits of dissertations consulted⁹ – ethical considerations were considerable at different stages of this project. By all means, archival research is intertwined with ethical concerns. Because research ethics is not a self-contained element of research, I discuss various ethical dilemmas and considerations interwoven with considering the different elements and phases of this research project.

⁸ Some of my fellow PhD students have dissertations in the archival collection, because they finished their undergraduate Geography degree at the University of Glasgow.

⁹ Some students later went on to have successful academic careers. In my sampling, I do not highlight dissertations of this particular group, because my aim here is to consider all student-geographers as 'real' geographers, explicitly not only the ones with higher academic 'ranks' and a long list of publications.

Small voices in small spaces

In April 2019, the Glasgow geography cohort who graduated in 1994 ("the Class of '94") revisited their *alma mater* for a reunion. On this Saturday, I was there among the welcoming party, and laid out all the undergraduate dissertations for this group of former students, putting them on display. As I had encountered already at academic conferences and in other more informal conversations about my research project, the memory of writing one's undergraduate dissertation evokes many emotions, flashbacks and associations. Reuniting this cohort not only with the spaces in which they studied 25 years earlier, but also with a copy of the dissertation that they had produced 25 years previously, was a telling demonstration of how writing a dissertation can be seen as a formative 'rite of passage'. Talking to several formal students at this reunion, I heard stories about how much (or sometimes how little) they remembered from these 'dissertation-days'. Learning how their dissertation research had been closely associated with certain journeys or happenings in their personal lives was an important moment in my research project. From studying hundreds of dissertations, as material, physical documents, to encountering how these documents were created by actual people with lives, expectations and struggles was an eye-opener. Of course, I was aware of this before: almost all of the dissertations include at least a few 'clues' about such contextual and complex lifeworlds and relationships. Yet, conversations about how, for instance, one student felt regret that she never continued working on their dissertation topic, made me more forcibly aware of the consideration, even a kind of care, that I ought to take in analysing these works. The ethical dimension of my research, even though I was not working with directly personal documents but rather with more formal, intellectual documents instead, was certainly underscored by conversations at this reunion.

In the previous chapter, I referenced the rise of microhistories during the second half of the twentieth century. This research project is not a microhistory *per se* but working with the dissertation archive means operating with small, highly contained knowledge productions or 'micro-knowledges'. The 'small' is also applicable to the spatiality of the project. The dissertations with which I am working are all produced in one department, part of one university and constructed within one, albeit changing, curriculum. Another example of the 'small' is the question of whose histories I consider are actually worth studying. Most of the student-researchers that undertook these research projects for their dissertation continued their lives and careers outside academia. Their 'small voices' are very rarely taken into account in the grand narratives about the history of geography as an academic discipline.

The historiographical context of social and cultural history and, more specifically, microhistory presents a framework for identifying and evaluating these different forms of 'smallness' that arise in this research. Overall, the study as a whole is not a study of the archival cupboard as it exists 'behind closed doors'. The dissertations are the primary sources, but what I would like to add to the existing narratives about the history of geography is a situated history: a diachronic analysis of the small knowledges within the volumes of dissertations written by many cohorts of geographers-in-the-making.

This research is object-oriented, taking the dissertations in the archive as a starting point. However, this does not mean that I am merely using this singular method of archival research on one collection of sources. A situated history asks for more than this: the quantitative and qualitative data collected from the dissertation archive is enriched with the personal experiences of former staff members and the analysis of other sources related to the history of the department and the academic curriculum. The collection itself, moreover, can be studied as encompassing: intellectual sources, because every dissertation includes an original piece of academic research; cultural sources, because the dissertations are often experienced as 'rites of passage' in the process of moving from being an undergraduate geography student to being a 'real' qualified geographer; and lastly, as social sources, whereby the dissertations illuminate a diverse, personal network enrolling peer students, family, supervisors, other departmental staff members, research participants and a wide range of external collaborating organisations. This threefold dimension of the dissertation archive, then, is the starting point for this situated history of becoming-a-geographer.

Archival encounters

Before I turn directly to discuss the archival collection, the complexity of what an archive actually entails and how archival encounters take place deserves some more explanation. Visiting an archive sounds like a straightforward activity: it is normally visiting a space, "stifled, rendered as passive, reduced to no more than a storage space" (Lorimer, 2011: 252), where an 'objective archivist' has ordered and structured a collection of sources. To some extent, archivists themselves share this view of their role:

"Archivists have long been viewed from outside the profession as 'hewers of wood and drawers of water,' as those who received records from their creators and passed them on to researchers. Inside the profession, archivists have perceived themselves as neutral, objective, impartial. From both perspectives, archivists and their materials seem to be the very antithesis of power." (Schwartz & Cook, 2002: 1-2) During the second half of the twentieth century, the ideas about what archives actually are and what kind of role archivists play have shifted away from this conception of the archive as a storage for objective data. Influenced by philosophers and social theorists such as Foucault's *Archaeology of Knowledge* (1969) and Derrida's *Archive Fever* (1994), archivists, historians and geographers have developed a variety of critical literature relating to archives and archival practice. In this specialist field, 'the archive' is connected with themes such as the acts of collecting, epistemological value (e.g. Schein, 2001), power and interpretation (e.g. Lynch, 2009), memory, and ethics. (e.g. Cameron, 2001).

The emergence of an archive means that things have to be collected. "The act of collection is part of the act of valuing" (Cresswell, 2012: 168): a collection is never random. Choices have been made about what to save and store and what to throw away (Cook, 2011). In my own archival research, this idea of collecting and valuing plays a double role. First of all, I was able to do my research precisely because former staff members (both academic and administrative) saw the undergraduate dissertations as 'valuable enough' to store, rather than just to discard. This valuation is also related to rules and regulations requiring dissertations to be saved for a certain period of time. Whereas many other departments and universities discarded their dissertations at some point, this department had not (Withers & Johnston, 2008). The other way in which the act of collecting and valuing plays a role in my archival methodology lies in my own interpretation of what is 'worth noting down'. This issue is addressed in a later section about data collection and the development of a sampling strategy and template. Although decisions reached were deliberate and substantiated, the choices made cannot but have shaped this research project in a particular way: "When writing history, there are rules to be followed and evidence to be respected. But no two histories will be the same" (Thomas, 2010: 36).

Valuing is central to decisions about what to collect and what not. A related characteristic of the archive is that it is partial: if a *selection* of everything is valued and collected, that means that some things are *not* there. Questions on the partiality of the archive and questions on absence have been incredibly significant in the literature around methods in historical geography:

"Archives are made up of fragments and as such are partial and incomplete: firstly, in terms of chronology and coverage; and secondly, in terms of physical structure – often littered with holes and missing pages. This fragmentary character of archives poses the researcher with a number of frustrating challenges, and yet this is often what make them so enchanting, mysterious, seductive and addictive." (Mills, 2013: 703)

Absences in the archive (Moore, 2010) imply an important power dynamic. Things are not just 'not there', they are often actively left out or thrown out: archives are processes, not things (Stoler, 2009). The dissertation collection, however, *is* close to complete. There are other considerations that have played a role here: why was it thought that there was something of value about the dissertations, making them worth saving, that was not true of other work by students (e.g. exams, coursework)? The constitution of any archival collection exposes themes of authority and responsibility with regard to the archivist, but the same is applicable to the historical researcher visiting the archive. Different researchers make different selections from historical records and have active voices in this selection-making process (Bailey *et al.*, 2009). Osborne hence refers to the archive not as a centre of calculation (Latour, 1987), but as a centre of *interpretation* (Osborne, 1999: 52).

Seeing the archive as a place where a lot of activity is going on from archivists, researchers and, potentially, the public still leaves out one important group of 'archival actors': the humans who are mentioned in the archival sources and have created the archival sources. Doing archival research can be seen as conducting 'encounters with ghosts' (Mills, 2013). People may no long be living but dealing with personal information about individuals still evokes questions concerning research ethics. In projects on recent history, such as my research, the 'source producers' are mostly still very much alive. Because the undergraduate dissertations are technically owned by the university, not their authors, I am able to use this source material without asking for consent. In the section about nearness, I address considerations concerning the impact that my research might have on former students who now have other academic or non-academic positions. Archival research goes hand in hand with responsibility:

"Archives ... are the sites of memory. They are the places – whether a cardboard box in the attic or an imposing public building – where people can begin to construct accounts of the past. This means that they are also full of emotion because they are the places where people's lives are remembered, and where we have a responsibility to think carefully about how we reconstruct those lives in the present and for the future." (Ogborn, 2011: 92)

By studying an archive as one collection it creates an imagined community that transcends time (Daston, 2012). Because these dissertations all ended up in one collection in one cupboard, I examine these knowledge productions as documents produced by this overall community. Every individual archival source has its own context and history. Although the reason why every dissertation in the archive ended up in the archive is because of its 'belonging' to the selection of the archive (in this case, being an undergraduate Geography dissertation, produced at the University of Glasgow), the individual dissertations should still be acknowledged as individual narratives, with individual contexts, connected to specific travels, emotions and personal relations. I hope to pay justice to these specificities, and to the emotional investment of the dissertation authors, in the sections of the thesis that follow.

The cupboard on the fourth floor

"Historians are like reliable local guides. Ideally, they will know the terrain like the backs of their hands. They recognise all the inhabitants and have a sharp eye for strangers and impostors. They may not have much sense of world geography and probably can't even draw a map. But if you want to know how to get somewhere, they are the ones to take you." (Thomas, 2010: 37)

Being part of a community, or cohort, of geography PhD students meant seeing my peers leaving our offices to travel to far or not so far places for their fieldwork. Whether they went to community centres in Glasgow, salt marshes on the east coast of Scotland or further, across national boundaries, these experiences all shared the step across the threshold of the East Quadrangle building, one of the two buildings where the School of Geographical and Earth Sciences at the University of Glasgow is located. Although I also used some of the archival documents from the University Archives at Thurso Street, the empirical heart of this research project is the collection of geography undergraduate dissertations, located on the fourth floor of the 'East Quad' building, just a few footsteps away from my own desk. The collection is located in a small, windowless space: actually



Figure 1 East Quadrangle, University of Glasgow (author's own)

more a cupboard than a room. In the introduction to this chapter, I described this cupboard as an 'almost-archive'; a largely indexed and structured collection of sources, yet without a designated archivist. The indexation concludes with the dissertations written in 2014, the year in which the Archiving Dissertations project ran, financed by a Chancellor's Trust Award, awarded to Hayden Lorimer, Chris Philo and Simon Naylor (Application Form Equipment/Staff Funding, Philo, personal archive, 2015). The coming into being of the dissertation archive, understood as an archive, not just several dusty piles and documents jumble up around the building, started a few years earlier. Between 2005 and 2007, Johnston and Withers sent out a questionnaire survey about the state of department archives within UK departments of geography (Johnston & Withers, 2008). The survey was prompted by several issues, such as the lack of attention paid to geography's archives in general, the attempts of two departments to reconstitute the history of the department, and restructurings of some UK geography departments. These concerns led to a proposal for a questionnaire survey, and this was eventually accepted by the RGS-IBG (Johnston & Withers, 2008: 5). Responding to this survey, Philo's answer about the status of the departmental archive in Glasgow's geography department refers to the existence of 'a few random items in the University Archives' and many documents held 'by individual staff members' (as quoted in Lorimer & Philo, 2009). An actual departmental archive was not yet formed. Another aspect from that survey response nevertheless foreshadowed the formation of a departmental archival collection. The questionnaire sent by Johnston and Withers combined with the Centenary¹⁰ celebrations of the department of Geographical and Earth Sciences in 2009 was not only the impetus to work towards a more structured departmental archive, but, in addition, my research project as a whole:

"Note that this project [*Archiving Dissertations*] has *already* had a very substantial outcome: it has been the platform enabling a successful bid for a funded PhD studentship to research this archive (one funded as part of a successful UoG bid for a bundle of studentships working on 'collections' to be funded by the Leverhulme Trust" (Application Form Equipment/Staff Funding, Philo, personal archive, 2015)

My thesis is characterised by the dynamic between the small and the grand, but also by the relationship between spatial and temporal nearness and distance. Nearness played a role in this research project, not only in the 'felt' recognition of what the experience of writing-a-

¹⁰ The first Geography lecturer at the University of Glasgow (Sir Henry Lyons) was appointed in 1909 – hence the Centenary in 2009. This prompted Philo and Lorimer to create, or at least more systematically identify, what materials comprise the department archive (see the 2009 Centenary Issue of the *Scottish Geographical Journal*, 125(3-4), especially Lorimer & Philo (2009)).

dissertation is like, but also, more intensively, in the literal spatial nearness of the archive and the knowledge producers of the archive. Nonetheless, I considered 'my' archival research location as fieldwork (Lorimer, 2003b), meaning that I approached the archive as a location that asked for active engagement with what is there (Massey, 2003).

Entering the cupboard

Climbing up the winding staircase, through the corridor, and then: there it is. No windows. No fresh air. What is there, then? A well-hidden photocopier and hundreds of pieces of physical evidence of former students completing their geography undergraduate degree. The shelves bulge with dissertations, behind every pile of dissertations another pile looms. Being in such a small pace surrounded by all these works – material proofs of a small piece of someone's personal, or at least academic, history – inevitably makes you think about their struggles, days of writing or typing, at home or in the library, conducting field work in places faraway or nearby. It is not difficult to recognise the different decades on the shelves after entering the archive. The dissertations are not only bound in various ways, but there is also a great diversity in how they are tagged and arranged on their different shelves¹¹. Starting in the upper-left corner, the oldest dissertations in the collection, from



Figure 2 The archival cupboard (author's own)

¹¹ For years – I have been told – the dissertations had laid in chaotic piles, barely sorted, in cupboards and drawers spread across the department's space in the East Quadrangle – it was Lowdon who brought them altogether and arranged them in date and alphabetic order on the shelves in the cupboard.


Figure 4 Dissertation folder: *The Distribution of Indian* and Pakistani Immigrants in Edinburgh (Fyfe, 1974)

Figure 3 Dissertation folder: A Comparative Study of Student Influence on Residential Areas in the City of Oxford, Ohio and the West End of Glasgow (White, 1992)

the 1950s, have their distinct 'old paper' smell. The 1970s dissertations are stacked one shelf to the right, and even at first glance already look so much more recent than the documents of two decades earlier. The 1970s ones are all in red folders. It is obvious that the materials from this cohort have some history themselves. Each of them has the student's name and the cohort's year is on the spine. It is all in the same handwriting, so not done by the students themselves. The coming-to-being of this archive has clearly had some more and less organised stages. After handing in the dissertation, the material was probably held by the supervisor or marker – in some stages these two being the same person – before it was saved collectively somewhere within the walls of the department. The names and years on the spines are helpful, making it easier to find a specific dissertation. Every dissertation from the 1970s also has another archival number on it: this indicates an earlier inventory endeavour. The folders of this decade are quite heavy, and this impedes taking the entire cohort out of the cupboard for data collection in one go. Moving on to the 1990s another clear change in the material is perceptible. These cohorts are stacked in cardboard boxes. Confusingly, the 1990 cohort is stacked together in a box with '1988' written on it; a silent witness from reorganising the dissertation archives at some point in the past. All 1990 dissertations fit together in one box. The red folders are replaced by a plain paper cover. In more recent cohorts, roughly from 2000 onwards, sometimes there are multiple copies of one dissertation in the archive: the convenience of just being able to print one document multiple times is very different from paying a typist to provide a legible version of a handwritten piece of work. It is also from this era on that the dissertations show more uniformity on the inside of the dissertations, contrasting the title pages which provide some space to be distinctive: lots of the more recent dissertations have a photograph on the front (see, for instance, Figure 5).

Thinking about the short past of the dissertation archive, the topic of the *future* of this collection evokes some interesting questions. The dissertations were stored solely digitally from the 2017 cohort onwards. Exercising my 'temporary archivist' role, the search for the dissertations after 2014 (the last ones that were stored as part of the earlier mentioned Archiving Dissertations project), I have found the dissertations from 2015 and 2016 in yet another cupboard in the building. The dissertations written by the 2017 and 2018 cohorts were only traceable in the form of a .zip file. It was decided that from 2016 only electronic versions would be kept and that the hard copy versions would be either



Figure 5 Dissertation Folder: Water as a Human Right or Economic Good? Domestic Challenges Faced in Two Urban Areas of Dar es Salaam, Tanzania (Pritchard, 2010)

returned to students or destroyed, because of storage space issues. Without a designated archivist, it is difficult in an institution such as a university department, to keep on track with indexing and archiving new documents, recognising necessary 'maintenance' of the existing archival sources and communicating the intellectual *value* of not only keeping the words, maps, diagrams and photos that encompass the dissertations, but also to get them in their original physical appearance. The material is *part* of the text (Levy & Mole, 2015). Moreover, keeping the material dissertations leaves space for surprises. Some annotations by the student or supervisor, a marker's report, an unintentional appendix in the form of a handwritten note can all make an appearance. For instance, in a few of the dissertations written in 1998, the 'Dissertation Record Card' can be found in between the last page of the dissertation and the back cover. This record card displays the research topics the student considered for the dissertation and the 'important deadlines' and meeting dates

between student and supervisor¹². It is a very welcome insight in the 'making-of' of these dissertations as well as on the formal relationship between student and supervisor. In a digitalised file, without the involvement of an archivist, unofficial appendices such as this dissertation record card might get lost easily. This research project has the dissertation archive, in this cupboard within the department building as its primary source material: the archival sources *including* their material form and specific location are integral to the study. The dissertations are objects: at once material, social, cultural and intellectual items that can – and as I argue here, should – be studied as all these forms of documentation in one:

"We often think of literary texts as made out of language, or even out of ideas. But we can only encounter those texts through material objects. ... Some people treat these material objects as simply the 'vehicle' that conveys the text to the reader, and so they think that nothing important is lost if a text is reproduced in a different format ... So long as the words are the same, they say, that is what matters." (Levy & Mole, 2015: x)

Although there are some fundamental differences between undergraduate dissertations and books – for instance, the way they are circulated – they share an *active* constitution: "the negotiated and contested outcome of the interplay of material and social processes" (Keighren, 2013: 745). The fundamental differences are related to the power dynamics at play between on the one hand, often relatively young students, and on the other hand, older staff with a certain academic status, that have the task to supervise or grade the dissertation produced by the student. The rules and guidelines that are formulated by 'the university' as an institution also have an impact on the way dissertations are constituted. In terms of circulation, dissertations – unfortunately! – usually only have a very small audience, but this audience is often closely involved with the author: supervisor(s) and marker(s), peers, friends and family constitute the vast majority of the readers.

Studying such a collection of undergraduate dissertations, it is important to examine not only what is there, but also what is *not* there. Although the archive comprises undergraduate dissertations from every cohort from 1954 and even some sources from before that year, the collection is not a *complete* collection of all dissertations written by *all* undergraduate geography students since the 1950s. There are multiple reasons for the collection being incomplete. First of all, the possibility of doing a joint honours degree means that students combining geography with another degree might not have written a geography dissertation, even though they were formally part of the cohort of geography

¹² No such record cards are kept now – supervisors and students now keep their own logs. Dissertation proposals now have to be formally submitted and assessed.

students of their year. There are also less 'logical' reasons for missing dissertations. In my data collection I came across two dissertations that were indexed in the overview of the collection yet were untraceable in the archive. The dissertation archive has, over the years, sometimes been used by staff members and postgraduate students to develop teaching material or as an academic resource. Perhaps these dissertations were not always returned, or not returned to the specific place of the dissertation in the cupboard. Again, an archivist could play a role in this usage of the collection. Besides the dissertations that 'seem' missing but are actually not - from joint honours students that were part of the cohort but did not write a geography dissertation – and the recently (perhaps temporarily?) missing dissertations, there is a third group of sources that 'is not there'. These are dissertations that were actually written, but never made it to the archive. At the reunion of the cohort of 1994, there was one former student who was certain he wrote a dissertation in that specific year but his was one that was not there when I displayed all the dissertations from the cohort of which he was part. However, he told me 'not to worry about it' because he still had two copies of his undergraduate dissertation at home himself. There might be more cases where, perhaps by the student, the marker, or anywhere on the journey between writing and marking the dissertation to ending up in the archive, some documents were lost. The number of dissertations missing in the archive is not exactly clear. A combination of available numbers of undergraduate students and individual memories or data suggests that by far the majority of the dissertations written is actually in the archive.

Nearness as a methodological concept

Having an office located on the third floor of the East Quad building¹³, just beneath the archival cupboard on the fourth floor, 'nearness' is an obvious practical feature of this research project. It is, above all, very convenient not to have any travel time to the archival fieldwork location. It also means that forgetting something and going back to check something is never an issue at all. So, in the practical sense, working with an archive just one staircase up is very comfortable. In many other ways, 'nearness' is a more complex methodological element:

"For historians encountering a past society through the medium of documentary sources there is – or ought to be – the same sense of 'culture shock' that the modern field-worker experiences in a remote and 'exotic' community." (Tosh, 2002: 265)

¹³ Obviously only in the 'pre-pandemic era' of my years of PhD research...!

Is it necessary to experience the 'culture shock' that Tosh described? Could it be possible to experience this shock when I am actually a part of the department that produced the archive and, in a broader sense, the 'geography community' under study?

Questions like these evoke the comparison between the historian on the one hand, and the anthropologist, on the other. In my research, the dividing line between being an insider and an outsider is constantly on the move. I am working in an office close to the dissertation archive, in the same building as some of the 'knowledge producers' of the archive and staff involved in another role (supervisors, markers) in the undergraduate dissertation process, which might make me an 'insider'. Yet, without the experience of studying geography at the University of Glasgow, or even studying geography elsewhere, I miss out on the specific experience of being a geographer-in-the-making. Of course, my feeling about being an insider or outsider developed over time. Going back to Geertz's interpretation of the concept of 'thick description' (he borrowed the concept from Ryle, as he explains in Geertz, 1973: 6), the 'complex layers of meaning' are:

"apparent to 'insiders' in a given social situation who are able to pick up on the variegated subtleties of meaning because of their intimate shared knowledge of the social conventions, language and informal codes being used for communication with a specific social group" (Cloke *et al.*, 2004: 309)

Then again, being acquainted with the experience of writing a dissertation and some of its academic 'conventions', although in a different national and disciplinary context, makes me not convincingly either insider *or* outsider. In the end, perhaps, it is not even necessary to determine exactly how much of an insider I am in this research project. The combination of still being surprised by elements in geography as a discipline on the one hand, and by research and teaching practice in the department and speaking to and getting to know current and former staff members and students on the other hand provides a workable balance between my own distance and nearness to my research topic.

In terms of the methodological challenges of nearness and distance, dealing with temporal distance is inevitable for historians and historical geographers. Understanding the past through a contemporary mind based on objects, texts and – if lucky – personal memories and reflections, is a fundamental topic for historiographers and other researchers. Within the disciplines of history, human geography and anthropology, the epistemological question of how a researcher actually understands or makes sense of 'the world' is a central one. In *Practising Human Geography*, the conceptual analysis of Gregory on the 'translation' between researcher and researched is described as follows:

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"He contemplates this issue chiefly in terms of the temporal distance that confronts historical geographers ... but he accepts that the 'distance' between researcher and research subjects can arise for other reasons too, perhaps spatially (as 'us, here' research 'them, there') but often due to social, cultural, bodily and other differences between the 'positionalities' of researcher and researched." (Cloke *et al.*, 2004: 329)

The distance of the historical geographer is thus one of the ways 'distance' appears in the relationship between researcher and researched. The historian and anthropologist who potentially share a mode of understanding in the form of a 'conversationalist approach', initiating 'conversations' between past and present or 'here' and 'there', must always acknowledge the 'messy thing' that is meaning is and to what extent meanings can or cannot pass untrammelled between contexts (Cloke *et al.*, 2004). And, as Dening parallels the two disciplines of anthropology and history:

"I have been teased in recent years by how one could better do this anthropology of the past. I cannot escape the consequence of the directions I have already taken. Anthropology's vision is built not on the 'primitiveness' of the native but on the advantage of the dialectic between distance and familiarity." (Dening, 1995: 62)

Nearness, accompanied perhaps by familiarity, is an entrance to understanding, but needs the dialectic, the conversation, resulting in a constant balancing act (Cloke *et al.*, 2004).

The theme of nearness has a profound impact on the ethical considerations in this research project. Ascribing this importance of the conversation, excavating the relationship between researcher and researched, should be followed by some attention to the researcher themselves. The researcher's own positionality is another form of how the themes of distance and nearness appear in research. For me, the temporal and spatial nearness also entailed that some of my peers, other PhD students in the geography department, were authors in the archive: some of them had written their undergraduate geography dissertation a few years earlier and so their knowledge productions ended up in the archival collection. Small talk about my research project sometimes led to startled faces: "oh no, so you are going to read mine?" I could comfort many by explaining my sampling strategy, which meant that I would not read their dissertation from cover to cover, but in some cases this conversation about sampling *did* lead to the conclusion that their undergraduate dissertation would be part of the in-depth data collection and, thus, analysis. Although these exchanges were light-hearted, and no 'serious' issues were brought up, this nearness evoked some important ethical considerations. How to deal with the dissertations of people I knew? And what about anonymity?

Ethical considerations concerning nearness

It is vital to distinguish formal ethical requirements from the informal and yet perhaps even more important 'moral' requirements of this research. The formal requirements include the necessity of developing an information sheet and consent form for the interviewees (see section about interviews). Because of the formal ownership of the undergraduate dissertations lying with the university, consulting these archival sources included no procedural approvals, although here the 'nearness' issue again came into play. The choice not to anonymise the dissertations in this research is based on the recognition of the student-geographers as independent, active researchers: not just a number, but actual people with names, and bringing their own positionality to the research they are undertaking. The theme of authorship is a prominent one in the field of intellectual history. Authorship of dissertation authors are credible geographers and geographical knowledgeproducers, and therefore should be treated as such. Naming and referencing these producers of knowledge should be done in a similar way.

There is one remark that should be made in the discussion of authorship. The dynamic between both seeing every individual student who wrote her or his dissertation as an independent researcher, as well as constantly be aware of the social and institutional context in which the dissertation came about, raises the question: whose words, ideas, definitions, and thoughts do I read when I am reading a dissertation? Undergraduate students were influenced by, and reciprocally influenced, classmates, supervisors, markers, the offered courses in the undergraduate curriculum and university rules and guidelines. Such influences can of course also be seen in the research produced by 'established' academic geographers in speaking to direct colleagues, students, at conferences and getting reviewed by journal editors, but are even stronger in the case of undergraduate students. It might be hard to contradict things one has learnt from one's direct supervisor, or to question an idea broadly carried out in the undergraduate curriculum, especially when one is (often) both significantly younger than the ones with the 'final judgement' and dependent on graduating in a financial (fees, loans) and social (expectations of peers, parents, oneself) way. It is a very strong playing field of power relations that cannot be ignored:

"... when we approach a printed text from the past, we need to consider not just who wrote it – the biography of the author, their aims and ambitions – but also when and where the text was written and what that tells us of their notion of being an author and what could and could not be done/expressed by an author."

(Mayhew, 2007: 26)

Despite the decision not to anonymise the dissertations, I took several personal guidelines into consideration during the stage of data collection as well as in any forms of publication of this data, whether it was on Twitter, at conferences or in written publications. Moreover, to underline, the emphasis of this research project is explicitly not on the *quality* of the dissertations. Although for some dissertations the markers' reports are attached, I chose to use these reports to see what kind of aspects markers emphasised in the feedback, but did not question, or externally communicate, the final grade or my own view on this grade in any way. Especially with dissertations produced by former students that are either still postgraduate students or early career researchers, I consciously was extra careful and considerate in my ways of referring to their dissertations or using their dissertations as examples. Avoiding any potential negative impacts on the studentresearchers who produced the archival collection, no matter how small, was continuously the primary norm.

Contextual research in the University Archives

The undergraduate geography dissertation archive is central to this research project. However, to understand the educational and intellectual context behind the production of these dissertations, I wanted to explore changes within, for instance, the relationship between students and supervisors, the content of the undergraduate curriculum and the intellectual emphases of and individuals appointed to the undergraduate teaching staff. One method of collecting contextual data has been through interviewing some of the former and current staff members: this part of the data collection is discussed in a later section of this chapter. Another method has been through the consultation of the University of Glasgow Archives. Located at Thurso Street, a ten-minute walk from the geography building, this archive accommodates an extensive collection of sources, including records that go back to the foundation of the University of Glasgow in 1451 (Archive Services, University of Glasgow website). After sending a general outline of the aims of my research and the nature of archival information for which I was looking, the archivists at the University Archives helped me greatly in locating collections that could be of interest to me. Two suggestions were the collection of exam papers and the University Calendars. The collection of exam papers exposes a wonderful overview of changing language and academic 'accents' and I do feel like an examination of this material would deserve more attention than I was able to give it due to time restrictions. In my visits to the University Archives, I collected a number of photographs of exam papers and used the

content of the questions as contextual data. The second suggestion was the collection of University Calendars. This collection was useful in tracing information about graduation requirements, courses given in the curriculum and some information on syllabi (mandatory literature for students). Comparing the Calendars from different years provides a valuable timeline of institutional, educational and curricular changes. For instance, in the University Calendar for the academic year 1981-1982, the undergraduate dissertation process is mentioned as follows:

"All Single Honours students will, in the summer vacation between their Honours years, make an independent study of an approved area or topic and write a dissertation for presentation by a specified date" (University Calendar 1981-1982, p.12. University Archives, University of Glasgow).

Data collection

Sampling

Engaging with an archival collection consisting of 2614 comparable but distinctive sources meant that a sampling method had to be adopted. How much of the archive do I need to pick off physically from the shelf, see and read, before I 'know' the archive, grasp the 'essence' of the collection and am able to speak sensibly, even authoritatively, about this collection of sources as a whole? The ideal option, perhaps, is all sources in the archive. That way, I would be certain not to miss out on that one extraordinary piece of work: that funny one with the surprising writing style, and the dissertation that is notable only for exemplifying an exploration of the limits of exactly how much work is necessary to secure a pass mark. Obviously, this exhaustive option was not feasible, in practical terms. Another option is to read a number of dissertations per yearly cohort, a selection maybe also based on a proportional representation of topics of human and physical geography or one random sampling method from each cohort. On reflection, this option fell out of favour, since it risked a too 'atomistic' approach. Indeed, given my aim to investigate the relational context of which 'small' knowledge producers were a part, the role of the university department overall, with its staff members, curriculum and rules and regulations, as well as the big 'outside world', and one particular category of 'relations' that I considered especially important in this regard is the role of peers, meaning fellow students who share the same educational context, perhaps the same study rhythms and routines and social lives. These relationships with peers are perceptible in dissertations, notably in the Acknowledgements. By studying the dissertations of a complete yearly cohort of students, it is hence possible to discern the relational connections within the cohort, rendering a

more sociological perspective on this production of geographical knowledge more achievable:

"The most important of these [geographical elements of cohortness] is the sense of thrown-togetherness – or, as we have specified, *synchronicity* – that emerges in the ways in which individuals are corralled into institutional and other collective spaces. We have been at pains to emphasise how the everyday, emotional, material experience, and *performance* of that synchronicity can at one be accidental and deliberate, and can at once lead to both senses of belonging and exclusion." (Brown & Kraftl, 2019: 14)

My further decision to consult one out of every four-year period as a sample for this research was based on the idea that this selection would encompass one cohort of every 'generation' of the four-year undergraduate degree programme. All in all, this method led to a sample numbering 645 dissertations, from the total of 2614 dissertations in the cupboard-archive. I have distinguished cohorts for sampling, independently from any concern for whether the students see *themselves* as members of the cohort and this membership as a part of their 'identity'. I simply assign cohort status to all the former students as an organisational, structuring device. However, as I saw at the reunion of 'the Class of '94' and as Brown and Kraftl (2019) state in their paper on 'cohortness', it is a reasonable structuring method because many *do* feel part of a cohort and there is still space to approach the concept from a more 'accidental' or exclusionary perspective.

Although the option of studying a certain number of dissertations of each sample cohort (for instance, ten of every cohort) was also considered, I eventually decided to study each independent cohort 'in one go'. So, dependent on the size of the cohort, I would focus for a few days or a few weeks on one cohort of geographers-in-the-making, reading and analysing every dissertation produced by that cohort. This way, noticing resemblances, trends, social relationships and other connections within the dissertations would be easier. Noting these elements already in the data collection stage of the research, before conducting the in-depth data analysis, made it possible to be flexible in the choices of what – and, just as important, what not – to note or photograph. This flexibility had a potential downside as well. Not every cohort was seen through the same lens. Taking with me the experience of my earlier reading of other cohorts meant that at some point I sometimes already 'knew what I was looking for'. Being surprised by the content became progressively a more difficult exercise. This experience, of somehow being saturated with the data, is perhaps inevitable. Moreover, some will argue that this saturation is what one should be looking for in undertaking qualitative research: "Decisions about when further data collection is unnecessary are commonly based on the researcher's sense of what they are

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hearing within interviews, and this decision can therefore be made prior to coding and category development" (Saunders *et al.*, 2018: 1899). Especially in the final two or three cohorts that I analysed, this sense of saturation became more obvious to me. This was something that I had to consciously acknowledge, interpreting this feeling as a confirmation that my data collection was indeed well advanced, while still being open to the new inputs of the particular dissertations that I was still reading through. By the choice of studying cohorts as particular unities, with regard to consistency, this meant that I really had to be sure I would be able to study each and every dissertation in the sample cohorts: definitely a substantial commitment in terms of time spent engaging with the dissertations. In the second year of this research project, the data collection based on the dissertation archive hence took up a vast amount of time. The dissertations are the empirical heart of this study, so I had to engage with them fully, openly and committedly: not to have done so would have betrayed the very purpose, principles and indeed 'ethics' of my project.

As discussed in the previous section, the collection of dissertations in the archive is not entirely complete, and a few individual dissertations are likely missing (reclaimed by students, 'borrowed' by staff members or lost during the many relocations of the archive). There is, however, sufficient reason to be confident about the 'close-to-completeness' of the archive and that the departmental practice was to retain *all* dissertations for every cohort (rather than perhaps just a subset). For instance, for some of the 'older' cohorts (from the 1950s and 1960s) there were overviews of all grades for all students enrolled in the undergraduate programme. The number of grades awarded per cohort was crosschecked with, and found to match almost perfectly, the number of dissertations in the archive for that cohort. Changing trends in numbers of students in every cohort also parallel the experiences of some former and current staff members (as related mainly as part of interviews that I held, discussed later in this chapter), and the numbers of dissertations are in line with the growth of the Glasgow Geography degree programme over the years. Furthermore, for the cohorts that contained markers' reports, it is also evident that the final grade did not influence whether the dissertation was preserved or not. It is thus a combination of formal sources as well as informal conversations that confirms the tradition to preserve the dissertations of cohorts in their entirety with no selectivity in what was kept and no discarding of, say, 'weaker' performing dissertations. The implication is that the quantitative analysis of the dissertations in the chapters that follow, including the graphing of absolute numbers and percentages, is indeed appropriate and justifiable.

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Part of the sampling method, besides the decision to study one in every four cohorts as a whole, was deciding on the order of going through these sixteen different cohorts. Although a chronological order was considered, I chose to 'hop' through time, which led to the following sequence of analysed cohorts: 1974 – 2006 – 1990 – 1958 – 1962 – 1954 – 1994 - 1970 - 2010 - 1982 - 1998 - 1986 - 2002 - 1966 - 2014 - 1978. The consecutive 'block' of three from 1954, 1958 and 1962 were analysed one after another because these cohorts were relatively small. This irregular non-chronological approach was chosen to encounter a diversity of 'types' of dissertations in the earliest phases of my data collection stage as well as in the later phases. This method of 'time traveling' in the data collection stage was very helpful and valuable. Whereas the first three cohorts studied (1974, 1990, 2006) were used as a pilot stage in which the recording template that I devised (see below) was still very much under constant development, the effect of switching between different years with different intervals made it possible to see what kind of smaller differences and similarities were perceptible. Simply recording thoughts such as 'wow, in this 2002 cohort the fear of crime and its gendered context is a 'hot topic', whereas the previous cohort I have read, 1986, was also about crime but without emphasising the emotional and gendered aspects' was valuable in the larger process of relating these dissertations to developments in the academic discipline as a whole, and then becoming comfortable with some rudimentary timeline of ideas, concepts and approaches. Besides the individual templates that I constructed for every sample dissertation encountered, I hence also produced a short summary of each cohort after analysing the cohort as a whole. For instance, my short notes on the cohort of 2002 look like this:

2002 dissertations

- Many quotes from interviewees/participants;
- Almost no statistical analysis;
- Field diaries
- Every dissertation preceded by an abstract;
- Often recurring themes:
 - o 'outsiders'/'others';
 - tourism/sustainable tourism;
 - 'representation' (in museums/photos/postcards)

Figure 6 Example of short summary produced after analysing a cohort in its entirety These summaries are very short, and merely used as supportive tools to make the later

phase of actual data analysis a bit easier: it was a way to 'aide my evolving thought' (Crang,

2003: 130). The main 'result' of the data collection based on the undergraduate

dissertation archive, however, was recorded in the templates completed for every sampled dissertation.

Template

Having decided which sources from the dissertation archive to include in the in-depth analysis, the next stage was to think about the question of how: how will I approach these sources, what do I want to get out of this research? And how do I pay attention to the uniqueness of each individual dissertation without losing sight of the 'bigger narrative' about the places of student voices in the disciplinary history of geography? In practical terms, I needed to create a basic template for my note-taking for each dissertation in turn - creating my own 'archive' of mini-reports on each dissertation which itself became the core resource for the research analysis. In the aforementioned 'pilot stage' of collecting data from the cohorts of 1974, 1990 and 2006, the template changed to some extent. Starting with the cohort of 1974, questions about the explanation of methodology, for instance, did not seem very relevant. Of course, the students of 1974 adopted a certain method to their research project, but the dissertation, as the final 'product' of their research, did not include any explicit

NameTitleCohortStructure?Aim/research question?Explanation of methodology?Conclusion/results?Visuals?Mentioning of process?Mentioning of supervisor?Other helpers/collaborations?Disciplinary
awareness/conceptual framing?Particularities?

Figure 7 Final version of the template

explanation of, nor reflection on, their methods and methodology. For the second cohort studied in the pilot, 2006, this issue differed significantly. A dedicated methodology chapter was included in every single dissertation from this cohort.

This chapter usually included both the considerations of several methods, a justification of chosen methods and often a reflection on the efficacy of these methods. In this cohort, the distinction between either 'just' adopting methods or presenting an explicit methodology became obvious. The examination of three different cohorts across three different decades proved to be a useful approach to the development of a practical framework, in the form of a Word template, applicable in the stage of primary data collection.

Two examples of completed templates are displayed in Figures 8 and 9. The first one is a template based on a dissertation from the cohort of 1970, the second from the cohort of 2010. These examples demonstrate how I used this template in the archival research. As can be seen, not all questions are answered for all dissertations. For many of the earlier dissertations, roughly from the 1950s up to the 1970s, questions such as the explanation of methodology and the question about the research process are not answered since there is nothing to say. The same applies to the question about the supervisor. Moving on to one of the more recent cohorts, 2010, often I was able to answer most of my questions, but not necessarily all of them. Supervisors are not always mentioned and the explanation of methodology can still be fairly limited. The use of a uniform template as a mould to describe the source materials can be a limiting factor, of course, but by adding the 'particularities?' question the peculiar writing styles, examples and materialities of individual dissertations were not left aside. Furthermore, the 'broad' questions about structure, visuals and process provided enough space to engage with each dissertation as a unique piece of work. Another risky feature when using such a template is that sometimes the dissertations of an older vintage seem 'less complete' than the more recent ones. It is really important to be aware of not falling into a teleological view on this collection of dissertations. The changes to including chapters about methodology and research process are not necessarily an indication of increasing quality of the dissertations, but instead suggest that the requirements about what should appear in a dissertation has changed over time. The focus of this research project is certainly not on the quality of the dissertations, and in the comparative analysis of dissertations from different cohorts and decades questions about quality is not discussed – although it has to be admitted that better dissertations are more likely to have included fuller, more aware and interesting commentaries on, for instance, matters of disciplinary focus and methodological innovation. The template was connected to a digital folder per cohort with photos of pages from the dissertations. Where I took a photo that was related to something mentioned in the template, I added '[photo]' to the template. Other photos in the digital folders had a file name structured as follows: '[cohort year][student last name][description of photo]; for instance, "1994 Shaw Sediment trap design colour photos.jpg". The collection of photos comprised approximately 300 photos, including photos from front pages, pages of contents, questionnaires, field work photos, graphs, maps and acknowledgements.

Name George Brown

Title

The Ffestiniog Region

the parishes of Ynyscynhaearn, Ffestiniog, Llandecwyn, Llanfrothen, Maentwrog and Penrhynde udraeth

Structure?

Aims of the Study, Location and Extent of the Area, [12 chapters on e.g. Geology of the Region; Climate of the Region; Forestry], The Region Today and in the Future

Aim/research question?

"This interaction between Man and the environment gives the area its character and uniqueness. The study aims to express and explain this "uniqueness" by means of a detailed examination of all the elements of the landscape, both physical and human, which when combined produce this distinctive and intangible property." P.1

Explanation of methodology?

Content/results?

"In conclusion, this unique and distinctive region is destined for steady and controlled economic growth through a more rational use of the environment for the benefit of both inhabitants and visitors. It is experiencing a great transition, and will emerge as a region in which economic development and exploitation can be reconciled with amenity value and conservation." P.26

Visuals?

Mentioning of process?

Mentioning why this subject?

"Of all the regions in the British Isles, North Wales is to the geographer one of the more fascinating and distinctive." P.1

Mentioning of supervisor?

Other helpers/collaborations?

Farmers; National Agricultural Advisory Service; N.A.A.S. Caernarvon; Forestry Commission; Merioneth County Council Planning Department; Portmadoc Urban District Council; Central Electricity Generating Board, Trawsfynydd; retired headmaster, Portmadoc; "Mr. and Mrs. Parry, Tremadoc, for their hospitality and assistance in tracing useful information, Native Welsh speakers, they were of great value in ascertaining the correct spellings and pronunciation of place-names." P.32

Disciplinary awareness/conceptual framing?

Particularities?

Key words: region

Figure 8 Example of template filled in for a dissertation of the 1970 cohort

Name Olivia Lam

Title

Cultural conformation or ethnic confirmation? A study of Chinese identity formation in Britain

Structure? -

Aim/research question?

"This study aims to address the issues surrounding the Chinese individual's sense of identity in Scotland. By considering the Chinese migrant and the British born Chinese individual's lived experience in the Chinese Diaspora in Scotland, the focus will be on the individual's perception of their place within British society by considering British and Chinese as ideologically separate ethnicities, thus exploring the extent of influence of British culture has on the self or loyalty to their Chinese ethnic heritage, to interpret their identity within the dominant British society." P.3

Explanation of methodology?

In-depth interviews \rightarrow 8, with long established Chinese in Scotland Questionnaire \rightarrow 50 respondents, 32 questions

Conclusion/results?

Assimilation, the emergence of hybrid identities.

"In conceptualising the self within the Chinese diasporic setting in Scotland, this study has challenged the idea of an essentialist, homogenous Chinese identity and has lead to the consideration of an anti-essentialist, individualised identity." P.32

Visuals?

Bar charts for questionnaire results

Mentioning of process?

"There were potential respondents who refused to participate in the study as they stated their disinterest in the research topic, which highlights the limited sample of informants as it suggests these individuals felt their Chinese identity is insignificant and their Chineseness does not play an important role in their daily lives." P.16

Mentioning why this subject?

""Where are you from?" "I'm from Scotland." "No, where are you *really* from?" To be asked this deceptively simple and innocent question, invokes a compulsion to explain my position as, to what Ang describes, "a deviant vis-à-vis the normal" (1993:9). To this adamant inquiry into my origins, my standard story has become "I was born in Edinburgh but my parents are from China", thus introducing a plausible starting point for the discussion on the subject of identity." P.3

Mentioning of supervisor? Other helpers/collaborations? -

Disciplinary awareness/conceptual framing?

"The notion of ethnic identity has become a polemic issue in recent years." P.5 "A dominant theme in the literature of identity formation is the concept of lived experience, as exemplified by Rose's 1995 study on place and identity." P.6

Particularities? Questionnaire in appendix

Key words: identity, ethnicity, outsiders

Figure 9 Example template filled in for a dissertation of the 2010 cohort

Quantifying the archive

As addressed earlier, the collection of 2614 dissertations could not all be read from cover to cover in its entirety. To create a manageable coverage, this research project entailed an in-depth analysis of sample dissertations, comprised of one in every four cohorts of dissertations. This qualitative research method provides lots of data covering a range of themes, but a quantitative analysis of this archival collection can offer a complementary perspective (Elwood, 2011) on the changing practice of 'doing geography' and 'becoming a geographer' over time. Enriching the in-depth analysis with quantitative data based on the breadth of the archive, might be interesting in trying to answer questions such as:

- How has the ratio between physical geography dissertations and human geography dissertation changed over time?
- To what extent have students had the chance, or realize the ambition, to travel to other countries for their first independent research project?
- Is it possible to see subdisciplines within the discipline of geography grow and/or shrink?
- Is there an increase of female students, as well as female supervisors, perceptible over time?
- How did the size of cohorts develop, and is it possible to relate this to the accessibility of higher education?

The difficulties with this quantitative data collection are twofold. First of all, the numbers do tell *a* tale, but it is not necessarily *the* tale. Shifts in subdisciplines might indicate changing disciplinary trends, for instance, but they could also point at changes in academic staff (and their respective expertises) within the department. So, these questions cannot be fully answered by the numbers, but they may still give us clues that *something* has changed, if without answering the why or how. The second difficulty with the quantitative data collection is the room for interpretation. It can be tricky to ascribe each dissertation to one or even two subdisciplines. It is also difficult and, in addition, perhaps ethically incautious, to ascribe students' genders based on their first name. The quantitative data gathered is thus not always complete, right and fair. Why, then, still include this quantitative layer in this research? And how is this deficient analysis still valuable?

To answer this, it is important to describe what kind of quantitative data I exactly assembled. There were six different variables that I collected for every dissertation in the archive, besides the already available data (student names, cohort, title). The variables that I added to this existing database were:

- Presumed gender of the student;
- 'Branch' of the geographical discipline (human geography/physical geography/both);
- o Subdiscipline
- Three variables concerning study area
 - International/Scotland/UK;
 - Country;
 - Regional area

Merging the existing archival inventory with this newly collected data in one Excel document resulted in one extensive data set that I could use in several quantitative analyses. The Excel file looked as follows (green-marked data is collected/added by me, the other columns were already part of the archival inventory prepared by Lowdon):

m/	f Surname	First name	Year	Subdiscipline	Branch	and/UK/Internat	Country	Area	Title
m	Ross	Murdo	1996	Tourist	Human	International	France		The evolution of selected coastal towns in Brittany, France
f	Ross	Melanie	1996	Coastal	Physical	UK	England	Sussex	Sand dune fencing at Camber Sands, Sussex
m	Scott	Murray	1996	Land use	Physical	International	Cyprus		Is terrain type the dominant factor over land use in northern Cyprus?
f	Scott	Amanda J.	1996	Social	Human	International	USA	Texas	The Hispanic community in Brownsville, Texas

Figure 10 Example quantitative data collection undergraduate dissertation archive Dissertations that were part of the sampling collection also included columns with the supervisor(s). The seemingly straightforward task of assembling the information about students' genders was more complicated than expected. First of all, by not being able to use additional administrative data from the university (student application data, for instance), this data collection had to be based on the actual dissertations. Often the only information in the dissertation that indicated one's gender was the first name (if mentioned) on the title page. Besides the fact that some names are not gender specific, it felt a bit blunt not to use students' own sense of identity, nor be inclusionary to non-binary gender identities. This collection phase and is merely used as a detail revealing something about the changing diversity of geography students at the University of Glasgow.

Second, assessing the geographical study area for dissertations was relatively easy for many of the earlier dissertations in the archive but was often more challenging for later dissertations. Indeed, many of the earlier 'regional studies' had the actual study area in the title of the dissertation. In the reconstruction of study areas, it is important to distinguish the dissertations that are first and foremost *about* a certain area, from the ones that emphasise a specific area as an example or case study, and where the actual research topic and research question is itself not narrowly focused on that area. I still elected to try to reconstruct the study areas in these latter cases, to enable the analysis of the 'spatial' element of the dissertations-in-the-making: where did students travel to? Did they stay close to home or travel far, crossing national borders? Quantitative data about study areas might indicate salient changes with regard to the spatiality of undertaking research, or fieldwork, for these first independent research projects. I used three different methods to collect the data about study areas. For the sample cohorts, I noted the country and specific area during the qualitative data collection. For the dissertations not part of these sample cohorts, I first tried to determine the study area based on the title, which was an option for about two-thirds of them. For the remaining approximately 400 dissertations that were not part of the samples and did not include the study area in the title, I went to the archives with a printout of a list and manually looked for the study areas in each dissertation. The data noted about the study areas were, as said, primarily if it was about a study area in Scotland, anywhere else but within the UK, or international. Furthermore, a few dissertations were categorised as 'global' or 'virtual'. Specific more local research areas were noted for the dissertations about an area in Scotland; local council areas were used as unities. For dissertations about an area not in Scotland, so elsewhere in the UK or in another country, the specific country was mentioned in the 'country' column of the quantitative data Excel document.

Assembling and determining the subdisciplines was an even more complex endeavour. This process consisted of much deliberation with both fellow PhD students and supervisors. First of all, it is important to address the subjectivity and probably less-than-perfect end result of this process of assigning dissertations to subdisciplines. It was a process of going back and forth in establishing a list of the subdisciplines that could meaningfully be discerned from the data. There is no agreed definitive delimitation of such subdisciplines in geography. In the end, the list (see Figure 11) consisted of 24 subdisciplines, covering both human geography

Agricultural	Hazards
Biogeography	Historical
Coastal	Land Use
Conservation	Political
Cultural	Population
Development	Regional
Economic	Rural
Environmental	Settlement
Fluvial	Social
Geomatics	Tourist
Geomorphology	Transport
Glacial	Urban

Figure 11 Subdisciplines used in quantitative description of dissertations

subdisciplines as well as physical geography subdisciplines. The list includes many commonly accepted subdisciplines, recognisable in chair titles at university departments and in titles of academic journals and conferences, but some difficult choices had to be made. For instance, there are no subdisciplines of 'health geography' or 'animal geography', even though these subject areas are nowadays commonly recognised as distinctive subdisciplines of geography. As is demonstrated in the empirical chapter that covers the changes and trends of dissertations relating to certain subdisciplines, some of these choices have led to relatively large numbers of dissertations being ascribed to certain subdisciplines. For instance, social geography turned out to be the 'largest' subdiscipline, even though within that subdiscipline there are still potentially many more subdisciplinary distinctions to be made. Furthermore, approaches, such as feminist geography or humanistic geography, were not included here, because these are categories making distinctions within a conceptual realm, not within the substantive foci (what is getting studied), although I made an exception for regional geography. Regional geography has often been explicitly conceived as contra subdisciplines (meaning 'systematic geographies', as is discussed later), and as the meeting point where subdisciplines come together to enable regional synthesis. The regional geography dissertations, however, are a separate 'subdisciplinary' category, because such dissertations are distinctive from all other dissertations because they were dissertations for a separate degree programme, as is discussed in Chapter 4. Other conceptual approaches are of course addressed in Chapter 6. As said, in no way is this categorisation claiming to be without errors. However, even this set of 'imperfect' data is valuable in discerning certain trends and developments both within individual cohorts and across different cohorts.

Interviews

During the 1970s and 1980s, oral history emerged in the field of social and cultural history. In the 1990s, the methods of oral history entered the discipline of human geography as well (Riley & Harvey, 2007). Oral history has received a lot of criticism, mainly about its reliability, the personal bias of interviewers and interviewees, the selective nature of memory and feeling of nostalgia and more (Riley & Harvey: 356), but advocates of using oral history argue that subjectivity is a strength, not a weakness: it reveals clues about the relationships between past and present, memory and identity, and individual and collective identity (Riley & Harvey, 2007: 346). Whereas archival research is the primary method of my research, expressed both in time spent and in use of data, the choice also to interview several individuals was made to provide further informed contextualisation of the archival data. Oral history by means of interviews, offers the possibility to seek for evidence, clues and additional information: "Oral historians can think now as if they themselves were publishers: imagine what evidence is needed, seek it out and capture it" (Thompson, 1988: 56). In my research, this meant that I was able to collect memories of actually *doing* the

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dissertation research as well as *doing* the tasks of a dissertation supervisor, advisor or marker, beyond the more formal, recorded version of this process.

The interviews were held after the archival qualitative and quantitative data collection were completed, but before the qualitative data was thoroughly analysed. This way, I had a general idea who to interview and what kind of questions to ask, with still enough time to plan any additional interviews or smaller archival inquiries if needed. In total, I held 6 interviews (see Table 1).

Conversation with:	Years active within the department	Roles held within the University	
John Briggs	1979-2018	Professor of Human Geography; Head of Department; Clerk of Senate; Vice- Principal	
Peter Chung	1990-present	Microanalyst	
Gordon Dickinson	1963-1967 (student), 1970- 2010	(Senior) Lecturer Physical Geography	
Anne Dunlop	1969-1973 (student), 1986- present	Student; Tutor; Lecturer; Learning & Teaching Administrator	
Trevor Hoey	1992-2019	(Senior) Lecturer; Professor of Numerical Geosciences; Head of Department/School	
Chris Philo	1995-present	Professor in Human Geography; Head of Department	

Table 1 Overview interviewees

I aimed for staff members who worked or had worked in the department for a considerable amount of time and for a balance between human and physical geographers. The possibility to interview staff members who had also been undergraduate students within the department – and thus also having dissertations within the undergraduate dissertation collection! – felt like a brilliant opportunity to interview people who were able to talk from a double role of both student and staff member within the same department. Overall, the interviews covered individuals that were involved in the department in every decade from 1960 onwards: combining this material with the era I am looking at (1954-2014), means I only lacked an interviewee holding a role in the department during the 1950s.

An interview is a 'local and immediate encounter' (McDowell, 2011: 159). As in every aspect of this research, the theme of nearness strongly influenced the interview planning

as well as the interviews themselves. Interviewing people who are part of the department's past and/or present, given my own affiliation with that same department, meant that recruiting participants was relatively straightforward: I could approach intended interviewees that were still working within the department by e-mail and face-to-face. Despite this nearness, I experienced some reluctance in the cases where I had e-mailed staff members that I did not know personally and who did not know me. Presumably the interview request was then too random or became lost within mailboxes full of other requests and responsibilities. In these cases, as well as in the cases of contacting former staff members, the help of my supervisors was requested: a message from a former or current colleague perhaps being less easily overlooked than a direct request from a stranger. All interviews were held within the East Quadrangle building or the Gregory Building, the two departmental buildings. For current staff members, the interview was

Interview with: Date & Time: Location:

- 1. Own history at GES
- 2. Experience in assisting dissertation projects by undergraduate geography students
- 3. Changes in topics/methods?
- 4. Formal or informal changes in what is *expected* of undergraduate dissertations (different requirements, norms)?
- 5. Memories of outstanding/surprising dissertation project?

Figure 12 Information on print-out used in every interview

held in the interviewee's own workspace; former staff members I interviewed in a meeting space. In preparation for every individual interview, I compiled a list of all undergraduate dissertations supervised by the interviewee that were part of the sampling frame. This was obviously not a complete list of supervised projects, but it was something that did not cost me a lot of time and I expected it to be a good aid in the interview. Before every interview I made sure that the participant had received the information sheet about my research. At the start of every interview, I provided the participant with a printed information sheet as well and talked through all the elements of the information sheet (see Appendix 2 for the Information Sheet). Afterwards, I handed the participant the consent form, again with an explanation of what the consent form implied (see Appendix 3 for the Consent Form). The fact that the interview data would not be anonymised was emphasised as well as the use of a phone as a digital recorder. Both the Information Sheet and Consent Form were approved by the Ethics Committee of the School of Science and Engineering (see Appendix 4 for Ethical Approval Letter). No problems occurred in any of the interviews concerning these

aspects of the interview. Before every interview I also printed out a three-page template form I created to take notes during the interview (see Figure 12). This print-out included five headers with the general themes I wanted to discuss with every participant. This was used an additional form of recording the interview, besides the transcription of the audio recording.

I planned to talk about these five themes with every participant but aimed for a 'conversational and informal tone' (Longhurst, 2003: 105), 'a dialogue rather than an interrogation' (Valentine, 2005: 111). Such semi-structured conversational interviews leave enough space to ask divergent follow-up questions, with keeping some focus on the overall direction of the interview. In practice, every participant had enough to tell me, but was also aware of the fact that I had multiple themes that I wanted to discuss. I think the constitution of a group of geographers as participants as well as the foci of my inquiry led to a very welcoming, supportive and positive dynamic in every interview.

The interviews, ranging from 20-50 minutes in length, yielded a variety of anecdotes, personal memories, factual data and reflections. As soon as possible after the interview, I scanned the signed consent form and transferred the audio file from my phone to the OneDrive of my University of Glasgow account. On most occasions, I also transcribed the interview on the same day. The conversations covered some factual information as well as informal and more subjective experiences, and both these elements turned out to be really helpful in contextualising the data collected in the archives. My position of being partly insider (PhD student in the department), partly outsider (I have never been an undergraduate student here nor a dissertation supervisor) was in no way a negative or complicating factor in the interviews: I was 'outsider enough' to ask for more explanation of background information when needed, but 'insider enough' to talk in detail about changes within geography or within the department's history. One interview took place in a fairly early stage of my research project, a year before I conducted the other interviews. Looking back at that interview, I then lacked a thorough understanding of the kind of information for which I was looking, which made me perhaps a too insecure interviewer, failing to ask good follow-up questions. Deciding to wait a while before I would continue conducting interviews was a good decision. I needed more understanding, knowledge and experience within my field of research before I could function well in this 'space-inbetween' being an insider and outsider (Dwyer & Buckle, 2009).

Data analysis

"There is a certain moment of pleasure that often occurs in projects when we complete fieldwork and with satisfaction look at the mass of accumulated materials — be they questionnaires or field notes, tape or transcripts, copied documents, pictures or whatever — and think of what we have achieved. This is the lull before the storm, the moment before a rising anxiety starts tapping on our shoulders (well, it does mine anyway) and asks what are we now to do with all this stuff. How are we to turn this mass of material into some cogent, hopefully illuminating, maybe even impressive, 'findings'? And, of course, we realize the one thing they are not is findings — findings, like questions, require work. It is better to think that through analysis we make interpretations, not find answers." (Crang, 2003: 128)

The research of the archival data collection resulted in a quantitative spreadsheet of 2614 items – all dissertations in the cupboard – as well as a collection of 642 – the sample size – of filled-in templates, covering a half page up to two A4 pages each. I structured this 'collection of a collection' in two different ways: first, one Word document per cohort year; and second, one Word document per template question. This way it was possible both to study one cohort at a time and to explore a broader theme through the years, such as disciplinary awareness or methodology. This duplication of the data set was chosen to analyse the data through both a 'temporal lens' and a 'thematic lens'. The second document (structured by template question) was thanks to the specific question, already organised by an 'overarching code'. My coding practice was therefore different in character from many forms of coding found in other qualitative research projects, precisely because this data collection as a whole was already the result of an 'on-the-spot-orientation' (Kitchin & Tate, 2000). There was no need to 'filter out' meaningless unimportant details or examples: during the collection of the data, I had already broadly done this. What had to be done with the data, however, was the 'entitation': "combing through them [the data] to ascertain exactly what is there; laying them out, rearranging them, classifying them, putting individual items of data into boxes and lists; perhaps going on to detect patterns in the lists and boxes" (Cloke et al., 2004: 234). By means of immersion and close reading, certain comparisons and connections indeed became much more obvious.

In the first set of the data collection, the data sorted per cohort year, I focused on identifying particular dissertations that stood out: some were very surprising, some revealing, some very innovative for their time era. I also identified dissertations that were – without the negative connotation of the word – average, or representative, for its cohort: dissertations that had a subject that was regularly researched, had a predictable but steady structure, and with a maybe not surprising but well-justified conclusion. This way, I

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developed an overview, both on paper and in my own conceptions of the 'narratives of the archive', of how the geographical knowledge productions, and their presentations in the many undergraduate dissertations, changed over time. The second set of the data collection was structured by the template questions. Because I collected lots of direct quotations from the dissertations, it was possible not to only see how, for instance, the content of the research questions changed over time, but also how the language, presentness of the 'I' of the student-researcher and the presupposed aim of what 'should be done' in a dissertation had changed. Such themes are discussed in subsequent chapters. Because I studied the dissertations as knowledge productions, as paper traces of the social and intellectual activity of doing research, language and discourse played a fundamental role (Dittmer, 2011: 274). The textual analysis undertaken of the sample dissertations is partly just that: *textual* analysis.¹⁴ However, by the recognition of this embodied, lived experience of research done by a student-geographer in a complex social network of supervisor, markers, peers and family, the data analysis done here goes beyond 'just' the text: by paying attention to the context in which the dissertations were created, it is necessary to look at the social setting that the language 'is deployed in' (Dittmer, 2011: 279). The additional method of conducting interviews supported this data collection and analysis. The transcriptions of the interviews were mainly analysed to look for explanatory reasons: how do changes in the institutional and educational histories of Geography in Glasgow explain changes within the dissertations? Did the arrival of a specific staff member, or a change in the university's or departmental rules and regulations ask for this specific component of the dissertation? The stage of data *analysis* was not obviously distinct from the data collection stage, because, as explained, the use of the template and the notes made after every cohort studied already provided some analytical insights and understanding.

Conclusion

The methodological approach of this research project has been designed to acknowledge, interconnect and justify the complexity of the intellectual, institutional, social and cultural contexts in which my research is grounded. This complexity has led to a constant interplay between approaches and emphases. My selection methods, structuring methods and categorisation methods were all decided on based on their feasibility within this

¹⁴ There are different genres of textual, narrative and discourse analysis – all with subtle conceptual, methodological and technical dimensions. The textual analysis I exercise here is the 'classic' historian's craft of careful reading, looking for patterns, regularities, exceptions and surprises.

multidimensional framework. The practices of my research have been characterised by indepth immersion, close reading and a lot of flexibility in going back-and-forth between methods and sources. The interlinkage of the data collection and analysis, as well as the multiplicity of archives consulted and methods used, meant that the analysis can be summarised as an in-depth engagement with all collected data. Seeing archival research as fieldwork (Lorimer, 2003b) means that I approached the archive as a fieldwork location, asking for active engagement with what is there (Massey, 2003). My positionality as a researcher was shaped by my nearness to the archive, the department and the 'narrators in the archive'. This role of part insider, part outsider provided many valuable opportunities, as well as some important methodological and ethical considerations. Ethics, in general, is in my opinion always interwoven in all elements and phases of research and is thus addressed in several sections within this chapter. A near-archive, a multidimensional thematic, a contextual approach and 2614 undergraduate geography dissertations: in the following chapters, I discuss the results of this extensive archival research.

CHAPTER FOUR

UNDERGRADUATE DISSERTATIONS AND THEIR EDUCATIONAL, SPATIAL AND SOCIAL CONTEXTS

"Thanks must first of all go to Dr. Nienow for helpful advice support and to Mr P. Chung for field equipment. Professor J. Orford of Queens University Belfast and Dr A. Cooper of the University of Ulster, for pointing me in the right direction as far as significant reading material was concerned.

Miss L. Raymond must receive a mention for patience and invaluable computer 'handling' during the formatting of the script. Last but not least my parents for transport facilities to the site and for the provision of a many a 'family' picnic while in the field. My father in particular deserves a mention for holding a ranging pole for long periods of time without grumbling ... much!" (Gamble, 1998: i)

Introduction

Many of the undergraduate dissertations include an acknowledgements page. Although in many cases this section is short – often just a couple of sentences long, or an enumeration of different involved persons or organisations – it offers a rich insight into the complex social and spatial networks that shape undergraduate dissertation research. The abovecited acknowledgements from the dissertation of Jonathan Gamble, written in 1998, indicate, for instance, the role of the dissertation supervisor, supporting university staff, academic staff of other universities, a friend or acquaintance offering IT support and his parents. This one quotation evokes multiple questions: what about students who do not have that kind of support from family available? What exactly is the influence of the supervisor on the research process as well as the final version of the dissertation? Where do students actually go for their undergraduate dissertation research – probably their first independent academic research? In this chapter I examine the educational, spatial and social contexts and networks of past generations of undergraduate Geography students at the University of Glasgow. This longitudinal study of archival documents, combined with a small number of interviews, provides the opportunity not to only study 'static' contexts or networks, but to also address gradual - or sometimes, abrupt - changes.

In the first section I emphasise the educational contexts of students writing their undergraduate dissertations: for instance, the role of the supervisors. How did this relationship change over time? Are there any shifts in university rules and guidelines that have led to some more abrupt changes? How do former dissertation supervisors reflect on their own role in undergraduate dissertation supervision? Does the changing relationship between student and supervisor indicate general changes in British higher education? This section relating to the educational context also includes an analysis of the position taken by the dissertation in a changing curriculum. In Chapter 5 changes in *what* has been studied in undergraduate dissertations is covered, and in Chapter 6 I explore changes in methodology and skills such as mapping and field sketching. These discussions are of course also strongly related to the curriculum, and in a broader sense to the 'educational context' of dissertation-writing students. In this chapter, though, I discuss curricular changes with reference to the influence that they have had on the collaborations, fieldwork and spatialities of the students doing independent research for their undergraduate dissertation.

Second, I address the spatial contexts of doing undergraduate dissertation research. By means of quantitative and qualitative analysis of the study areas researched by students, I discuss some general shifts and trends. For instance, issues of globalisation are explored in relation to the affordability of travelling abroad as well as the internationalisation of higher education, perceptible both in a more diverse student population in the department and in more undergraduate students going abroad as part of exchange programmes such as ERASMUS, are all traceable in the dissertation archive. Connected to the whereabouts of study areas are also more conceptual discussions concerning the conception of what 'the field' actually comprises. These themes are extensively discussed by professional geographers. By taking the changing practices of dissertation writing practices as a starting point, however, a different light can be shed on how exactly these theoretical and conceptual discussions about the field are expressed in academic geography education. Thus, in the last section of this chapter, I explore the different appearances that 'the field' has held for different students. In this section, I also address the practicalities of fieldwork and the role of collective, organised field expeditions in the dissertation-writing experiences of many past students. These discussions further demonstrate the role of wider social networks in doing fieldwork: family, friends and fellow geography students have often played the role of 'unpaid research assistants'. The study of spatial and contextual practicalities addresses the geographical situatedness of small research projects: whereas in Chapter 3 I discussed the situatedness of my research project, every single undergraduate dissertation in the archive is also an example of situated research in itself.

The analysis of the educational, spatial and social contexts of undergraduate dissertations provides a unique insight into the complexity of the productions of such 'middle-order' geographical knowledges. It raises questions about the influence of many different individuals as well as more 'systemic' influences of the specifics of the undergraduate

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curriculum, the practical research and teaching facilities in the university and the accessibility of British (and more specifically Scottish) higher education. An inquiry of a student's 'ownership' of the knowledge produced in the dissertation is then connected to a more general inquiry into how this may or may not differ from other forms of knowledge productions.

The department as a social space of dissertation writing

Before I turn to the 'whereabouts' of dissertation writing within the department, the specific role of the dissertation in the curriculum is discussed. This will offer some further perspective on the 'weight' of the dissertations for students as well as for supervisors and markers. In this section I will first explore the position of the undergraduate dissertation in British higher education in general, before I address the University of Glasgow's undergraduate Geography curriculum in particular.

The wider context of British higher education

After 1992 there was a significant increase of higher education institutions (HEIs) prompted by the Further and Higher Education Act. Simultaneously, the total numbers of students enrolled in these institutions increased as well. The rapid growth of the number of HEIs led to pressure on quality assurance and accountability (Brown, 2004): how would it be possible to maintain the desired level of quality (of both research and education), with so many different institutions? The 'apparent variability' of standards of assessment practised by individuals, departments, institutions and disciplinary communities (Chapman, 1994, in Webster et al., 2000: 3) was a political concern, both recognised within and outwith academia. Before, with few universities and lower student numbers, the number of degree qualifications was relatively small and it was thought possible to ensure comparability and equality in academic standards (Pepper et al., 2001: 25). The traditional form of regulation was 'self-regulation' (Brown, 2004: 3), but the idea of 'benchmarking' spread to higher education from business in the early-1990s. The 1997 Report of the National Committee of Inquiry into Higher Education suggested that the newly-established independent Quality Assurance Agency, executing the Teaching Quality Assessments since 1992, should provide 'benchmark information on standards' (Lund, 1998: 66). The value of these benchmarks would be that:

"If effective, benchmarking should ensure that no matter where in Britain students choose to study for a geography degree, they would undergo broadly equivalent learning experiences, while the degree classifications they achieve as they graduate would be firmly based on some shared and public statement of standards." (Pepper *et al.*, 2001: 24)

These benchmarks would not mean a 'national curriculum', although that was what was feared by some (eg. Johnston, 1997), but a national system based on the principle of peer review to ensure broadly consistent quality and standards.

This administrative shift towards a formalisation of the quality assurance procedures in higher education, connected to increasing numbers of HEIs and students during the 1990s, also has implications for the position of the dissertation within the undergraduate curriculum. The dissertation is recognised as:

"particularly important to the issue of degree standards and academic quality, for it is central to (British) conceptions of quality in higher education and generally contributed significantly to final degree classification." (Pepper *et al.*, 2001: 28)

Although almost all undergraduate Geography students in the UK undertake a dissertation, there is some variation in terms of size, weighting and timing of the work (Harrison & Whalley, 2007: 402). Looking at the most recent (at the time of writing) Geography Benchmark Statement, formulated by the QAA, it does presume 'something like a dissertation' as part of the degree:

"Within most honours degree courses in geography, it is anticipated that some form of independent research work is a required element. Students experience the entire research process, from framing enquiry to communicating findings. Independent research is often communicated in the form of a dissertation presented in the later stages of the course. ... This independent research may involve field-based data collection, or other forms of primary or secondary research. Regardless of the nature of the research, the student's learning requires critical reflection on the potential risks as well as the moral and ethical issues of the research project. On joint and combined honours courses, students still conduct independent research work, although this may be in an interdisciplinary context or outside geography." (QAA, 2019)

A dissertation as part of the undergraduate curriculum is thus not required by the benchmark statements and has never been required, but is nonetheless strongly approved and encouraged. For most institutions, and the same goes for University of Glasgow, the dissertation, or 'individual research project' or 'final year essay', a fundamental part of the curriculum for decades, has acquired a further stamp of official-national sanction and, to an extent, direction.

Changes in the undergraduate degree programme

The University Calendars, archived in the University Archives, provide a glimpse of changes in the undergraduate Geography curriculum at the University of Glasgow. Especially for the period 1950-1980 the Calendars provide information about the classes and examinations which shape the undergraduate curriculum, with even some basic information about the content covered. From the mid-1980s onwards, the University Calendars focus more on general rules and guidelines, for instance about complaints procedures, codes of conduct, rules according to marking, invigilating and feedback and entry requirements. In this section, laddress two aspects of the changing curriculum and educational context: first, the distinction between the regional and systematic geography degree: and second, the changing options concerning joint honours degrees.

The University Calendar of 1954-1955 offers a wealth of information about the actual content of the undergraduate Geography curriculum. The Syllabus of Classes includes the prescribed books per class. This overview of mandatory literature, as shown below (Figure 13), gives some insights into the content of these classes. The regional focus of the degree is evident, with many sources on specific regions in the world such as The British Isles, Latin America, the U.S.S.R and Western Asia. The other literature is about subdisciplinary fields such as geomorphology, cartography, economic geography and historical geography. Third-year students were taught the history of geographical knowledge, as the mentioning of Dickinson and Howarth's *The Making of Geography* (1933), itself already terribly dated, indicates. This work provides an overview of the history of geographic thought, from the Ancient Greeks, via the colonial era up to the development of 'the regional concept', and overall the curriculum strongly emphasises *regional* geography.

What this list of literature reveals, besides the regional focus, is the inclusion of literature published in another language than English. The University Calendars up to the early-1970s mention the language test that all geography students should take at the end of second year:

"At the end of 2nd year, intending honours students will be required to pass a test in translating, with the aid of a dictionary, a passage from a geographical text in either French or German" (University Calendar, 1954-1955, SEN10/97: 261)

From the late-1960s, this language test is not confined to either French and German, but could also be taken in Spanish, Portuguese or Russian (SEN10/113: 247). A few years later, this language test is no longer mentioned in the University Calendars and is thus probably taken out as a requirement before passing to Honours.

Ordinary Class - Year 1:

Bartholomew – The Advanced Atlas of Modern Geography; Lake – Physical Geography Willmore – Groundwork of Modern Geography Hardy – The Geography of Plants Shackleton – Europe, a Regional Geography Demangeon – The British Isles

Higher Class I - Year 2:

Jones and Bryan – North America Baulig – Amérique Septentrionale Stamp – Asia Sion – Asies des Moussons de Martonne – Traité de géographie physique von Engeln – Geomorphology Raisz – General Cartography Miller – Climatology Kendrew – The Climates of the Continents

Higher Class II - Year 3:

Gregory and Shave – The U.S.S.R. Blanchard – Asie Occidentale Preston James – Latin America Fitzgerald – Africa Wood – Australia, its Resources and Development Forde – Habitat, Economy and Society East – An Historical Geography of Europe Dickinson and Howarth – The Making of Geography

Higher Class III - Year 4:

Vidal de la Blache and Gallois – Géographie Universelle (European Volumes) Ogilvie – Great Britain, Essays in Regional Geography Smith – An Economic Geography of Great Britain Sorre – les Fondements de la Géographie Humaine Zimmerman – World Resources and Industries

Figure 13 Prescribed books academic year 1954-1955 (further readings recommended during the course) (University Calendar, 1954-1955, SEN10/97)

Whereas in the 1950s the undergraduate Geography degree was called 'Geography', without any distinctions between regional or systematic geography, from the early-1960s the degree called Geography could be combined (as a Double Course, predecessor of Joint Honours) with Systematic Geography¹⁵. This is also when the first students with two dissertations in the archival collection appear, for instance a regional study entitled *The Parishes of Falkland, Leslie and Kinglassie* (Balfour, 1962a) combined with a 'systematic'

¹⁵ 'Systematic' geography equated with a subdisciplinary focus and was often seen as a complement to regional geography. In the latter, all systematic geography would supposedly be put together with reference to specific 'areas', or 'regions'. The relationship between these two are discussed more fully in Chapter 6.

urban geography dissertation entitled A study of functional change in Park District (Balfour, 1962b), undertaken by the same student. This means that the 17 dissertations of the cohort of 1962 are written by 12 different students, of whom 5 did the Double Course Geography and Systematic Geography¹⁶. During the 1960s and 1970s, the curriculum changed from very 'fixed', with little space to choose courses within a certain degree, to a programme with an increasing number of choices and options. For instance, the Systematic Geography students could choose classes on Biogeography, Urban Geography, Economic Geography, Historical Geography and Climatology, besides the mandatory course on Air Photo Interpretation. The systematic dissertation, then, had to be connected to one of the courses chosen. From 1970, Honours Students were taught the course Development of Geographical Thought, and in 1974 Systematic Geography was extended with the courses Applied Human Geography and Social and Political Geography. In the late-1970s, the distinction between Geography and Systematic Geography disappeared, and the only undergraduate geography degree was called 'Geography' once more. Within this course, students could still opt for a more regional or systematic focus by their choices of option courses. In 1980, a limit on regional options chosen was formulated.

As mentioned, from the early-1960s, the Geography degree could be combined, as a Double Course, with Systematic Geography. Whereas in the 1950s there were solely Single Courses, the developments towards Double Courses, later called Joint Degrees, was one to stay. In the early-1960s, Geography could be combined with Systematic Geography, Political Economy, Economic History, Archaeology and Computing Science. In later years new potential combined degrees with Geography emerged (and sometimes disappeared again after a few years): during the 1980s, for instance, combinations with Arabic, Philosophy and Scottish Literature became possible. These potential joint degrees do not reflect the curriculum of the undergraduate geography degree, but they do indicate changes in the university: with many new degrees and new combinations of degrees, studying had become a more 'tailor-made' experience, whereas geography students in the 1950s, after having chosen their degree programme, were part of a relatively static four-

¹⁶ Geography was a degree both in Sciences and in Arts. For BSc students, it could be a single honours, regional *or* systematic, for MA students it was a joint honours, but this meant doing two dissertations. Besides Maureen Balfour, who combined a regional study with an urban geography dissertation, the other four 'Double Course' students either made the same combination, or chose to undertake an economic geography dissertation, for instance, Robert Davidson's regional study on *The Parishes of Kilfinichen and Kilvickeon, Kilninian and Kilmore, and Torosay, Argyllshire* (Davidson, 1962a) combined with an economic geography dissertation entitled *The sphere of influence of the shopping and service facilities of Victoria Road* (Davidson, 1962b).

year programme.

The history of dissertations

Undergraduate dissertations are often seen as the key 'format' of undergraduate research. Healey and Jenkins address the difference between undergraduate research in the UK and in the US: in the latter there is a stronger tradition of undergraduate research by a selected group of students – not all students –, working on student-initiated and faculty-supported research, whereas in the UK the final-year dissertation is seen as the place and time for undergraduate research (Healey & Jenkins, 2009). The UK dissertation is hence an 'equal' experience for all students, meaning that it is expected from all enrolled students to produce a dissertation. Healey and Jenkins address undergraduate research generically, their analysis is not specified per discipline. As I discuss in Chapter 4 of this thesis, socioeconomic backgrounds of students, the social networks of students and the support offered by individual supervisors still bring lots of individual differences and inequalities with them, ones causing experiences from different students within the same cohort to be very diverse.

Work by educationalists on research undertaken by undergraduate students taking 'first degrees' focuses largely on the different dimensions that this research can take: it can be done by all students or just some, it can take the form of individual or collaborative projects, it can be process-centred or product-centred, and it can start in year one of the undergraduate degree programme or in the final year (Beckham & Hensel, 2009). The 'elite model' of just a 'lucky few' doing undergraduate research, a US tradition, is opposed by the traditional 'mainstream model' that is common in the UK, as discussed above. However, diving into what has been written *about* the phenomenon of the undergraduate dissertation, it soon becomes evident that more has been written about its expected or desired *future* than on its history. Research on the historical role of the undergraduate dissertation is in fact remarkably sparse, and my concerted efforts to locate a literature on this subject-matter have proven largely fruitless. Some educationalists reflect very briefly on how the dissertation has been seen as a 'cultural expectation' (Healey & Jenkins, 2009: 19) for decades, and some succinctly address the distinctive historical role of the dissertation in curricula:

"The dissertation was regarded as the component of undergraduate studies that offered students the opportunity to demonstrate their "honour worthiness" 20 years ago. In courses in which much of the assessment was by examination, the dissertation was a relatively unique opportunity for independent learning and knowledge acquisition. In addition, the dissertation was designed to prepare students for postgraduate study." (Rowley & Slack, 2004: 176)

Such reflections, however, are very general and mainly address the presumed status of such independent study, and not about shifts in the exact forms, roles and scope that the undergraduate dissertation has undergone through time. There are other ways to shine a light on such developments: first of all, of course, by looking at actual undergraduate dissertations from the past. However, before I turn to the undergraduate geography dissertations on which I focus, intensively and extensively, in my thesis, it is possible to look at rare instances of educationalists from the past discussing the (for these authors, *contemporary*) roles of the undergraduate dissertation or, as its senior cousin, the doctoral thesis: such journal articles and books then become historical sources, even if they were not written as such. Watson (1983), for example, researched dissertations as learning or teaching tools in the context of undergraduate business degrees in the UK. He describes thesis writing as regarded as indispensable, with courses seen as "somehow incomplete if they do not include a thesis or dissertation"¹⁷ (Watson, 1983: 182). More recent educationalists describe the pressure on the 'classic' final-year undergraduate dissertation:

"For the last half century or more the final year undergraduate dissertation, typically an 8-10,000 word independent project, has been seen as the gold standard for British higher education. However, it is coming under pressure for reform as student participation rates have increased, the number studying professional disciplines has grown, and staff-student ratios have deteriorated. Some courses have abandoned the dissertation altogether, but there is a danger of throwing the baby out with the bath water The dissertation has a long life yet. However, if it is to remain strong and vibrant and continue to provide a transformational experience for most students then it needs to evolve and become more flexible. We need to recognise that not all students want the same things from their degree programmes and that a choice of alternative or additional formats, experiences and outputs is desirable." (Healey, 2011)

Again, this quotation – from an educationalist particularly concerned with geography and the wider environmental sciences – addresses the familiarity of the undergraduate dissertation for anyone involved in British academia, but no insights on the emergence of this 'rite of passage' is given.

Other than the undergraduate dissertation, the history of the PhD thesis has received more attention from historians. The history of the PhD goes far back, but the modern-day PhD in Britain finds it origin in 1917. Before then, British students went to German universities

¹⁷ It is interesting to note that Watson does not specify the difference between a thesis and a dissertation.

where they would be rewarded with a PhD, but for economic as well as political reasons this was not seen as a desirable situation (Simpson, 1983; Bogle, 2017). The first research doctorate programme in the UK was Oxford University's DPhil degree¹⁸, and from the start a written 'dissertation' – later typically called a 'thesis' rather than a 'dissertation', although some interchangeability of the terms has persisted, even to the present – was a standard aspect of examination (Jackson & Tinkler, 2001). Another source, specifically on the 'growth' of geography as an academic discipline (Stoddart, 1967), addressed this growth by tracking, among other indicators, the numbers of 'theses accepted for higher degrees'. He experienced difficulties in finding data on the number of persons with academic qualifications, but solved this problem by using long-term data from the so-called 'Index to Theses Accepted for Higher Degrees in the Universities of Great Britain and Ireland', managing thereby to demonstrate exponential growth of geography in the UK from the late-1950s onwards (Stoddart, 1967: 6). Stoddart's research demonstrates how increasing numbers of higher or doctoral degrees might stand as a proxy for the growth of an academic discipline, as well as implying that dissertations and theses were increasingly viewed as standard elements of disciplinary curricula, training and preparation. Of course, only higher degrees are mentioned by Stoddart, not specifically the BSc or (misleading titled) MA degrees like the ones geography students at the University of Glasgow have obtained (as discussed later in this chapter, geography students receive a BSc or MA degree dependent on whether they were enrolled as Science or Arts students), but the contributions from both Stoddart and Watson suggest that dissertations and theses were standard, and to some extent unquestioned, by the second half of the twentieth century. However, the exact origin of specifically the *undergraduate* dissertation is never discussed.

Later in this chapter I explore the specific role of the dissertation in the undergraduate curriculum. However, the scarcity of literature and research on the history of the undergraduate dissertation itself, and on changes in the purposes, characteristics and disciplinary differences of and associated with the dissertation over time, strikes as remarkable. The presence, though still limited, of research on the history of the PhD thesis might indicate that, rather more than the undergraduate degree, the PhD degree is seen as an 'entrance' to the academic community. Moreover, PhD theses are of course often the source of published books, chapters and articles, as well as being quite commonly cited, and sometimes even discussed at some length, in the academic literature: as such, they are

¹⁸ This demonstrates that even the title of the PhD is not ubiquitous.
already there as part of the acknowledged textual record on which most histories of academic disciplines are based. The same is palpably not the case for undergraduate dissertations, even though, as my thesis will elaborate, undergraduate students have held a central role – in many respects an even more central role than PhD students – in the academic community. My research on an archive of undergraduate dissertations from one discipline at one university might give some very small clues towards a larger understanding of not only how disciplinary knowledge developed over time, but also of how the undergraduate dissertation, its materiality as well as its content, scope and role, has developed.

The nature of 'the' dissertation

Whereas Master's and Doctoral theses as well as marking procedures are widely researched, academic attention to the undergraduate dissertation is sparse (Todd et al., 2004). Some researchers, however, have tried to formulate a key definition or description of what this particular educational 'format' exactly entails. One of these attempts to describe the undergraduate dissertation distinguishes four key characteristics: students define the focus of the work, the work is carried out on an individual basis (with support), students have prolonged in-depth engagement with the work, and research includes the analysis of primary and secondary data (Ashwin et al., 2017: 514). These four characteristics mention some important aspects of the process and scope of dissertation research, focussing on the responsibility and, at the same time, the freedom of students within this process. The possibility to choose a subject, to decide on methods and to go to the field alone is fundamentally different from sitting an exam, and can thus be "a liberating experience, allowing them [students] to display creativity and imagination" (Gatrell, 1991: 17). The specific character of the dissertation distinguishes it from other aspects of the undergraduate curriculum, a distinction not only experienced by students themselves but also by members of staff. The dissertations can be used to distinguish between degrees (eg. honours versus ordinary degree) but is also drawn upon "when it comes to adjudication of those falling on the borderline of degree categories" (Webster et al., 2000: 72). Although the notability of the dissertation within the undergraduate curriculum has remained similar over the decades, there have been some small, gradual changes. Rowley and Slack (2004) argue that before the 1980s, examinations were the dominant mode of assessment in most undergraduate courses, whereas towards the end of the twentieth century, coursework started more explicitly to assess knowledge as well as skills (Rowley & Slack, 2004: 177). The emphasis on independence and individual

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responsibility for student learning became part of undergraduate courses.

Focussing on how the undergraduate dissertation, or its predecessor, is defined, the University Calendars once again offer insights, especially for the 1950s to 1970s. In the Syllabus of Examinations in the Calendar of 1954-1955, under the header Higher Class II (eg. third year) for Geography it says:

"In the summer vacation students will undertake an independent regional study of an approved area. Approval of the area should be obtained by the end of the Candlemas term. The study, in the form of an essay not exceeding 6,000 words, is to be presented on the last day of the Martinmas term following." (University Calendar, 1954-1955, SEN10/97: 261)

This citation presents some answers with regard to the requirements and rules concerning the study: this description mentions that it is an *individual* study, though the area which it is studying should be approved. The deadline and scope of the 'essay' are also mentioned. This description of the 'independent study' is more or less the same until 1970, when it is called 'a dissertation' for the first time (SEN10/113: 188). The Systematic Geography degree, however, speaks of 'a dissertation' from the early-1960s.

As I discuss in Chapter 7, the regional studies of the 1950s and 1960s, saved in the archival collection, are different from the other documents in this collection. It is obvious that such regional essays, or regional dissertations, never started with the idea of a research question or a conceptual or thematic focus. These regional studies were independent in a student's data collection and writing-up, but the aims and terms were presupposed:

There was a kind of formula for the regional one, it was ... a little bit similar to the parish surveys – have you encountered the New and Old Statistical Accounts of Scotland? Usually the local minister would write a biography of his parish, and this was, to some extent, a modern version of that. You took an area, and it was often a parish in Scotland, if you did it in England, it usually had to be more than one parish because they were smaller in England, tried to produce then what then would be a contemporaneous regional geography, a subject that no longer exists." (G. Dickinson, interview, 5 September 2019)

The question as to whether dissertation writing students knew what was expected of them evokes follow-up questions about what overall is the *purpose* of the undergraduate dissertation. Are students 'sent' to the field without a lot of guidance, as if it should be self-evident based on everything that they have been taught, earlier in the undergraduate curriculum? From the cohort of 1954 to the cohort of 2014, every one of these students have been on multiple collective fieldtrips during their undergraduate studies. From the early-2000s, the third-year Geography fieldclass was explicitly conceived as a training

ground for the dissertation research (C. Philo, interview, 10 December 2019). Is the dissertation the ultimate test as to whether students are 'worthy' geographers or is the project an opportunity to guide students through their first 'big' project?

Most will agree that it is not either-or, but considerations about whether the dissertation is an assessment tool or a learning tool strongly influence the relationship between student and supervisor, as well as the actual outcome of the research project:

"There was a tradition – which you will have seen if you go back in the 1980s and 1990s – that said, 'no, geography dissertations are the students' piece of work. They come in, they tell you their idea, you tell them it is a good idea, they go away and don't see them again until they hand it in'. Which is fine if that's what you want it to be. If you actually want it to be a learning process about how you do research and how you produce reports for other people, you've got to supervise them." (T. Hoey, interview, 10 July 2019)

Frequently recurring discussions about the purpose of – and hence what preparation is needed for – the dissertation will doubtless be familiar to staff members of many geography departments: is the undergraduate dissertation primarily an *assessment* tool or a *learning* experience? The time span of the dissertation archive presents the possibility to analyse this 'assessment versus learning' question over time. Some interviews with current and former staff members gave more clues about how both students and supervisors saw the undergraduate dissertation. One current staff member, who graduated from Glasgow in the early-1970s, reflects:

"My memory is you got to hand it in the first day back, so we really did it over the summer. From May through to October, it would have been in those days. I am not conscious of any training for it, I am not conscious of having anyone to help me do it. Someone must have told us how to do it, but it could have been a handout for all I know." (A. Dunlop, interview, 20 June 2019)

This is also recognisable in the sparse feedback comments saved from the 1960s and 1970s. Students are called to account on fundamental mistakes in the research design or research question, whereas for contemporary dissertation-writing students – hopefully – such mistakes will be overcome in an earlier stage of the research project. Yet again, it is not black and white, and a dissertation seen as an assessment can still be praised for its learning effects. In this 1966 marker's report, the marker praises the learning experiences of the mistakes made in the research:

"you had a lot of computing to do, and this has been done well – even more important however is the experiences gained by making all those mistakes." (Graham, Marker's Report, 1966)

The nature and differing conceptions of what a dissertation is or should be are, as shortly

described here, also strongly related to one specific position: the undergraduate student's supervisor.

The role of the supervisor

The relationship between supervisor and student is, to some extent, "open-ended" (Derounian, 2011: 92). Although some of the key aspects of supervision are described in explicit documents about the dissertation (as I discuss later in this section), it is up to the supervisor and student to arrange a feasible working relationship – yet, increasingly with guidance – and all of this, in a relatively short period of time. MacKeogh (2006) distinguishes multiple roles taken by undergraduate dissertation supervisors:

"Subject experts; gatekeepers of academic standards; resource person and advisor on the research literature, research methodologies; 'midwife' of the dissertation; director, project manager, shaper; scaffolder and supporter; editor; promoter of student self-efficacy." (MacKeogh, 2006: 20)

The variety of these roles demonstrates the complexity of the question to what extent supervisors influence the final product of the research process, the dissertation itself. The supervisory relationship is shaped by balancing autonomy and support (Del Rio *et al.*, 2018). It is difficult to discover more about student-supervisor relationships based on individual dissertations themselves, yet the dissertation collection as a whole reveals some developments over time of the role of the supervisor, or as they were often called before the 1970s, advisors¹⁹.

First, the mentioning of the supervisor gradually became more frequent between 1954 and 2014. Whereas in the regional dissertations from the 1950s and 1960s almost never was a supervisor mentioned (in line with the idea that the regional dissertation was a straightforward exercise), some of the systematic dissertations did mention a single academic member of staff, presumably the student's advisor:

"This study owed much to the training in biogeography, both academic and practical, received from Dr. Tivy of Glasgow University Department of Geography." (McAllister, 1966a: n.p.)

Other than this example of McAllister's dissertation, in cases when the advisor/supervisor did receive mention, it was often 'just' by name, in a list of other parties and institutions

¹⁹ This term has periodically reappeared, probably to suggest a more 'hands-off' relationship: *advising* the student, as explicitly different from *supervising* the student.

which were thanked. From the 1990s on, the formalisation and indeed parallel intensification of the role of supervisor becomes evident in the dissertation archive. For instance, 'formal' dissertation record cards were used for a while, which I discuss later in this section. The much greater presence of the supervisor in the acknowledgements is also a window on increasing formal and informal forms of involvement:

"Dr. Rhian Thomas, without whom Minitab 14 would still be a mystery." (Paul, 2006: n.p.)

"[Thanks] for all the chocolate, help and advice, without which this dissertation would not have been possible. I am sorry for all the times I e-mailed you on your day off but equally very grateful for all the times you replied. Hopefully I will have done you proud" (Gray, 2010: n.p.)

"I am unsure how many students are as lucky as I was to have such a dedicated and insightful tutor, who will allow them to work independently and self-sufficiently. For all your help, I am very, very grateful." (Davidson, 2014: 3)²⁰

Acknowledgements often demonstrate a combination of intellectual support and counselling. Besides the interpersonal and advisory relationship between supervisor and student, shaped to some extent by the rules and guidelines of dissertation supervision and to a greater extent by the individual supervisor and student's preferences, the *intellectual* relationship plays a significant role as well. Students' dissertation projects were sometimes directly inspired by specific option courses, given by their supervisors. Some students mention this explicitly in the acknowledgements.

"[Thanks to] to Dr David J.A. Evans for his help, advice and inspiration out in the field, on this 'Sexy' topic of deformation tills." (Shiels, 1998: iv)

"Chris Philo for his inspirational course 'geographies of social "outsiders" and his help and support throughout the project." (Noone, 1998: 1)

Many more of these intellectual influences of particular supervisors (or generally, academic members of staff) become perceptible when studying the disciplinary and subdisciplinary trends and shift in the undergraduate dissertations over time. These 'effects' of individual staff members are discussed in Chapter 6, when examining the question of *what* students have researched for their undergraduate dissertation.

Increasing explicit governance of the dissertation process

In the mid-1990s the recording of the supervision process became more formalised. It is difficult to pinpoint one specific reason for these changes in supervision, as it was a

²⁰ There is an interesting linguistic difference noticeable from the late-2000s, when students address their supervisors directly in the acknowledgements, as if 'speaking to them'.

combination of growing student numbers (leading to a bigger workload in terms of supervision), professionalisation and quality assurance in higher education, and individual staff changes. Reflecting on these changes, two former academic staff members mention some aspects of this process within the department:

"The naughty difficulty of how much support would you give to students...some students were getting a lot more support than others. There was no malice in that, it was just that some supervisors thought, this is the way to do it. We tried to codify it more, there were several things: some dissertation topics led themselves more easily to supervision, because they were intrinsically structured. Some students didn't bother very much about supervision. Gradually we became more and more involved. ... Chris [Philo] was in the van of this. His introductory lectures to the third years on dissertations, they were really good. I remember thinking, I wish I had that when I was doing things: much clearer overview of why you were doing things and what, how to achieve particular ends." (G. Dickinson, interview, 5 September 2019)

"When we were in the phase that we saw the dissertation very much as an assessment vehicle, one of the things we noticed was that you could flick through them and you could see quickly quite a lot of mistakes. We did, ten years ago, introduce a process that we still use where students can have part of all of their dissertation skim-read by their supervisor before they hand it in, about 10 days, 2 weeks before, just to get them quick feedback on the obvious mistakes: reference list incomplete, no captions for your figures, spelling mistakes, whatever. ... I think what happens with the best students they almost don't need it, because having that meeting makes them prepare for it, which means they would come along with something that is actually pretty good, and you give them almost trivial feedback. But if you wouldn't have the meeting, they wouldn't have done that. It is forcing them to be prepared for that meeting that is actually [...] Quite a few of the changes we made over the years have been designed to do that, putting milestones in, making the students do the reporting." (T. Hoey, interview, 10 July 2019)

Some cohorts of the late-1990s in the archive include a Dissertation Record Card (see Figure 14). This double-sided card addresses the dissertation process, from getting information about dissertation writing and subject choice to handing in the dissertation. These Record Cards provide a lot of information on both the formalities of dissertationwriting and the differences in the actual execution of all dissertation-related tasks. It demonstrates the lengthiness of the dissertation process, from an introductory lecture about the dissertation at start of the second term of the Junior Honours year (year 3), to handing in the completed dissertation to the departmental office in day 1 of next year's second term.

The Record Card also explains how an initial dissertation idea, often based on one of the Honours Options, had to be submitted to the Dissertation Administrator, after which, two weeks later, the student would get the name of the appointed supervisor. The student and supervisor then usually met twice before summer: in the last meeting the Dissertation Plan made by the student should be formally approved by the supervisor. The student usually undertook the fieldwork for the dissertation in the summer between third and fourth year, an expectation and practice consistent for the cohort of 1954 up to the cohort of 2014 and beyond. The Record Card itself was not a formal aspect of assessment, but as the Card states: "A record which shows that the student completed all compulsory meetings before the deadlines, will count in his/her favour". It seemed to have played a role in cases in which the marks of two dissertation markers on average was in the middle of two grades. From approximately the mid-2000s, a formal Dissertation Proposal is an assessment that gets marked as part of student's third year (Junior Honours). The dissertation record card as well as the appearance of something like a 'Dissertation Handbook', including graderelated criteria, and an overview of rules and guidelines concerning the undergraduate dissertation in the mid-2000s demonstrates the governance becoming increasingly explicit over time. Unfortunately, earlier versions of hand-outs of dissertation requirements are not saved and archived. The consistency in, for instance, the scope and format of dissertations within cohorts suggest some rules and guidelines. However, it is not possible to discover how implicit or explicit these forms of governance were.

Department of Geography & Topographic Science, University of Glasgow GEOGRAPHY HONOURS DISSERTATION RECORD CARD

Student's name in capitals: Surname NOONE Other names MARGARET (Add matriculation number andy if there is another student in the year with the same summary)

The following section of the card is to be completed during the meeting at which the Dissertation is explained, in January of the Junior Honours year. List the options you are taking in Junior Honours. Mark with a tick those from which a dissertation topic could arise.

	Name of option	Tick or not
Option 1	GEOGRAPHY OF SOUTHLOUTSIDER	21
Option 2	URBAN	
Option 3	MOUNTAIN ENVIRONMENTS	

This card is to be used to record all meetings between the student and a member of staff in connection with his/her dissertation. It will be available to the Examiners when the dissertation is marked. A record which shows that the student completed all compulsory meetings before the deadlines, will count in his/her favour. 'Deadline' means the *last* date which is permissible: most of these activities should preferably be completed long *before* the deadline.

DEADLINE	ACTIVITY	DATE	SIGNATURE OF STAFF MEMBER
Junior Honours year: Term 2			
Week 2 21/1		"Foregot"	a.m.
Week 7 25/2	Submit Dissertation Idea to Dissertation Administrator. Short title of Idea, and initials of appointed supervisor are given below.	25/2	Q.m
			CPP
Week 9	Meet Supervisor by appointment to decide prescription for Dissertation Review Essay.	25/03	CRP
Junior Honours year: Term 3			41
One week after student's last Degree exam.	Submit Dissertation Review Essay to Supervisor, and arrange appointment to have it returned.	10/06	dr
2 weeks after student's last Degree exam.	Dissertation Review Essay returned by Supervisor, leading to discussion of exact dissertation topic. Fix time for next meeting.	10/06	CR
3 weeks after student's last Degree exam	Meet Supervisor by appointment to hand in and discuss formal Dissertation Plan.	10/06	AR

proval of Dissertation Plan (must be signed and dated by	10/06	(RD
) Give short title in space below.	10/06	. GT
	estimas in public space roval of any questionnaire which is necessary.	

DEADLINE	ACTIVITY	DATE	SIGNATURE OF STAFF MEMBER
	Use space below to record any further meetings during the Summer Vacation (permitted but not normally necessary: may be used to gauge the amount of guidance you have received).		-0
	Meeting to discuss data collected in field & strategies for interpretation.	28/07/18	Alla
	Jer Interpreterion.		
Senior Honours year: Term 1: Week 2.	Supervisor verifies that you have collected all the material on which the dissertation will be based.		
	Use space below to record any further meetings during term 1 (permitted up to end of week 7: may be used to gauge the amount of guidance you have seceived).		A.
	Long meeting to discuss progress : barcolly very good, particularly if Margaret nails down the last few	20/10/48	offhu.
	interviews.		all
	Meeting to discuss thesis outline : looking good - hoving a little trouble getting last few interviews.	04/12/18	approv
Term 2: Day 1	Hand in completed Dissertation to Departmental Office: to be date		

Comments by Supervisor:

Brief Jurther chas about how to use interview materials in thesis.

11/11/18 ABU

Morgoret has worked extremely well on this project: she has been a model dissertation student. I hope that she will be able to do justice to her ideas & endeavour in the final write-up.

(09/05/99)

Figure 14 Dissertation Record Card (Noone, 1998)

The broader departmental and intellectual network

The relationship between student and supervisor is not the only one that plays a role in both an intellectual and counselling way. The networks within the department, the wider university and the broader academic community are also very much present in the undergraduate dissertations. Whereas the curriculum and all courses in the undergraduate studies have an effect on what students learn, some students explicitly mention one course or lecturer who has influenced their intellectual interests and skills. For instance, one student who was supervised by a different member of staff still thanked "Prof. Paddison, for introducing me the mysterious world of retail geography" (Lees, 1998: II), another student thanked Dr. A. Morrison "For teaching me how to WRITE!" (Martin, 1986: iv), and yet another student thanked "Professor C Philo for advice on coding and recommending helpful reading material" (Mann, 1998: iii). The frequency of 'non-supervising' academic staff members mentioned in acknowledgements demonstrates how the dissertation perhaps is the 'grand finale' of the undergraduate studies, but is simultaneously 'just' one component of a larger and much more extensive learning process, in which many different people in the department play a role. Supporting staff, such as lab and field technicians are also mentioned by many students undertaking physical geography dissertations, especially the ones requiring an extensive period of fieldwork preparation or laboratory analysis within the department:

"[thanks to] Kenny Roberts for his assistance whilst working in the geography laboratory, especially for the much needed cups of tea!" (MacKay, 2010: 3)

There are other departments of the University of Glasgow mentioned by some students: Zoology, Engineering and Environmental Chemistry are mentioned most. The latter provided research facilities that Geography did not have 'in-house'. Besides other departments from the university, some students also worked with individual staff members or used research facilities at other universities²¹, both nationally and internationally. Lastly, peers play a fundamental role in the experience of undergraduate dissertation writing. As mentioned earlier, some students worked together in the field, for instance in one of the field expeditions. Yet, also 'just' being in the writing-up stage, sharing the same deadlines and similar struggles turned out to be memorable experiences for students:

²¹ For instance, Ian Young thanked Dr. Eyles (Newcastle University) in his acknowledgements "for aiding me in my interpretation of the aerial photographs" (Young, 1978: 3); and Robert McNeill referred to the help of two professors at the University of Manchester and one from the University of Southampton with his dissertation on city marketing and urban regeneration marking (McNeill, 1998).

"[Thanks to] All the guys and gals in my class who helped me in my hour of need (4 pm -5 pm, Monday September 1st) on the Macs, on maps, stats and on inspiration which was badly needed:- Elaine, Helen, Kieth [*sic*], Laurence, Lesley, Marion, Paul, Pauline and Roy." (Martin, 1986: iv)

"[Thanks to] Kam and Debbie for much needed soup and coffee breaks on those many stressful nights in the library." (Duffy, 2002: n.p.)

"[Thanks to] Sophie Swaile who had to deal with the daily questions and procrastination." (Livingstone, 2014: 3)

This is perhaps one of the most recognisable experiences for all former undergraduate dissertation writers (all current academics, and many, many more people now with a career outside of academia): the hours, days and weeks of writing-up, having breaks together, offering each other small forms of mental and intellectual support. The University Library has been a central place to many dissertation writers over all decades, both as a place to find source material and as a place to meet others going through the same process.

Lastly, there is an important group of people who students barely acknowledge at all: all the former thinkers on whose work they are building. Stuart Pate wrote these words about these collaborations through time:

"Studies like this are actually written by hundreds of people whose ideas are selected, modified and brought together, and it is to these people that I would like especially to acknowledge my gratitude." (Pate, 1974: n.p.)

The undergraduate dissertation, then, is indeed very similar to other academic research projects, with the historical and contemporary ideas of other academics as starting point, with many peers or colleagues working on similar yet different projects, and the daily struggles of writing, distraction and motivation. The distinction perhaps is found in two ways: the inexperience of doing a project like this individually, and the educational context of needing to do this project within certain requirements in a certain period of time to graduate.

<section-header><section-header><text>

Figure 15 Title page (Pate, 1974)

Changing styles of acknowledgements sections

As mentioned briefly in the section on supervision, not only have the different people and institutions mentioned in the acknowledgements changed over time, but also the language. Comparing three acknowledgement pages of three dissertations from different decades (1958, 1990 and 2014), three main differences might be recognised: first, the shift from

Acknowledgements Many people, too numerous to mention individually, have most willingly supplied information in numerous ways. To these, the writer is most grateful. The following, however, deserve special mention :-Mr. Andrew M. Rosie, County Planning Officer, and the Staff of the County Planning Department, Ayrshire County Council. The Staff of the Carnegie Library, Ayr. The Staff of the Statistics Branch, Department of Agriculture for Scotland. The Farmers of Tarbolton and Stair parishes.

Figure 16 Acknowledgements (Crabb, 1958)

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Figure 17 Acknowledgements (Milne, 1990)

talking about oneself in third person was replaced by using a first-person form. In Figure 16, Crabb states "To these [people], the writer is most grateful", whereas in Figure 17, Milne writes her acknowledgements starting "I would like to thank the following people". Second, the language used in the acknowledgements demonstrate a shift from more 'factual' ways and reasons to thank others to more personal and emotional language. This does not mean that the personal relationships were very different. Crabb's acknowledgements, written in 1958, already describe how many individuals helped *willingly*, and how *grateful* he was for their help. Milne's acknowledgements (Figure 17) are not that much different from Crabb's, even though hers are written more than 30 years later. However, she adds some personal acknowledgements to her parents, about how her dad was *brave* enough to read it and how her mum had to *put up with her*. McQuade's 2014 acknowledgements then adds even more of these forms of emotional and personal language, describing how *he would never have imagined having hens* and how *wonderful creatures* they are. A last obvious 'break' in

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Cover Image: Quetzy the hen, sitting on my knee in the chicken-yard as I have a cup of tea (photo by R. McQuade)

Figure 18 Acknowledgements (McQuade, 2014)

style of the acknowledgements, besides the introduction of the 'l' of the author and the more emotional language is the shift from acknowledgements being enumerations to more narratively written acknowledgements, making use of 'small stories' and sometimes visual material, as seen on McQuade's acknowledgement page (Figure 18). The three examples here are to some extent exemplary for their eras, but there are still major individual differences within cohorts. Some students in the 2010s still refer to themselves as 'the author' or 'the researcher', especially in physical geography dissertations. This demonstrates that there are individual preferences as well as subdisciplinary trends.

The geographies of undergraduate dissertations

The undergraduate Geography degree programme obviously has to do with 'the spatial', whether it is about spaces and places nearby or far away. For many students this meant that travelling to their so-called 'study areas' to conduct their research 'in the field' was an integral part of their undergraduate experience. In this section, I address changes in the areas studied by these undergraduate students over time, by a quantitative analysis of the areas addressed in all 2614 dissertations in the dissertation archive.

Study areas

In a few cases the student had not actually travelled to this location, since by some

students the research was done 'from a distance', for instance, by doing a library study²². In most cases physical encounters with study areas have been undertaken. The extensive dataset provides opportunities to recognise changes over time and discuss potential causes of shifts in such study areas. Table 2 demonstrates the numbers of dissertations about an area (or

Category	Number of dissertations
Scotland	1811
Rest of the UK	295
International	446
Other	62
Total	2614

Table 2 Numbers of dissertations per study area category

using an area as case study) within respectively Scotland, the rest of the UK and outwith the UK: it illustrates the overwhelming majority of dissertations about an area 'close to home' or, at least, close to university. The category 'Other' will be discussed later.

²² A library study of course still takes place *somewhere*, but the difference I am making here is between travelling to the area study (and maybe also visiting some archives and libraries *in situ*) and, for instance, studying a foreign region/area based on research undertaken in the University Library in Glasgow.

Table 2 is a graph of all dissertations sorted by study area over time. As the table demonstrates, dissertations with a study area in Scotland have always been the majority of the dissertations in any cohort. The number of dissertations about an area in the UK but outwith Scotland remains relatively constant (see Figure 19), but looking at the changing percentages for Scottish versus international study areas suggests some changes over time. There is a notable dropping off of non-Scottish study areas from the mid-1970s to the early-1990s. It might be the case that with gradually expanding of education, more students of lesser financial means were studying at the university. Overall, the demographic of students at the University of Glasgow has predominantly been the West of



Figure 19 Timeline of number of dissertations per year per study area category



Figure 20 Timeline of percentage of dissertations per cohort with a study area in Scotland or outwith the UK

Scotland (Thompson *et al.*, 2009), and this is still, to lesser extent, the case.

Figure 20 shows how Scottish study areas have indeed consistently been the majority, but indicates a strong change towards more international study areas since the early-1990s. There are two apparent causes for this shift, one related to a broader development in higher education, the other more specific to the geography department at the University of Glasgow. First, in the early-1990s internationalisation became a key issue in debates and policies concerning UK higher education. Internationalisation was "expected to serve peace and mutual understanding, quality enhancement, a richer cultural life and personality development, the increase of academic quality, technological innovation, economic growth and societal well-being" (Teichler, 2009: 95). Student mobility was conceived as one of the key elements of internationalising higher education (ibid.). In 1987, the ERASMUS programme was established as an exchange programme between eleven European Union Member States, including the UK (European Union, 2012).

Unfortunately, the numbers of Geography students at Glasgow taking part in an ERASMUS exchange are not available, but presumably the emphasis on student mobility was present in the department as well. It is expected that, either by means of ERASMUS exchange and related financial support to go abroad or by the fact that going abroad for studies became common, Geography students in Glasgow will have shown similar signs of international mobility. The second cause of this shift towards more international undergraduate dissertation study areas is easily identifiable: individual academic staff members in the department organised research trips to several different countries. For instance, from 1992 to 1995 there were annual expeditions to Iceland, organised by David Evans, with many undergraduate students joining for their dissertation research. Also perceptible in the graph are the research trips to Egypt and Tanzania, organised on several occasions by John Briggs and Jo Sharp, between 2002 and 2013. In a later section of this chapter I discuss these expeditions further.

Although Figure 19 and 20 categorise the dissertations by their study area, making use of a threefold classification of Scotland, Rest of the UK and International, there is a fourth group of study areas as yet not discussed. This category of 'Other' study areas entails approximately 2.5% of the total number of dissertations, but this collection reveals some interesting shifts. The category 'Other' consists of several kinds of dissertations:

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methodological dissertations²³, dissertations studying at the global scale, dissertations that are comparing case studies in Scotland with case studies in other countries, and dissertations about the virtual world. Although the number of such methodological dissertations is relatively small, they do appear throughout the years in the dissertation archive; there is no specific trend perceivable. The dissertations emphasising the global scale or the virtual world²⁴ are all from recent cohorts, appearing from the cohort of 2006 onwards. The emergence of dissertations on the virtual world are obviously connected to developments in technology, whereas the dissertations that address a question or research subject on a global scale are presumably connected to ideas, practices and the clear academic importance and addressing of globalisation.

Study areas in Scotland

As mentioned in Chapter 3, the quantitative data collection concerning the 2614 dissertations in the undergraduate dissertation archive not only entailed distinguishing the categories Scotland, Rest of the UK, and International, but also divided each of these categories into smaller spatial units. In the case of Scotland, I used the Scottish Council Areas as the relevant division units, with certain exceptions. One was the National Parks of Scotland – Loch Lomond and the Trossachs, and the Cairngorms: though these areas only attained their formal status of National Parks in 2002 and 2003 (Scottish Government, n.d.), my qualitative investigation of the dissertation archive revealed that these two areas were often regarded as 'unities' long before the formal establishment of the National Parks²⁵. Because both parks are located across several council areas, adding the National Parks as distinguished subcategories besides the council areas made the data analysis feasible. This does, of course, mean that the number of dissertations about adjacent areas must be interpreted with the exclusion of Loch Lomond or the Cairngorms. A second exception to the Council Area categorisation is that some Council Areas are merged as one category in

²³ For instance, *Comparative tests of the accuracies of three stereo-plotting instruments: Wild B8 Aviograph, Zeiss Jena Multiplex and Santoni Stereosimplex 2C* (Wright, 1965), *A comparison of three types of aerial photography for photo-interpretation* (Weir, 1971), and *A novel method of mineral separation* (Marshall, 2008).

 ²⁴ For instance, Geography transcending geography: Identity and community construction in the virtual age (Harris, 2009), Deconstructing climate change activism: Influence, diversity and contested politics in a global movement (Sutherland, 2011), and Gender expression and quiet oppression: A study of the geographies of women's online politicised communities (Robertson, 2013).
 ²⁵ In the case of Loch Lomond demonstrated by dissertations such as Outdoor recreation as differentiated by socio-economic, age and visit length factors in the Loch Lomond area (McKenzie, 1977), and The role of conservation in the Loch Lomond area (Forrest, 1985); in the case of the Cairngorms by High altitude pinus sylvestris in the Cairngorm Mountains, Scotland: Evidence of colonisation (McAleese, 1999).

this quantitative analysis (e.g. North and South Lanarkshire; East and West Dunbartonshire). Again, it is important to note that any form of categorisation, in this case based on the Scottish Council Areas, has its flaws, but this quantitative data analysis is undertaken with the aim of recognising some spatial trends within the undergraduate dissertation research over several decades. The chosen categorisation is detailed enough to discover and recognise certain shifts and trends, yet broad-brush enough not to get lost in small areal differences. The last exception is the one category covering Scotland as a nation-state²⁶. Many study areas have a direct connection to specific subdisciplines²⁷ (see Figures 21 and 22) Others, however, demonstrate a much more dispersed distribution. This is, for instance, perceptible when comparing the dissertations on Ayrshire and on Glasgow. As I discuss in Chapter 5, both social and urban geography as subdisciplinary foci of the dissertations grew considerably from the early-1980s onwards. This shift also relates to the quantitative data about the study areas: studying Glasgow fluctuated year to year, but generally there is an increase in Glasgow-related research compared to research in other areas in Scotland. The opposite is evident for dissertations on Ayrshire: whereas the numbers of dissertations on Ayrshire at its peak was approximately 20% of all dissertations on Scotland of the cohort, since the mid-1990s the area's percentage has never gone higher than 10%. This demonstrates that (sub)disciplinary trends and interests have a strong spatial impact concerning where dissertation research 'happens' as well.

Another noteworthy development is the emergence of dissertations on Scotland on a national scale. Before the turn of the millennium, this was rather unique whereas since 2000 this has become more common. Since then, almost a quarter of all dissertations on an area within Scotland took a national perspective. The titles of dissertations about Scotland on a national scale or with a national perspective demonstrate some specific foci of inquiry: Scottish identity (both political and cultural), Scotland and sustainability, and Scottish cultural and environmental heritage.

 ²⁶ For instance, *Residential desirability in Scotland* (Henderson, 1975), *The campaign expenditure strategy of the SNP, June 1987* (McCormack, 1988), *Scottish nationalism - A gendered phenomenon?* (Curry, 1999), *Sustainable golf in Scotland* (Cosh, 2003), and *Scottish economic policy: A critique of current policies and the power of communication in the Scottish life science sector* (MacLeod, 2012).
 ²⁷ Regional geography of course explicitly demanded the explicit chose of a 'study area' (originally, with the 'regional study', ideally containing a diversity of localities (eg. urban and rural).



Figure 21 Number of dissertations per subdiscipline for dissertations about Ayrshire



Figure 22 Number of dissertations per subdiscipline for dissertations about Glasgow

Although in some cases the scale of Scotland was a very practical one (for instance, when collaborating with an organisation such as Scottish National Heritage), in many cases the research on a national Scottish scale can be seen as exemplary for the rise in a Scottish cultural as well as political identity: approaching Scotland more as a nation-state than before, as also addressed in other academic publications (eg. Leith & Soule, 2011). With political developments such as the foundation of a Scottish Parliament in 1999 (Mitchell, 2014), Scotland as a nation-state²⁸ was more evidently a focus of inquiry for academics, including student-geographers.

Study areas in the rest of the UK

The 295 dissertations about an area within the UK but outside of Scotland, can also be divided into multiple spatial subcategories. This table (Table 3) demonstrates the broad

coverage of areas examined by undergraduate geography students throughout the years. Similar to the overview of Scottish study areas, the broader national perspective is again a substantive category. These dissertations with a British scope take, in large majority, a human geography perspective: approximately 75% of these dissertations consists of cultural, economic, political and social geography research. This proposition again might not be surprising: the nation-sate as a scale is feasible in Table 3 Number of dissertations per research on politics as well as questions

Country/ Crown	Number of
Dependency Channel Islands	dissertations
England	176
Isle of Man	3
Northern Ireland	40
UK National	61
Wales	13
TOTAL:	295

category within the UK, outwith Scotland

concerning identity, traditions, media and migration.

Whereas I expected Northern Ireland to be an area that would be discussed through a political or cultural perspective in dissertations, this turned out to be incorrect. Although the Troubles were mentioned (as a contextual element) in some of the dissertations about Northern Ireland, only five of them had the Troubles, or the Northern Irish/Irish border

²⁸ For instance, *Tourism, heritage and national identity – selling Scotland: A modern or traditional* nation? (Youens, 2001), Scotland for Home Rule: The viability of Scottish independence (Fulton, 2009), Defining the 'traditional': The influence of music on national identity in Scotland (Wilson, 2009); Nationalising the landscape: Development of national identity through landscape and construction intervention (Alexander, 2010), Windfarm resistance in Scotland: A Categorisation analysis approach (Stoddart, 2012), and "We don't just want to change the flag; We want to change the country": Gendering the Scottish independence debate (Cuthbert, 2013).

conflicts, as their focus of inquiry²⁹. The connection between the Troubles and tourism was the main focus of the other two dissertations on the Troubles. Overall, the dissertations about an area in Northern Ireland, had principally either a tourist or an agricultural emphasis. The spatial range of dissertations written about England is large. From Cornwall³⁰ to Norfolk³¹ and from Hampshire³² to Northumberland³³: all counties are covered within the undergraduate dissertation archive. The spread is large as well. There are no outliers, except that the most northern counties of England are more often researched than southern counties: the counties Cumbria, Northumberland, Tyne & Wear, Durham, Lancashire and Yorkshire take up around 30% of the dissertations on England. There is no specific subdisciplinary trend perceivable in the dissertations about the north of England except a small 'peak' of physical geography dissertations situated in Yorkshire³⁴³⁵. As demonstrated in these examples, this does not indicate a specific subdisciplinary trend, as the dissertations are on fluvial and glacial geography as well as coastal geography. The higher number of dissertations on the north of England thus seems to be based on its closer proximity to Scotland or the home areas of students instead of a specific subdisciplinary focus.

International study areas

The broad range in study areas within Scotland and the rest of the UK is also perceptible in the diversity of countries, oceans or political units (such as the European Union) in the rest of the world. There have been 71 different such units studied. Looking at the 'top 10'³⁶ of countries studied (see Table 4), there are some clear trends perceptible. There are two

²⁹ For instance, An analysis of how the terrorist cease-fire during 1995 influenced Northern Ireland's tourist industry (Wilson, 1997), Spaces of cultural and political resistance in Belfast (Rice, 1999), and The 'Troubles' in Northern Ireland and their effect on tourism (McDougall, 2006).

³⁰ For instance, *Cornish self-determination; A regional necessity or a nationalist's utopia?* (McEvoy, 1999).

³¹ For instance, Shoreline management plans: Relationships between coastal defence policies and habitat conservation objectives (Seal, 2002).

³² For instance, *A study of soil acidity in relation to planted vegetation in a designated area of Brick Kiln Inclosure in the New Forest* (Radford, 1995).

³³ For instance, *Patterns of consumer behaviour in the Hexham area* (Craig, 1973).

³⁴ For instance, *The morphology of the channel and drainage basin of the River Calder* (McCorkell, 1969), *A study of the stratigraphy of the east Yorkshire coastline* (Duff, 1998), and *A study of the east Yorkshire glacial deposits and their depositional environments* (Leitch, 1998).

³⁵ During the 1990s, there was a Geography Year 1 fieldclass to York. David Evans supposed was 'lyrical' about the glacial geomorphology of North East England. This educational component as well as the interests and enthusiasm of individual staff members will have had influence on the spatial accents of undergraduate dissertations.

³⁶ With three different countries occupying the tenth place.

outliers: Tanzania and Iceland. As already mentioned, the high numbers of these two countries, together with Egypt, Switzerland, Norway and New Zealand (also in the top-10), can be explained by the field trips and expeditions organised by several particular staff members. All of the 69 dissertations on Tanzania, for instance, were written by students in the cohorts between 2008 and 2013, and all of these dissertations have a human geography emphasis or emphasise a more hybrid form of geography (combining human and physical elements³⁷. Other countries that are more common within the dissertation archive such as the USA, Ireland, Canada and France³⁸ do not have a direct curricular or extracurricular cause for their higher presence in the collection, but the spatial proximity or the sharing of a native language are potential explanations. When international

Country	Number of dissertations
Tanzania	69
Iceland	59
USA	38
Ireland	33
Canada	27
France	23
Egypt	17
Switzerland	16
Spain	12
India	10
New Zealand	10
Norway	10

Table 4 Top-10 of countries (outwith the UK) most studied

dissertation research became more common from the

early-1990s, the diversity of countries visited increased as well. The majority of the students from the 1960s-1980s who travelled abroad went to France³⁹ or Ireland⁴⁰. Besides these commonly researched countries, there is an extensive list of countries that are less prominent in the archival collection, yet the spatial range is still noteworthy (see Table 5).

In this section, I have reflected on the spatial emphases of geography students in their undergraduate dissertation research. It can be concluded that a vast majority of the undergraduate research emphasised an area within Scotland. Unsurprisingly, there is a shift

³⁷ For instance, An analysis of the key factors influencing farmers' choice of crop: Kibamba Ward, Tanzania (Greig, 2008), and The fruits of the roots: The sustainability of the conservation practices of mangrove ecosystems in Dar es Salaam, Tanzania (McSorley, 2011).

³⁸ Ian Thompson (Professor in Human Geography at the University of Glasgow from 1976) had a research specialisation in the regional study of France, and he also offered a second-year course on France (Thompson *et al*, 2009: 332).

³⁹ For instance, *The growth and morphology of aubiere: A 'ville-village' of the Massif Cen*tral (Davidson, 1967), and *Rouen - Sea port in the heart of Normandy* (Wink, 1978).

⁴⁰ For instance, A survey of the geomorphology of the Tulla Basin (Ballantyne, 1972), and Changes in agriculture and population in West Donegal (Mallon, 1978).

perceptible from the 1990s onwards towards more international research and mobility. Although this development was not something that was limited to the University of Glasgow and had many economic and political causes, there was an extra impetus to do international research, even on the undergraduate level, by means of the organised fieldtrips and expeditions to countries abroad.

Countries/Areas	Number of dissertations
Germany	7
Australia; Greece	6
Hongkong; Spitsbergen	5
Nepal, South Africa, Sweden	4
Brazil, Chile, China, Cyprus, Italy, Kenya, Malawi, Peru, Russia, Singapore	3
the Atlantic Ocean, Bolivia, Cayman Islands, Ecuador, Finland, Luxembourg, Malta, Nigeria, the continent of South America, the Netherlands	2
Afghanistan, Antarctica, 'the Arctic', Bulgaria, Colombia, Congo, Czech Republic, Denmark, Dominica, Dominican Republic, Estonia, the European Union, Falklands, Haiti, Indonesia, Iraq, Jordan, Malaysia, Mexico, Mozambique, Namibia, Portugal, Puerto Rico, Saudi Arabia, Serbia, Sri Lanka, Thailand, Trinidad and Tobago, United Arabic Emirates, Zambia	1

Table 5 Overview of other countries or areas studied at least once

Such curricular or extracurricular aspects of the undergraduate degree can have a longlasting effect both in the academic careers of undergraduate students taking part and the research done within the School or Department as a whole. Unfortunately, more recently there has been a demise of such initiatives, caused by the workload of academic staff and decrease of financial support from the University. In the next section of this chapter, on the practicalities of 'going into the field', I further explore these expeditions, as well as other 'dissertation travels'.

Emergence of the microscale: biographies, bodies and bothies

The question of 'scale' in dissertation research is obviously a spatial question but is also very strongly connected to foci of inquiry and methodologies. In the previous sections, I have already mentioned research on the global and virtual scale, as well as how certain scales are more prominent in dissertations addressing certain subdisciplines: for example, the national scale in political and cultural geography dissertations, as well as the 'regional study' as a subdiscipline with a very specific scale. From approximately 2010, other scales of geographical research emerge in the collection of undergraduate dissertations. Sharing a focus on 'the small', the situated or the singular, such study areas are, for example, confined to one building, one household, one life or one event⁴¹. The dissertations in the archival collection which focus on this small scale often have other things in common: many of these dissertations explicitly mention ideas of 'lived' and 'embodied' experiences and are dissertations on social or cultural geography.

In the cohort of 2010, there are two dissertations that explore the theme of bothies. One of the students takes a broad approach, analysing bothy culture, whereas the other student takes one specific bothy as a starting point:

"A biography of a building will be told through the events that surround it. ... This adjusted way of seeing; a micro-scale focus valuing just one place, with many small happenings and events, and the local and personal meanings it holds does however have wider, grander effects, and not just for us humans. ... To write this dissertation a number of stories will be told: of Shenavall bothy – its materiality and reverberations throughout the landscape; of individual human and animal residents and visitors that surround the place both recent and distant; of a literal journey, my personal narrative of the 'lived-in' experience of being in this landscape for a time. ... Hopefully what will emerge is something that although very local and idiosyncratic will still be universally relevant and transferable to a host of different places – not just rural but urban or suburban." (Henderson, 2010: 2-3)

This student explores research on a microscale and explicitly mentions the wider relevance of this situated narrative. It is not only the situatedness of the research that distinguishes a dissertation such as Henderson's from many others, since there are obviously many more dissertations that stay very close to their chosen case study or study area, but also the active presence of the student-researcher themselves in the written dissertation. They are not just a 'researching instrument' whose senses are used to observe, but they also start to use their own experiences, feelings and bodies as valuable sources themselves. Such autoethnographic approaches are connected to use of language that is highly personal, emotional and story-like.

⁴¹ Physical geography dissertations have often expressed an emphasis on a singular element of the landscape – one river, one glacier, or one beach – long before 2010 but I have interpreted the 'singularity' of a river as similar to the 'singularity' of, for instance, one neighbourhood in a city, or as a study of one population group ('the elderly', or 'adolescents), which is also present in the entire temporal scope of the dissertation archive.

In her dissertation *Embodied geography of tattooing: Scratching the surface of female tattooists* (2014), Claire Sannachan explores the theme of gender and tattoos using a combination of different methods. More traditional methods, such as semistructured interviews, are enriched with her own experience of being tattooed. In this, she combines her own experiences, but also takes 'the body' as a geographical space and place:

> "To further unpack the female tattooed skin, it is vital to look at skin and the body as a whole within geography. The female experience has been under represented, both as a professional tattooist and as alteration of the female body. Along



578 likes amyvsavage Sloth lady, big thank you to Claire for sitting awesomely 👍 💃

Figure 23 Printscreen of tattooist's Instagram Feed posting student's tattoo (Sannachan, 2014)

with this research, the bodies' skin will be considered as a space and place while examining the transformation of female tattooing." (Sannachan, 2014: 6)

Emphasising 'innovative' scales asks for solid justification. It is striking that all the examples mentioned here provide an extensive explanation of why and how the microscale or small-scale that they use in their research deserves a place in geography's disciplinary framework.

Another example of how the microscale has been used is by the emergence of biographical studies in the dissertations. Some of these dissertations are 'traditional' biographies of an individual, for instance on an artist⁴², others provide a biographical study of a landscape⁴³ or a practice⁴⁴. The idea of approaching other entities than human beings or organisations with a biographical perspective is not new. In 1984, for instance, Pred already wrote "that all humanly shaped landscape elements as well as all humanly made objects are not

⁴² For instance, on poet Kenneth White, in "Opening a world": Biographical-cultural geographies of Kenneth White and geopoetics (Somerville, 2013), or on musician Dick Gaughan, in The place of folk music in cultural geography: Dick Gaughan a modern day Scottish prophet (Forsyth, 2006).
⁴³ For instance, on the Electric Brae, a so-called 'gravity hill', in 'All downhill from here': A historical

and geographic account of the Electric Brae, a so-called 'gravity hill', in 'All downhill from here': A historical

⁴⁴ For instance, on rock climbing, in *Physical graffiti - A cultural biography of rock climbing at Dumbarton Rock* (Hutchinson, 2008).

lifeless, not without biographies of their own that are part of the never-ending transformation of nature" (Pred, 1984: 288). Before 2000, the undergraduate dissertation archive does not entail any examples of such biographical studies or embodied experience, nor examples of student-researchers focussing on one specific small space. It thereby demonstrates some kind of a 'delay' in the emergence of such approaches that are likely to be connected by curricular changes and staff changes within the department.

Going into the field

Before turning to the practicalities of fieldwork and the way undergraduate students reflect on this experience, I explore what these 'fields' or fieldwork locations actually entail.

The expanded field: from labs to rivers, from schools to archives

'The field', as discussed in Chapter 2, is often positioned opposite 'the lab' as a space of knowledge production, for instance by Kuklick and Kohler (1996). The difference between the two is characterised by the contrast of the field being a 'natural field location' and the lab being a 'closed-system' wherein control and prediction becomes possible. For many undergraduate students, it was not either-or but both-and. In many physical geography projects, a period of fieldwork preceded a period of lab work, open to all manner of uncontrollable and unpredictable flows, agents and phenomena, the first playing a role in the data *collection* and the second in data *analysis*:

"The basic field technique was the analysis of spoil tips which were randomly selected without knowledge of their type, age or characteristics. This field technique consisted of placing a transect through what was preferentially chosen as a representative portion of the spoil tip. Quadrats of one metre square were marked out at fixed regular intervals; the procedure was standardised to intervals of five metres after some experimentation to assess what would be a good sampling distance in an unfamiliar environment. Certain factors were noted directly from the quadrat; the vegetation cover, species number, slope, sub-surface temperature and environment were measured and noted. A soil pit was dug, and a field sketch of the profile made, and soil samples taken for laboratory analysis." (Brown, 1978: 11)

This quotation, from Kenneth Brown's dissertation entitled *An investigation into the reclamation potential of spoil tips in the Fauldhouse region* (1978), describes his research methodology, but also addresses the spatialities of his methods: his project was delimited to a specific region, and within that region, the spoil tips were randomly selected. Besides the collection of data by making use of quadrats, taking notes and making sketches, he also took soil samples for laboratory analysis. This is a routine that is seen frequently in all kinds of physical geography dissertations over time, but from the mid-1990s the work in the lab is described and documented more elaborately. This is not only connected to the fact that

methodology chapters gained a more central place in dissertations over time but was probably also influenced by the improvements of the departmental laboratory facilities around 1994. In an interview, Peter Chung, a microanalyst technician at the Glasgow department, reflected on these lab improvements:

PC: "... when Professor Bishop was appointed, he achieved huge investments in the labs. They spent a lot of money. Previously we were restricted to that one room, room 27A, and we did the teaching and research in that lab.

MB: "How did these investments change the possibilities for students' dissertation research? What kind of things could they do after all these changes that they maybe couldn't do before?"

PC: "They had more space to do things than before, whereas before you had to do something and tidy it away. So since we had a room for teaching we didn't have to tidy away so much. People could just work on a task." (P. Chung, interview, 7 June 2019)

The lab improvements afforded better working facilities for dissertation research: it became possible to continue on the same project for a few days in a row instead of always checking whether the lab space was needed for teaching. Besides these improvements in the research facilities in terms of accessibility, the lab improvements also included new instruments, such as stream tables⁴⁵. This meant that students working on a fluvial geography dissertation were able to do more experimental research. From the mid-1990s, students regularly made use of these facilities: sometimes complementing their fieldwork but other times as their main method; and more theoretical, methodological and experimental research projects began to appear in the collection of dissertations based *solely* on research undertaken in the laboratory:

"... five experiments testing the Be-separation effectiveness of larger cationexchange columns were carried out at the University of Glasgow's School of Geographical and Earth Sciences. ... The required acids, chemical rock sample substitutes and solution standards were prepared for the experiments. ... The experiments were conducted in a fume hood in a geochemical laboratory. Column stands were equipped with two plastic columns with large yellow reservoirs attached in order to hold a larger volume of eluent." (Vanik, 2014: 23-24)

It is a variety of lab facilities that students use, from the geochemistry facilities (see Figure 24), to the flume (part of the School of Engineering, see Figure 25). Such lab-based research projects are nonetheless still exceptions: the lab was for physical geographers definitely a

⁴⁵ The stream table was used, for instance, in the research for the dissertation entitled *Hydraulic mechanisms of meander evolution* (Scott, 1994).

'usual' space of knowledge production, but not regularly the *only* space. The experience of going into a field, even if combined with lab work, has hence been a consistent factor since the 1950s.



Figure 24 Example of particle size analysis, using Coulter (Shiels, 1998: 56)



Figure 25 Photo of the Flume (Baff, 1994: 17)

The fieldwork locations of students undertaking a human geography research project for their undergraduate dissertation are often 'open' spaces such as cities, villages, neighbourhoods and tourist destinations. Shifts are perceptible in line with disciplinary trends. For instance, with emerging attention paid to the social geographies of outsiders (this became an Honours option course in 1997), spaces such as schools⁴⁶, nurseries⁴⁷, care homes for elderly⁴⁸ and refugee centres⁴⁹ also started to become viable fieldwork locations:

"the site [primary school] remains an interesting and viable 'laboratory' for investigating the hierarchy of possible 'places' of association in accordance to a child's emerging political identity." (Ferguson, 2010: 11)

Such sites bring specific ethical considerations with them. In many cases, there is a personal relationship with the fieldwork location: for instance, a student's own former primary or secondary school⁵⁰ or the nursery⁵¹ the student's child attends. This choice demonstrates that access to certain spaces has often to do with existing social networks and relations. Just as many physical geography dissertations combine fieldwork with laboratory research, many human geography dissertations combine fieldwork with documentary analysis, such as archival research. In the regional geography dissertations from the 1950s to early-1970s, every student mentions one or more local libraries and archives located in the region that they were researching. In some cases, the documentary research was the only method and libraries and archives thus the main field work location: "this project was principally an exercise in library field work" (Haynes, 1970: n.p.). Archives are hence also important fieldwork locations, mostly for historical geography dissertations, but also as some form of supportive fieldwork location for, for instance, urban geography projects. Spaces connected to documentary analysis and archival research are often local or regional archives, and national or regional 'record offices', such as the Scottish Record Office⁵² (now

⁴⁶ For instance, Juvenile delinquency - A class based phenomenon? (Black, 1998).

⁴⁷ For instance, *"The terrible twos": A social geography of childcare* (Gallacher, 2002).

⁴⁸ For instance, Social inclusion of elderly people in Dumfries and Galloway (Hedley, 2002).

⁴⁹ For instance, *"A palace with all the refinements of modern civilisation": The uses of space inside and outside of Hawkhead Asylum* (Mackinnon, 2005).

⁵⁰ "Permission was granted by the Head Teacher because I am a former pupil of the school and my old geography teacher is an Assistant Head" (Adamson, 1998: 6).

⁵¹ "Perhaps the most important practical issue concerning this research was the presence of my son, Aidan, in Stepping Stones. This influenced all aspects of the research and my research role in particular" (Gallacher, 2002: 19).

⁵² For instance, visited by Stewart MacGregor for his dissertation *The processes acting towards the evolution of Lochgilphead and Ardrishaig, Argyll* (1970) and Alison McLean for her dissertation *The residential segregation of migrant groups in a mid-nineteenth century small town: The case of Partick, central Scotland* (1982).

named the National Archives of Scotland). In Chapter 6 I explore the use of archival methods further, but it is an important and consistent 'fieldwork' location for many student-researchers throughout the decades. This analysis of what kind of spaces actually are meant when talking about the fieldwork locations of undergraduate students demonstrates that, although the 'classic' image of geography fieldwork is prevalent and dominant within all cohorts, both in its physical geography and its human geography conception, it is important to acknowledge some changes over time. These shifts are related to changes in the discipline as well as changes in the local, departmental context.

The practicalities of fieldwork

Fieldwork is often seen as the 'signature' practice of geography (Day & Spronken-Smith, 2017: 2) and as the most powerful educational activity in teaching geography (France & Haigh, 2018). Fieldwork is an integral part of the geography undergraduate curriculum, but the experience of doing *independent* fieldwork for the dissertation is a different, individual experience. The activity of 'going into the field' often started with borrowing a bike, taking



Photo 11.



Photo 12.

Figure 26 Land use survey photographs (Waddell, 1974: n.p.)



Figure 27 Diagram of time spent during field research (Aitken, 1966)

a train or asking parents for a ride. However, there is usually some extensive less visible planning period that proceeds such journeys to the field. In some cases, the struggles experienced in planning and preparing greatly shape the scope, process and output of the fieldwork. Other struggles or challenges are not apparent before the actual fieldwork has started and ask for a solution 'on the spot'. The analysis of practical struggles, as well as the more positive equivalent of expected and unexpected practical opportunities, evokes certain moral discussions about accessibility of and equality in academic education.

Planning fieldwork starts with deciding on the scope of the research project, and sometimes making a good plan required preliminary survey work in the field (eg. Sinclair, 1978). For the majority of the cohorts of geography students, dissertation research has taken place in the summer between the third and fourth year of the four-year undergraduate programme. This fixed moment to do dissertation research brought particular problems for some of the students. For instance, Alison Waddell researched land use for her dissertation *The changing extent and importance of derelict land and land reclamation in Stoke-on-Trent* (1974), by means of air photo interpretation (pre-existing photos) and a survey of the area (see Figure 26). However, she describes the lack of activity in the photos that she has taken herself and blames this lack on the timing:

"The fact that in each case the photography had been flown during the summer holiday fortnight did not help as any visible signs of activity such as smoking chimneys, lorries on sites or cars parked beside works were absent." (Waddell, 1974: 15)

Indeed, Waddell's photos are in themselves visually attractive, yet the lack of activity did not help her research on land use (land use patterns could still be discerned, but there were no people around to ask for more information). Not only the timing with regard to the summer season and holidays is challenging, other students had additional planning problems:

"The timing of research made reaching potential participants very challenging – the ending of summer holidays and Ramadan and the start of schools were reasons why women interested did not have time to take part." (Kakela, 2014: 12)

Such examples demonstrate that the 'fixed' moment of when the dissertation should be researched is shared among many generations of students and is something that might influence the kind of research that students are able to do, as well as whose help is potentially available.

Besides deciding on the scope of research and the time and timing constraints, there are many other practicalities that shape the process of fieldwork. Many of these aspects are 'universal', in the sense that they happen to students whether doing research in the 1960s or in the 2010s, and in projects that are undertaken in Scotland as well as abroad. Challenging to many human geographers, for instance, has been the poor response rate or poor response 'quality' while looking for questionnaire or interview participants:

"The initial indication was that the employers concerned would be sufficiently cooperative to allow at least an accurate cross-section of firms to be interviewed. This indication, however, proved to be rather fallacious." (Weir, 1970: 2-3)

"Problems with the younger generation, almost universally young males, were that they did not take the survey seriously. This was done by making outrageous comments, abusing the system, and the police department as a whole. Thus, a few questionnaires were ruined." (Adam, 1998: 16)

"People do not like speaking about how much they are earning, especially when their income cannot be classed as wholly legal." (McCormack, 2010: 14)

"In multiple occasions individuals I approached were under the influence of alcohol, they were often gregarious and eager to assist; however, due to their intoxication they couldn't read, understand or complete the questionnaire. They verbally communicated their aggravations, often pugnaciously." (Johnston, 2014: 19) The nature of the 'problem' of participants is thus diverse – from not finding people that have time for you to not getting the right information or mutinous teenagers – yet consistently perceptible throughout the different cohorts. Other fieldwork limitations and challenges are more specific in more recent times: for instance, the very justified constraints raised by the need to get formal ethics approval from the university-based ethics committee.

There are also some other common fieldwork factors that play positive and not-so-positive roles in the experiences of students, from needing certain weather conditions to do research:

"Many visits to the site proved unsuccessful due to lack of wind. However, one day in September there seemed to be enough wind to move sand grains and thus enable fieldwork to be carried out." (Hamilton, 1994: 15)

To weather ruining many days of fieldwork:

"The greatest general limitation within the study was the weather, and specifically the high rate of precipitation. ... Work was hindered by the rain, and on some occasions field work had to be abandoned." (Lemon, 1994: 14)

From handy and supportive scientific instruments:

"The instrument [Kern DKM2 Theodolite] was light and easily hand portable. Setting up was very easy once the centering leg principle had been understood and operated a few times." (Graham, 1966: 12)

To DIY solutions, bottles and buckets:

"Forty 1 litre milk bottles were rinsed and soaked in a strong detergent for 24 hours and then rinsed thoroughly with distilled water to ensure no detergent clung to the sides. The bucket and funnel which were used during the collection of samples were also sterilised." (Montgomery, 1998: 10-11)

Language differences, alongside unexpected events such as strikes and transport issues can be added to the list of practical constraints.

Assistance and help in the field

Although undergraduate dissertations are *independent* research projects, many students had some sort of support in the field as well as in the preparation and writing-up stage. This support sometimes had a more intellectual character (e.g. offering information, being a respondent in the questionnaire, referring students to interesting data or locations), other times it was more support in a practical or counselling sense. Some of these roles are prevalent in all cohorts: this includes the help of family, friends and peers, but also help from local residents in the study area. There are also many institutions that are thanked by students from all different decades, such as certain city council departments and forestry commissions.

mfries and Galloway

Tracey Shaw 9 Fellside ANNAN DG12 5HL Dear Tracey RESEARCH ON CAR Thank you for coming Lantonside. I understand that the wo removed from site after and 3 days at high tides of	DUALCHAS NADAIR NA H-ALBA	SOUTH WEST REGION	Dumfries and Galotter Area Office 106 High Street Dalbeattie Kirkcudbrightshire DG5 4HB Tel: 0556 610086 Fax: 0556 611924			
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Please ensure that you are when carrying out this wo	e able to get off the mork.	arsh and that your own s	afety is not compromised			
If you want any other loca 0387 77275. If you want let me know.	l information please co to look at the aerial pl	ntact Wally Wright at the notographs again or any o	e Caerlaverock Office on of the reports here please			
Good luck with your work.	. I look forward to re	ceiving a copy of your r	esults and conclusions.			
Yours sincerely			conclusions.			
dine.	7					
CHRIS MILES Area Officer						
Dumfriesshire						
Figure 28 Permission letter for re	search (Shaw, 1994)					

The help from family members and friends through the decades can be summarised as

practical and psychological support, expressed by fieldwork assistance, financial support

and much needed distraction:

1

"my good friend, <u>Miss Wilma M. Young</u>, who painstakingly translated all the German I could desire and more, especially during my 'fact-finding' trip to the Federal Republic" (Birch, 1986: iii)

"My father for accompanying me on each of my bird surveys to take down notes of what I saw and heard." (Aitchison, 1998: 55)

"The author wishes to firstly thank my parents who without there [sic] help I could not have visited Malawi, and subsequently lived there. They allowed me to disappear into the countryside and explore what it had to offer." (James, 1998: ii)

"My Grandpa for all his humour and timely hedge cutting and gardening chores when needing to let off steam." (Macari, 2002: n.p.)

Besides such forms of help, as already mentioned, it was not uncommon for mums, girlfriends and sisters to have helped by typing up the dissertations of their sons, boyfriends and brothers, especially between the 1960s to early 1990s. It demonstrates a surprisingly gendered element of dissertation writing: even though the cohorts of students have always been mixed, female students tended to type their dissertations themselves or paid a typist service provider to do it, whilst many male students 'outsourced' this job to female relatives. It might be a trivial element (to what extent is the *typing up* actually part of the dissertation work, when the student has done all the intellectual work himself already?), but it addresses how the 'workload' of doing an undergraduate could be different for students, even when they were part of the same cohort of students.

Examining the mentioned support and assistance chronologically, there are some shifts perceivable over time. For instance, in the 1950s and 1960s, the most thanked 'group', by a large majority, were farmers (of specific parishes, villages, areas). This of course directly relates to the types of research students were doing. The dissertations suggest that farmers were not only asked about the land-use of the land they owned themselves, but also as residents who often had lived in this specific space all their lives. Another example of a group that often was able to help out in regional studies was religious people in parishes, such as reverends and vicars. In multiple accounts of the 1950s and 1960s they are mentioned specifically. After these decades, religious people are also sometimes mentioned, but then only in cases where religion⁵³ was the main focus of inquiry. In these cases, religious people interviewed were approached as experts on a topic or as 'research participants'.

There are also certain roles or institutions that were able to offer assistance to undergraduate dissertation students of many generations, but who, more recently, have perhaps grown 'out of the picture'. Archivists and librarians working in local or regional

⁵³ For instance, Young Christians as 'outsiders' in Glasgow's West End (McCallum, 1998), and The role of the Orange Order in contemporary Scottish society (O'Donnell, 2006).

archives, libraries and museums play a big role in the data collection from the 1950s to the 1990s. The same goes for employees at various census offices, county councils and district councils. From the turn of the century, such parties seemed to have disappeared from the dissertations. It might be the case that they are only disappeared in their *explicit* form: whereas students up to the 1990s needed physically to visit or phone these institutions, from the 2000s it became easier to find information online. This does not mean that the work of archivists, libraries and so on is not consulted anymore, but that, because of the ease of checking such data online, it has become more or less 'invisible' that the work on inventories and digitalisation is still undertaken by actual people.

The 1970s and 1980s demonstrate other regularly consulted sources in the field: for instance, tourists, hotel owners and shopkeepers and tourist information offices are becoming more prominent in these decades. Again, this relates to certain subdisciplinary trends. There is, however, also a group that became indispensable in fieldwork (especially for human geographers) from the 1970s onwards: respondents and research subjects. With methods such as questionnaires, interviews, participant observation and ethnography, it became important to connect to people in the intended response group: this crucial shift to *actively* recruiting research subjects – from casual 'informants' (giving contextual information) to people purposively researched using specific methods is thoroughly discussed in Chapter 7.

Whereas respondents provided a very active and central role in the research itself, many students also thanked those around them that had to 'endure' their behaviour and absence:

"Mum, Dad, Lesley and Rachael for help, encouragement and patience with a certain (often frustrated !) dissertation writer." (Moyes, 1990: 46)

"Apologies go to my children Yvonne and Graham, for whom the word 'dissertation' is now synonymous with 'dinner is going to be late again!'" (Caulfield, 1994: n.p.)

These social relationships that play a role in the fieldwork experiences of undergraduate students demonstrate the breadth and diversity of the social contexts of the students. It also indicates that the practice of doing research for the dissertation and the writing-up of the dissertation were inextricably intertwined with the daily lives of the students: even if friends, flatmates or family members were not directly involved in 'assisting' the student in any way, this did not mean that they did not at least notice the dissertation activities indirectly. Whereas the division between a 'private life' and a 'student life' are perhaps in

general less strict, during the dissertation research this division faded even more, especially in cases where practical in-field assistance was offered.

Field expeditions

Whereas the Geography undergraduate curriculum has always included field classes of multiple days in the first three years of the four-year programme, the dissertation research fieldwork has often been an independent endeavour for students. There are some exceptions, however, in the form of field expeditions: both expeditions which were organised for the purpose of undergraduate dissertation research and expeditions with a more diverse travel party. As I discuss in Chapter 5, such field expeditions strongly influenced the subdisciplinary accents within a cohort.

In 1966, a small number of undergraduate students joined lecturers and postdoctoral researchers to the Island of Rhum. This expedition was aimed at surveying parts of the island, on behalf of the Nature Conservancy (Graham, 1966). Two dissertation students were involved in the surveying as part of their dissertation research: two other undergraduate students were joining the party but with their own independent research aims within the field of biogeography. Their dissertations reflect on sharing accommodation and transport to the island with the others, but do not indicate a lot of shared field activities. This aspect is different in other, later field expeditions, notably the multiple expeditions to Iceland in the 1990s, organised by David Evans. These trips included



Figure 29 Photo of 'field attire' of research undertaken as part of the Iceland Expedition '94 (Hosea, 1994)
many more students. The four weeks shared over summer obviously meant that stronger relationships were built with peers, leading sometimes to personal acknowledgements:

"Jenny Pearce – for those unforgettable moments we spent each day crouching behind boulders, discussing the merits of oatcakes and the universe." (Partington, 1994: 3)

"everyone involved with the Iceland 94 expedition, particularly those diamond geezers with the levelling data: Ian and Gary. A big boo-yah to Morg and Spider, and the rest for making the four weeks there a lifelong experience (dig those rainy Winchester Club days man!)." (Wilson, 1994: 48)

In the interviews held with current and former staff members, such field expeditions were also discussed in a different way. Philo reflects on idea of 'unfairness' that some students held if *not* going on field expeditions themselves, explaining why staff just being 'there' on an expedition does not automatically mean that they had more input than when a student doing a non-expedition project would have consulted staff member regularly as a 'resource':

"There was disquiet for instance about students that went on Dave's expeditions, or who went with John and Jo to Africa, that they were getting a 'Rolls Royce treatment'. I never really bought into that too much. I think that - I have always tried to think of that as – a staff member is a resource. And students should feel free to draw upon that resources. Some students draw upon it more than others." (C. Philo, interview, 10 December 2019)

John Briggs, himself organiser of field expeditions to Egypt as well as Tanzania in the late-1990s and 2000s, reflected on the quality of dissertations based on these field expeditions.



Figure 30 Fieldwork in Dar es Salaam (Hamilton, 2010)

He argues that there are two reasons for the high quality of dissertations connected to research expeditions: overall the 'better students' were more interested to go on such research trips, and there was some 'sense of competition' in these groups. "When going abroad together, you do not want to be the one 'doing the least'" (J. Briggs, interview, 18 July 2018).

The field expeditions meant building close connections to peers and staff members, but also led to stronger relationships as well as growing interest in specific subjects or subdisciplines. In one of the expeditions to Tanzania, organised by Briggs and Sharp, students from Glasgow collaborated with students from the University of Dar es Salaam. For the latter, helping with translation was a very practical way of offering field assistance and to overcome language and culture barriers. These field expeditions strongly influenced students on a personal level:

"On returning to Glasgow after spending 3 weeks in Dar es Salaam, I remembered the culture, the people and the beautiful landscapes all of which seemed illustrative of the process of migration in one way or another. Whilst on safari immediately after completing the research I was still consumed by the concepts and realties of rural-urban migration, and witnessing the fascinating sights of hundreds of wildebeest migrating across the Ngorongoro Crater highlighted the simplicity and natural qualities of migration" (Hammond, 2010: 6)

It is important to note that such expeditions were not only influential on a personal level, but also affected future career paths of undergraduate students. There are multiple examples of students who went to Tanzania and continued with PhD research, even with a focus on Tanzania or development geography. It demonstrates that, although the undergraduate dissertation is a relatively small exercise in research, it can be experienced by individual students as a key moment or starting point for later developments in life.

Conclusion

The contexts and networks of dissertation-writing students are, as discussed in this chapter, diverse. The geographies of the research undertaken by undergraduate students show developments towards more international research and orientation on a global scale over time, yet simultaneously also changes towards exploration of the microscale. Such shifts are inextricably connected to disciplinary and subdisciplinary developments and trends. Internationalisation in higher education and student mobility programmes such as ERASMUS, established in 1987, have had an impact on the possibilities for students to go abroad. The current political position of the United Kingdom, as well as Scotland in particular, might lead to a decrease in international students coming to Glasgow to study

and the possibilities for students at the University of Glasgow to go abroad during their undergraduate studies. Future researchers of this dissertation collection might be able to reflect on the effects of Brexit on not only *where* students went to do fieldwork, but also how that might have led to new trends in foci of inquiry, perhaps to a new parochialism or perhaps to sustained critical reflections on the geopolitics of re(enforcing) boundaries on movements of people and ideas.

The conceptual pluralist understanding of 'the field' as a space of geographical knowledge production is supported by the many different fields to which students have travelled and have described in their undergraduate dissertations. From a dance school⁵⁴ to glacier 'snouts'⁵⁵ and from a chicken coop⁵⁶ to machairs⁵⁷; the geographical field is definitely diverse. This explosion of field possibilities also influences the variety of practical challenges encountered in the field. Some students rely heavily on family or friends who act as unpaid research assistants, maybe indicating how students with a 'richer' social network might have a more pleasant fieldwork experience with a lower workload. Apart from the 'wealth' in the social sense, socio-economic factors play a role in different opportunities for fieldwork: some students mention their parents as 'funders'.

The educational context of the undergraduate dissertation as part of a wider curriculum distinguishes such a research project from other academic research. It is not only the awareness of students and supervisors that the dissertation should be 'good enough' to pass (or to get a certain aspired grade), but also the relationship between what the students had learnt and which fields the students had come to know well during their coursework that in many cases directly influences the dissertation. Specific courses, individual staff members and existing facilities within the department or university might influence the choices made by students. These aspects mean that, whereas many undergraduate geography students in the UK might research similar phenomena in similar 'fields', there will always be substantive differences in when certain disciplinary trends become visible in undergraduate dissertations or which areas are more regularly studied. The 'where' of dissertation research is multi-layered and diverse. The 2614 small

⁵⁴ For instance, *The geographies of a dance school* (Smillie, 2010).

 ⁵⁵ For instance, A report on the tacheometric survey of the snout of Otemma Glacier, Switzerland (Woolnough, 1968), and The comparison and analysis of two methods of collating ablation data for the snout of Sandfellsjokull, Myrdalsjokull Ice-cap, southern Iceland (Partington, 1994).
⁵⁶ The geographies of hen-keeping (McQuade, 2014)

⁵⁷ For instance, The extent and management of recreational impact on the machair of Clachtoll Sands, Sutherland (Mulvey, 1990), and Are current sediment processes and human practices at Eoropie Beach sustainable in regard to future threats facing machair? (Osterblad, 2012).

knowledge productions in the cupboard all include quite specific geographies of how the research for the project is undertaken and experienced, yet taken together this collection has revealed numerous key geographical, social and educational constants and changes over time.

The specific education context distinguishes the undergraduate dissertations to some extent from other geographical knowledge productions and raises questions about *who* exactly produced the content of the dissertations. It is important to be aware that the dissertations – the first independent contributions to the field of geography – by 'geographers-in-the-making' are not only worth studying because of their sometimes innovative and well-researched foci of inquiry and methods, but also because they offer a glimpse into how 'established' geographers impact future generations of geographers, and how they 'made an entrance' into the discipline themselves. The role of supervisors and other staff members, the networks of peers, friends and family, the financial and practical access to research further from home and the rules, regulations and traditions of British higher education are central to the productions of knowledge and 'rites of passage' that are undergraduate dissertations.

CHAPTER FIVE STUDYING GEOGRAPHY: AN ANALYSIS OF THE DISSERTATION COLLECTION AS INTELLECTUAL SOURCE MATERIAL

"As a measure to benefit the diversity, security and sustainability of our energy supply; as well as reduce the emission of atmospheric pollutants such as carbon dioxide, there has been a recent surge in development of renewable energy sources. ... It is clear ...that studies such as this one are relevant on a local scale. Local people are by nature the ones most affected by changes in their local environment, and analysing and evaluating their interactions within the context of changing landscapes is vital." (Davidson, 2014: 12)

Introduction

The undergraduate dissertations in the cupboard contain individual narratives about research projects undertaken using specific skills, methods and tools. Investigating these dissertations as social and cultural sources provides insights into both the role of fieldwork in the geography curriculum and the active research experiences of many geographers-inthe-making, as the previous chapters has shown. Each dissertation is also an intellectual source, however, a piece of writing, approximately between 6,000 and 10,000 words long (the length of dissertations has increased slowly over the years), with a specific aim, hypothesis, question or objective. Each dissertation is an intellectual encounter, the deployment of an academic awareness and capacity to inquire into a chosen substantive subject matter, a topic for study both suggested by the 'real world' and, if sometimes awkwardly, aligned with the more systematic or subdisciplinary interests of the geographical academy. In this latter respect, the dissertation cupboard as a whole discloses disciplinary trends and shifts: to do with the disciplinary divide between human and physical foci, of course, but also from subdisciplines maybe going extinct at a slow pace through to more ephemeral disciplinary 'hypes'. The cupboard also discloses striking continuities throughout the decades.

In this chapter, I explore such disciplinary shifts and continuities by an analysis of both the intellectual content of the dissertation archive as a whole and some specific dissertations in particular. First, I address the relationship between human geography and physical geography. This analysis is quantitative as well as qualitative. In this section, I also explore some recent bridges between the two: for instance, hybrid studies on sustainability, climate change and green energy. Second, I will address subdisciplinary shifts and trends over time. This analysis is, again, both quantitative and qualitative. I consider causes for the quick rise of certain popular subdisciplines in the dissertation collection, focussing

particularly on changes in geomorphological studies over time and the explosion of cultural and social geography towards the end of the twentieth century. Within this analysis, I aim to stay close to the primary sources, and use many examples to support the arguments. By means of seven 'portraits' I exemplify shifts as well as long-lasting traditions within the discipline, structured by some key issues and concepts, such as commuting, vegetation, outdoor recreation and social justice. These portraits are presented as self-contained narratives, yet these narratives are obviously contextualised by the analysis of changes contained in this chapter as a whole. This chapter, thus, explores the richness of geographical knowledge that has been produced by many generations of undergraduate students, teasing out significant variations in 'what' has been the substantive, maybe subdisciplinary, focus of this knowledge. Students' independent research projects take place on a level between formal academic geography and non-specialist geography, and offer something distinctive to the existing narratives of what geography, or geographical knowledge, is and has been.

One undergraduate degree with two distinguished pillars

As discussed in Chapter 4, the educational context of the undergraduate Geography curriculum at Glasgow comprises both human and physical geography, leading to a degree with methods, writing styles and foci of inquiry deriving from very different intellectual traditions. Whereas in some other countries students at undergraduate or Bachelors level choose between human geography or physical geography beforehand⁵⁸, most British universities provide a 'singular' Geography degree. This unity in the educational programme is, however, not always experienced by everyone, whether students or staff members, involved. Based on my own experience as a tutor for first- and second-year Geography students, students – even when it is not explicitly asked – often make comments in introducing themselves such as "I am mainly interested in human geography" or "my other course is Earth Science, so I am more interested in all things that have to do with landscapes" and so. This early separation is perhaps also encouraged by the organisation of the degree: for instance, second-year students will take tutorials throughout both semesters, but these are taught alternatingly by their 'human geography tutor' and their 'physical geography tutor'. This division in human geography and physical geography sessions might exacerbate the presupposed distinction between the two pillars

⁵⁸ For instance, most universities in the Netherlands have an Bachelors programme Human Geography and Spatial Planning, as well as an Earth Sciences Bachelors programme that also comprises Physical Geography.

within the undergraduate curriculum. Nonetheless, there are enough elements in the degree that emphasise the interconnectedness of the human and the physical, both in field classes and in the 'day-to-day' curriculum: for instance, in lectures and tutorials about the urban environment. Some foci of inquiry provide a more obvious connection between the two pillars, which I discuss in this section. Examples are regional geography dissertations, comprising divergent social and physical aspects of a region, and geographical studies of hazards, a more recent 'bridge' between human and physical geography, with projects on, for instance, flood risk and flood risk perception⁵⁹.

Figures 31 and 32 respectively address the absolute number of dissertations categorised as human geography and physical geography, or as 'both', suggesting an integral, more hybrid form of geography combining the human and physical, and the proportion of dissertations within every cohort that are either human geography or physical geography, expressed in percentages of the total number of dissertations from that cohort. Of course, this categorisation exercise is somewhat arbitrary, as already discussed in Chapter 3. Even if the categorisation is not flawless, it is still insightful in many ways. The figures demonstrate how human geography has always – with the exceptions of the cohorts of 1966 and 1969 – dominated physical geography in the number of dissertations per cohort. These two graphs combined give rise to a few general comments on the shifting ratio between human and physical geography. First, 'unified', integral geography seemed to have been dominant until the mid-1970s and after that has been marginally present in every cohort (lingering between 5% and 10% of the dissertation in most cohorts). The percentage has never been higher than 15%, but there seems to be a small increase in such hybrid dissertations since approximately 2000. The last cohort studied in this project is 2014, and this cohort shows the highest percentage of such hybrid geography in over thirty years. Although the increase over time is very small, there might be some disciplinary trends that can be identified as causes for this small increase. Second, Figure 32 demonstrates that the dominance of human geography over physical geography was strongest during the 1980s. In some cohorts in this decade more than 85% (in one case even more than 90%) of the students wrote a human geography dissertation. It demonstrates the quite worrying state of physical geography in Glasgow's Geography department during the 1980s, which I discuss in more detail later. The third remark I would like to make is a logical follow-up of the

⁵⁹ For instance, the dissertation entitled *The public perception of flood risk: Mitigating the adverse impacts of flooding* (Hayden, 2014).

previous remark, namely the resurgence of physical geography in the 1990s. These three observations about the quantitative data are the basis for the following sections about the twin pillars of human and physical geography.

Recent bridges between human and physical geography

Some subdisciplines that I discuss in the next section of this chapter are very strongly positioned as *either* human geography or physical geography, whereas other subdisciplines can be placed closer to the middle on a hypothetical 'human to physical' scale. Examples of such subdisciplines are conservation studies, studies of hazards and environmental studies⁶⁰. Whereas the first, conservation, has been consistently studied by students with only a small peak during the 1980s, the other two mentioned here increased significantly over time. As Figure 33 demonstrates, the percentage of dissertations consisting of environmental geography increased over time, with only a small decrease during the early-1990s. That brief decline can potentially be explained by the numerous students who joined field expeditions, for instance to Iceland, who might have been interested in environmental research as well as geomorphological research but chose the latter because of the unique social and intellectual experience of the organised field expedition. There are several examples of intellectually valuable and innovative environmental research projects that focus on the connection between 'the human' and 'the physical'. One impressive example is Katy Kitchingham's dissertation Investigating 'nature' - A case study of Crawford Lake Conservation Area in Ontario, Canada (1998), which I discuss in detail when addressing the cohort of 1998 in the next chapter.

In the 1980s there were already students who presented in-depth research studies on the relationship between humans and the environment, one example being John McAuley in his dissertation entitled *The impact of man on the water quality within the South Calder Basin* (1982). McAuley describes his own research explicitly as physical geography, presenting the statistical data, maps and information that he used concerning agricultural, urban and industrial influences on the water quality as 'merely' secondary data (McAuley, 1982: 6: see Figure 34). However, his extensive introductory remarks maybe suggest otherwise, and strongly emphasise the human elements of his research:

⁶⁰ These are examples of *recent* bridges, but these are definitely not the first bridges between human and physical geography. Earlier examples of hybrid geographies are found in the disciplinary 'traditions' of environmental determinism and regional geography, dominating geography from the late-nineteenth century to the mid-twentieth century, as discussed elsewhere in this chapter.



Figure 31 Number of dissertations per cohort that can be categorised as human geography, physical geography, or 'both'



Figure 32 Percentage of dissertations per cohort that are human geography or physical geography



Figure 33 Percentage of dissertations per cohort that are respectively environmental geography and hazards studies

"After two million years of exploiting nature, man [*sic*] finds himself in a world closely moulded to his needs and desires. Only now is he becoming aware of the consequences of his prodigality – A point... has been reached in history when man must shape his activities throughout the world with a more prudent care for their environmental consequences. Through ignorance or indifference, man can do massive and irreversible damage to the biosphere on which his life and well-being depend. An ever increasing number of interested parties are drawing the attention of Governments and peoples to the growing evidence of man-made harm in many regions, including dangerous levels of pollution in water, air, earth and living organisms, major and undesirable disturbances of the ecological balance of the biosphere, and the destruction and depletion of irreplaceable resources." (McAuley, 1982: 7)

The archaic gendered use of the concept of 'man' to describe humans distracts from the more topical conscience of the 'irreversible' negative influence of people on the (natural) environment. McAuley thus presents an example of ethically charged research that he himself describes as physical geography, but which definitely has a strong human component to it.



PLATE 1: ABANDONED VEHICLES - A COMMON SIGHT ON THIS SECTION OF THE RIVER.



PLATE 2: AN EXAMPLE OF THE WET PEATY CONDITIONS EXPERIENCED ABOVE SHOTTS.

Figure 34 Fieldwork photographs (McAuley, 1982)

Such ethical-political studies connecting the human and the physical appear irregularly throughout the decades from the 1980s onwards, but increase markedly for the cohorts of the twenty-first century: sustainability, climate change and green energy are indeed three 'buzzwords' in many of these recent dissertations. Such studies sometimes emphasise the 'physical side' a little more⁶¹, whereas other studies lean towards the 'human side' of environmental themes⁶². In the cohort of 2010, two students independently connect the context of the environment and climate change to the role of the media. In her dissertation entitled *The role and perception of environmental journalistic cartography: Eyjafjallajokull volcanic eruption case study* (2010), Lauren Scott examines environmental cartography by analysing the maps accompanying news stories, approaching these maps as 'vessels of power' (Scott, 2010: 25). Her dissertation thus focuses on the role of media, and particularly on the role of maps in printed media, but she studies these maps from the perspective of *how* people are informed about environmental issues, thus majoring on the

⁶¹ For instance, *Investigation into dispersal of lead from disused mine, Tyndrum,* Scotland (Murray, 2006), and *A quantification and analysis of microplastics in sediment samples from a freshwater system* (Stedman, 2014).

⁶² For instance, *Footprints and food: How a community led organisation is responding to climate change* (Gibson, 2010), and *The process and social opinion of sustainable electrification in autonomous power grids* (Fisher, 2014).

circulation of geographical knowledge about the environment rather than on the environmental issues themselves. The second example of such a connection between media studies and environment is Suzanne Smith's dissertation *Shaping public perceptions on climate change through the printed media: Comparing* The Guardian *and* Evening Times (2010), comparing articles about climate change from a national and regional newspaper, providing a similar study although not focussing on maps in particular.

As Figure 33 demonstrates, the increase of environmental geography dissertations is a gradual one, whereas the appearance of the field of hazards studies is more abrupt. With just a few dissertations on hazards during the 1990s and 2000s, the cohort of 2014 suddenly presents a peak of 10% of the students writing their dissertation on hazards. These dissertations all have a very similar focus – they are about flood risk, flood risk perception, and flood risk prevention⁶³ – although, interestingly, they have been supervised by different members of staff, including historical geographers, geomorphologists and coastal geographers. The study areas of the projects are diverse as well, from Somerset in England to Dumfries and Galloway and Aberdeenshire in Scotland, but their methodologies and approaches are very similar: all include the design and use of questionnaires that provided the opportunity for some statistical analysis as well as interviews with experts. This sudden peak in dissertations on one specific topic could be instigated by two factors and it is probably a combination of both: first, specific attention to this research focus in the undergraduate curriculum, for instance in a course on hazards taught by Rhian Thomas, being of interest to many students, and second, actual and urgent attention to the theme in wider society generally and the media specifically⁶⁴.

Besides environmental geography and hazard studies, there is a third subdiscipline that provides an evident and consistent 'bridge' between human and physical geography, namely, conservation studies: a small subdiscipline, not subject to any significant increase or decrease over time. In the 1970s and 1980s, conservation studies dissertations were often connected to the impact of outdoor recreation and tourism, and many of them took

⁶³ For instance, Social impacts of flooding on residents in flood affected areas: A case study of Comrie, Scotland (Fraser, 2014), A comparison of the health and social impacts of flooding on people who have experienced multiple floods and those experiencing flooding for the first time (Honeyman, 2014), and Exploring the role of emotions in influencing flood mitigation behaviour in Scotland (McClymont, 2014).

⁶⁴ Looking at the MetOffice annual overviews of past weather events (<u>https://www.metoffice.gov.uk/weather/learn-about/past-uk-weather-events#y2013</u>), these demonstrate that in 2012 and 2013 a larger number of flooding events with high intensity and impact occurred than in the years before that.

Loch Lomond as their study area: a clear example of the influence of particular academic members of staff on dissertation subjects, in this case Gordon Dickinson⁶⁵, as well as the role of considerations concerning money and travel in the decision about fieldwork location. Some of these dissertations are discussed in the portraits at the end of this chapter. In the dissertation archive as a whole, there are 91 dissertations (out of 2614) on conservation, with, as said, a quite consistent line of inquiry recognisable. It is an example of an element of geography that has 'always been there', at least throughout the second half of the twentieth century. This definitely does not apply to all foci of inquiry and subdisciplines, as I discuss in the next section of this chapter. The examples mentioned here demonstrate that 'the physical environment' as treated in the dissertations has never been solely physical and has always been recognised as something influenced by and influencing human actors and human lives. Envisaging a two-way, mutually causal relationship between the 'natural' environment and its 'human' overlay is different from stricter conceptions of this relationship, for instance, early-twentieth century environmental determinism, arguing for a one-way arrow from the environment to the human (Philo & Ernste, 2009). Overall, there is an upwards trend noticeable towards a more critical, ethical-political voice in such environmental dissertations, indicating that some of the fields traditionally closer to the epistemology and methodologies of natural sciences are also influenced by discussions taking place in social sciences and the humanities. The forging of a new environmental geography hence recentralises humanenvironment relationships in a way that includes factors external to 'just' the environment or 'merely' concerned with human agency (such as economic logics).

Subdisciplinary shifts

As mentioned in Chapter 4, the activity of dividing the dissertations in the archival collection into subdisciplines is inherently 'imperfect', but the results still retain some indicative power. The longitudinal character of my research gives the opportunity to recognise fast and abrupt changes, such as the sudden increase of hazards studies as described above, as well as slower developments taking several years or even decades. In this part of the chapter, I explore two such developments in depth: changes in the numbers and character of geomorphological research projects, and the rise of social and cultural geography dissertations towards the end of the twentieth century. Before that, however, I

⁶⁵ Dickinson himself actively studied and authored papers on recreational threats to the environment of Loch Lomond (e.g. Dickinson, 2000).

provide some general notes on subdisciplines and subdisciplinary trends and shifts as revealed from the dissertation cupboard.

Quantitative analysis of subdisciplines

Figure 35 demonstrates the overall numbers of dissertations per subdisciplines. As the figure shows, there are four subdisciplines that really stand out: social, regional, economic and urban geography. These subdisciplines are all close to encompassing 10% of the 2614 dissertations in the archive (urban geography around 9%, social geography 12.5%). Looking further down the figure, it is possible to distinguish some of the subdisciplines that are not as prevalent as the top four but have still been studied by relatively high numbers of students, as well as some subdisciplines that have only been studied by a few individuals throughout the decades. It is interesting to note that, for instance, geomorphology – as the study of landforms, their forms and maybe processes – appears very low in the figure, with only a few dissertations allocated to this subdiscipline; but, as I discuss thoroughly in a later section of this chapter, this is because many geomorphological studies adopt a more particular focus on specific landforms or formative elements, typically given names such as glacial, coastal or fluvial geomorphology, and are thus represented in a more specific 'category'. Figure 35 lacks the more interesting information of how such numbers and the popularity of subdisciplines have changed over time, and of course it is that kind of data that will say more about what is has meant to be a geographer-in-the-making during different eras. There are several ways to probe such shifts over time. I have chosen to use two kinds of data representation: first of all, graphs demonstrating timelines of particular subdisciplines (for instance, Figure 33, showing environmental geography and hazard studies, displayed in the previous section) and second, as in Table 6, a table presenting an overview of the years when individual subdisciplines were (in percentages) at their peak in terms of having the highest percentage of dissertations submitted by that cohort overall. Furthermore, in Appendix 5, there is a collection of timelines for every subdiscipline independently: these timelines are insightful for looking up the shift in popularity of a certain subdiscipline over time – also for the subdisciplines that are not explicitly discussed in this chapter.

Table 6, the figure with the 'peak years' of subdisciplines, demonstrates some additional insights that Figure 35 cannot offer. Some subdisciplines have surprisingly high relative numbers, such as biogeography (1966) and economic (1968) and urban geography (1963). These numbers are likely indicative of the Honours options that the undergraduate curriculum offered in the 1960s: there was just a small number of options and students

were required to write their 'systematic' dissertation for one of these Honours options. Some other peaks can be explained by the organised field expeditions discussed earlier: for instance, the numbers for glacial geomorphology (1995) and for development geography (2011). Besides these two causes, the limited number of Honours options in earlier years and the field expeditions, there are probably three other explanations of the data displayed here. First, regional geography⁶⁶ was, as discussed in Chapter 6, mandatory in some of the earlier decades, leading to some '100%' numbers in a few cohorts. Second, some subdisciplines do not have a very convincing highest number and 'have just always been there' on a relatively small scale, yet across multiple decades. This goes, for instance, for rural geography and population studies. There is of course some movement in their respective timelines (see Appendix 5), but these are not significant. A further bundle of explanations concerns the role of disciplinary trends, the role of individual staff members in motivating and inspiring students to do certain kinds of geographical research, and the expectations and ambitions of generations of geography students. These connections here do not work in just one way, but rather in several ways, which makes it hard to distinguish



Figure 35 Number of dissertations per subdiscipline

⁶⁶ Technically, 'regional geography' is *not* a subdiscipline given how it was understood as where the 'systematic geographies' come together to reveal the characteristics and, potentially, the unity of a whole region. However, the regional geography dissertation are so distinctive from the others that I also used them as a subgroup in this analysis of subdisciplines.

what exactly comes first. I discuss this complex context of (sub)disciplinary trends within one educational context in some detail now, discussing the changes in geomorphological research by students and the rise of social and cultural geography throughout the decades.

Subdiscipline	Cohort	Percentage of cohort
Regional	1958-1961	100
Urban	1963	42.9
Transport	1964	18.2
Biogeography	1966	20.5
Geomatics	1967	15.6
Economic	1968	25.6
Settlement	1974	5.6
Historical	1977	27.8
Land Use	1979	10.5
Agricultural	1986	15.4
Population	1986	7.7
Political	1988	14.7
Conservation	1991	17.4
Glacial	1995	17.6
Coastal	1996	17.1
Tourist	1996	14.3
Rural	1997	4.6
Cultural	2003	21.6
Environmental	2005	15.6
Social	2006	27.9
Fluvial	2007	6.6
Development	2011	18.9
Hazards	2014	9.8

Table 6 Subdisciplines: cohort in which they were most popular

Geomorphology: describing landscapes, modelling landscapes, or explaining landscapes? As Figure 31 has illustrated, the ratio between human geography and physical geography changed throughout the decades. Whereas the percentage of physical geography dissertations fluctuated between 10% and 30% during the late-1960s and 1970s, it dipped below 10% during the 1980s. The early-1990s saw a steady increase again, with a few of the cohorts in the early- and mid-1990s being higher than 30%. These shifts are related to the already discussed field expeditions, while specific (sub)disciplinary trends, the impact of individual staff members, and educational innovations and curricular changes play important roles as well. In this subsection, I do not only discuss changes in numbers, but I also look at *how* the content of geomorphological dissertations changed over time.



Figure 36 Percentage of glacial geomorphology dissertations per cohort



Figure 37 Percentage of coastal geomorphology dissertations per cohort



Figure 38 Percentage of fluvial geomorphology dissertations per cohort

In the categorisation used in my research, I have distinguished the subdisciplines of fluvial and glacial geomorphology (in this section, I focus on the latter two). Furthermore, there is a small category that is entitled 'geomorphology', without a further specification. Dissertations in this category are a small number of dissertations from the 1960s and 1970s that cover a larger area⁶⁷. Of course, such studies still discuss specific types of geomorphology (dependent on the area chosen), but these do not have a specific research question or objectives focussing on either coastal, fluvial or glacial morphology and are, to some extent, comparable to the regional dissertations of the same era: essays describing the geomorphology of a region, collecting all kinds of data, but without very specific inquiries into causes or consequences. Geomorphological projects, then, asked for specific skills of undergraduate students: *describing* a landscape is a very different thing than *modelling* a landscape, let alone trying to *explain* a landscape.

One example of such a descriptive geomorphological dissertation was written by John Rankin in 1962. In his dissertation entitled *Morphology of the Ardoch Estate Area with special reference to Drift + Raised beaches*, Rankin demonstrated his skills at interpreting the landscape before him – as he undertook field visits – as well as interpreting existing maps of the same landscape:

"One of the principal difficulties in interpreting the morphological map is that of assessing whether or not flats on adjacent or widely separated spurs, and at slightly different altitudes, are in fact, the same feature. Similarly in the case of breaks of slope, where mergence or bifurcation may make it very difficult to ascertain which break, if any, is continuous with another." (Rankin, 1962: 7)

Rankin's dissertation provides a neat demonstration of analytic skills, but it is even more interesting that he includes discussions about what was difficult and what was manageable in the limited time frame and what potential follow-up projects could tackle. This dissertation is the only one from this cohort that contains a contents page and an abstract, and in some ways reads like a 'contemporary' piece of work. With a chapter dedicated to 'difficulties in analysis', he describes how he had to 'completely traverse the area on foot' and how he combined field observations, general map interpretation skills and the consultation of geology maps (Rankin, 1962: 13). Other than his peers, Rankin mentions two 'tutors' as advisors: "Mr. H.A. Moisley of the Department of Geography and Dr. W.W.

⁶⁷ For instance, *Geomorphology of area north and east of Helensburgh* (Robertson, 1965), and *Geomorphology of Strathallan* (Smith, 1967).

Bishop, of the Department of Geology" (Rankin, 1962: 34). As this dissertation, written in 1962, implies, physical geography projects have sometimes been closely connected with Geography's departmental sibling in Glasgow: Geology⁶⁸. The division line is not always evident, but the existence of this other undergraduate degree at Glasgow might be an explanation of why human geography is more 'popular' as a field for dissertation research than physical geography: many students interested in the formation of landscapes, who are perhaps not *that* interested in the human side at all, have already chosen to study Geology/Earth Sciences instead.

From the three more specific categories of coastal, fluvial and glacial geomorphology, it is evident that glacial studies have been the most popular over time, whereas fluvial geography has always been a significantly smaller subdiscipline in Glasgow (see Figures 36, 37 and 38). There are two peaks discernible in the dissertation archive, with the first dissertations focusing solely on glaciers and glacial geomorphology appearing during the 1970s and a second peak during the 1990s. Dissertations on glacial geomorphology can be distinguished into two categories: dissertations which aim to provide a map, a survey or a description of a (formally) glacial landscape, and dissertations that approach a specific area with a specific, well-defined research question, often, for instance, a contemporary glaciated landscape with an interest in *current* processes. Comparing several dissertations on glacial geomorphology from different decades demonstrates a few changes over time, not only in methods but also in the focus of research. Generally, there is a shift perceptible from formerly glaciated study areas to case studies with active ice. This is also described in (scarce) histories of geomorphology (e.g. Tinkler, 1985), with this shift starting to happen around 1960. Educational practice and the undergraduate dissertations arguably reveal a 'delay' in following such subdisciplinary trends by more than 15 years. In The glacial geomorphology of the middle Endrick Valley - West central Scotland (1978), Martin Sinclair aimed to draw up the glacial history of the area 'within a regional framework' (Sinclair, 1978: 1). He mapped the region as well as interpreting the forms of glacial drift deposits in the region. He provided an insightful narrative of the glacial history and changing morphology of the Endrick Valley, but also furnished some suggestions for future research. Comparing this dissertation with Elisabeth Partington's glacial research undertaken as part

⁶⁸ The relationship between Glasgow Geography and Glasgow Geology is itself complex and tangled (Leake & Bishop, 2009). From 2004 what had been the Division of Earth Sciences (previously Geology) was formally brought into the Department of Geography and Geomatics (previously Topographic Science) to create a unified Department (now School) of Geographical and Earth Sciences.

of the 1994 Iceland Expedition, differences are evident; and these differences are exemplary for the cohorts of which they were part. In *The comparison and analysis of two methods of collating ablation data for the snout of Sandfellsjokull, Myrdalsjokull Ice-cap, southern Iceland* (1994), Partington undertook an essentially methodological study of doing glacial research, in a presently glaciated area, comparing two methods of estimating how much a glacier is ablating over a short period of time and seeking to judge the accuracy and practicality of these different methods (Partington, 1994: 6). She paid attention to the *reason* why this methodological emphasis might be relevant:

"In an era of concern for the environment and postulations about 'Global Warming' it is of paramount importance that glacial research into mass-balance concentrates on the production of accurate results over short time periods before large scale extrapolations are made. Only then will the decision makers of the global community be able to make informed policies on the protection of the environment." (Partington, 1994: 39)

Summarising, the changes between glacial dissertations from the 1970s to the 1990s demonstrate generally - there are always dissertations that 'lag behind' the trends or that are innovative for their time – that more recent studies tend to focus on contemporary processes rather than past landscapes, are less descriptive and more analytical, and that theory and methods are more explicitly discussed or even become the central focus of inquiry. The means of relating form, sometimes inferring past processes, to analyses of process, often present-day processes, are methodologically very different, even though an outsider might not perceive such differences or their significances. This shift is arguably more about the shift away from an older 'denudation chronology', tracing the history of regional physical landscapes, to a more analytical approach to glaciers and glaciation. In Glasgow, the 'alliance' between glacial geomorphology and topographic science and surveying techniques (Evans, 2009: 286), exemplified by Partington's dissertation research undertaken in Iceland, led to a strong connection between local, field-based details and alertness to wider temporal and spatial contexts. This shift by no means indicates more 'quality' in the dissertations, because, even though the earlier dissertations are sometimes very descriptive, they still demonstrate high-level understanding of related elements in the landscape, which is maybe less specialised but arguably leads to a more holistic presentation of a given landscape as a whole.

Comparisons of different eras of coastal and fluvial geography research by undergraduate students also indicate a strong movement from regional landscape studies to landscape

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evolution studies through to more experimental projects, emphasising the modelling of landscapes and making use of computational skills and technologies. That said, the significant role of field-based research persisted throughout the different decades. In *A study of the evolution of coastal landforms at the mouth of the River Spey* (Robertson, 1978), the student used old manuscript maps, Ordnance Survey maps and existing aerial photographs to trace the development of the 'the river-mouth landforms over the centuries' (Robertson, 1978: 11). The student combined the analysis of secondary sources with his own measurements of sediment 'drift' to evaluate how the beach was changing, injecting samples on the mid tideline and taking wind speed, wind direction, wave height and wave frequency data into consideration (Robertson, 1978: 37). He concluded:

"The principal finding was that the anticipated cyclic evolution of the landforms at the river-mouth was proved. The dominant drift direction has been shown to be westward. This means that, at the Tugnet spit grows, the Kingston spit is gradually cut back and pushed landward. In the longer term, the whole form of the rivermouth has been altered as the seaward end of the delta has become choked with gravel and shingle leading to accelerated spit growth." (Robertson, 1978: 62)

Robertson illustrated the mixed-methods approaches used in many physical dissertations as it early appeared in such studies, as well as emphasising the central concern for the 'evolution of landforms'. Robertson's work was hence to some extent an example of a subdiscipline in transition: his methods still addressed the history of forms in the landscape and their evolution, but he was also already turning to contemporary processes and their measurement. Comparing this dissertation to Donna Baff's on *The effect of sediment sorting on the development of bedforms: A flume study using medium sands* (1994), the emphasis on processes becomes even more evident in the latter:

"Both the present flume study and others with which it has been compared have shown that as flow intensity is increased a sequence of bedforms results. This sequence of bedforms and their characteristics are however, dependent on various factors of the flow and the sediment. As has been highlighted here sediment sorting is one such bed material factor that has important implications for bed configuration in sand bedded channels. The present flume experiment revealed that it is difficult to predict the bedform resulting from a particular set of flow conditions unless the bed material characteristics are known." (Baff, 1994: 46)

Alongside the shift of some geomorphology projects becoming more experimental – using flume simulations – instead of descriptive, there was a simultaneous move towards more

projects on the modelling of landscapes⁶⁹ as well as towards computational and quantitative analyses⁷⁰. This move is evident from the research aims and objectives of more contemporary dissertations, such as Paul O'Connor's *Energy dissipation: A factor affecting physical erosion in free falling jet streams* (2014), where the scientific rigour stands in marked contrast to the descriptive evocations of earlier dissertations on water-eroded landscapes:

"The overall aim of this study is to establish the relationship between height (H) of falling jet stream and unit flow (q) in knickpoint zones. These properties are evaluated with intention to reveal their ability to control landscape evolution and act as energy dissipaters in certain circumstances. ...

Objective 1. Determine the relationship between both magnitude of knickpoint height (H) and unit flow (q) within the context of erosional potential in freefalling water and, in doing so, produce proof of (q0,6.H0,05) as the first order control on scour depth (...)

Objective 2. Assess the effect of turbulence and air entrainment in the falling jet stream and its energy dissipating properties.

Objective 3. Quantify a link between (q0,6.H0,05) and retreat rates of knickpoints produced by a fall in base level.

Objective 4. Evaluate the application of Mason's scour prediction equation (as seen in Mason and Arumugam 1985) within the framework of naturally occurring knickpoints." (O'Connor, 2014: 2-3)

Such changes are not only the consequence of better facilities and new technological and digital developments available to students, but are often directly connected to specific staff members. Mentions of supervisors and other staff members in the acknowledgements indicate this link, but it also striking to see the effect of appointments followed by projects of the newest lecturer or professor's specialisation within two years. For geomorphology, this is for instance recognisable with Trevor Hoey's appointment, and in O'Connor's case the influence of Paul Bishop, an expert on what knickpoint migration reveals about landscape evolution, is maybe important. Yet again, the cause behind hiring specific members of staff must of course be partly prompted by current staff members recognising a lack of expertise on a certain subject, or, more positively framed, the specific value of recruiting someone with a new expertise never previously covered in Glasgow. Thus, specific appointments are related to disciplinary trends, and are often the turning point in the period of delay between trends in the broad, international academic community (and

⁶⁹ For instance, A comparative study of a reservoir-fed river with a naturally occurring river within the same geographical area (Blain, 2002), and Assessing the impact of recently constructed 'natural' flood prevention schemes on flow properties (Erskine, 2006).

⁷⁰ For instance, *Talus Slope and Particle Morphology in the NW of Scotland* (Firth, 2006).

literature) and changes in the local undergraduate curriculum – and the dissertations stemming from it – of Geography as taught in Glasgow.

Besides disciplinary trends and the role of individual researchers, the confidence and previous experiences of students play a significant role in what they research and *how* (also see Chapters 7 and 8) they research their chosen subject matter. It is difficult, if not impossible, to pinpoint what comes first: a changing student population that prefers certain kinds of research practices or a changing Geography curriculum suddenly projecting a different message at outreach and recruitment events, subsequently attracting students 'matching' the revised curriculum. Trevor Hoey connects some recent changes in undergraduate dissertations to a decrease in previous outdoor experience of students:

"Certainly, [in school] Geography they were used to getting slightly more fieldwork than they do now; also in schools, I think time pressure at schools made it that less fieldwork is done. We did have students who had a little bit more field experience. When [Honours] classes were smaller, a higher proportion of the class would be sort of outdoor people who would go hillwalking or mountaineering in the weekends and so fieldwork was what they were easy with, they had all the gear, they knew what to do. Now we get students that are not so experienced in that sort of thing, and fieldwork doesn't matter quite that much to them. They don't see it as a particular reason to study Geography or Geomatics." (T. Hoey, interview, 10 July 2019)

Here, Hoey presents these changes in the previous experiences of students to some decrease – relatively recently – in the number of fieldwork-based dissertations, but he also sees changing complexity of the research practices and networks of physical geography as being responsible. Compared with professional physical geographers doing relatively small-scale, case study-based research circa 25 years ago, Hoey argues, there has now been a shift to multi-author teams undertaking big projects with very advanced and expensive equipment. This makes it more difficult to direct students to what is appropriate for an undergraduate dissertation:

"When I started you could show literature that had been published and say that this is literature on the same topic and even as an undergraduate they could do a scaled-down version of it. Because most of the literature 25 years ago was casestudy based, relatively small-scale. ... So actually, in a way it has become harder to help students frame appropriate questions that are doing what we are saying in the assessment criteria, being critically informed, contemporary and up-to-date because in order to do those sort of things – you can't as an undergraduate. It is really hard for them to take something from the literature and be like 'oh I can see if I take this idea and this idea, I can actually solve this little problem'. We [staff] can do that, but it is really difficult for students to do that. ... I am increasingly concerned ... I think the dissertation as it is structured, for someone who sees themselves as a physical scientist, does not quite do what they need. I don't think we give students enough guidance and enough support to do things that are more cutting-edge, where they can actually use recent literature and see how they could do some small but significant contributions to [achieve] this." (T. Hoey, interview, 10 July 2019)

The professionalisation of physical geography and its research capacity perhaps has a discouraging effect for students instead of an *encouraging* effect, precisely because the 'smallness' in scale, time, finances and human-power make the undergraduate dissertation less like an introduction to the *real thing* that it was previously in geomorphology (or indeed in some other disciplines and subdisciplines). It is a very striking discussion that raises questions about what exactly should be the aim of contemporary undergraduate dissertations, and how individualised a project it really should be.

The explosion of social and cultural geography from the mid-1990s

As mentioned earlier in this chapter (relating to Figure 35), the subdiscipline with the greatest number of dissertations in the undergraduate dissertation archive in Glasgow has been identified as social geography. Accepting the complexities and limitations of categorisation, this subdiscipline has been taken to cover substantive foci of inquiry such as migration, health, social cohesion, social media, and many, many more, but where there is a clear interest in social dimensions – social groups, uses and spaces – bound up in these subject-matters. Another researcher might have subdivided these dissertations into several smaller categories, as discussed in Chapter 3. Notably, my deployment of a self-contained subdiscipline of health geography or medical geography might have been justified, given a fair number of health-facing dissertations. To prevent an unmanageable number of smaller subdisciplines, however, I decided to approach social geography as one subdiscipline, but in this section, as well as in the portraits presented at the end of this chapter, I justify bundling together such breadth of and diversity in subdisciplines such as social geography. As Figure 39 demonstrates, there are two peaks perceptible when studying the number of social geography dissertations since the 1950s: one peak from the mid-1970s to the late-1980s, and a second, even stronger, peak from the late 1990s into the early years of the 2000s. In this section I emphasise this second peak, in relation to the almost simultaneous growth in the number of *cultural* geography⁷¹ dissertations; but to understand what this

⁷¹ Distinguishing social and cultural geography dissertations is often a complex issue; the two subdisciplines, especially from 1990 onwards, are very closely connected. This is also recognisable in

subdisciplinary rise actually means, it is important briefly to address this earlier increase of social geography circa the mid-1970s to the late-1980s.

The first rise of social geography is inextricably connected to many movements of the late-1960s and early-1970s which impacted academic geography, announcing the importance of addressing severe social issues:

"... what was at stake was also a liberal impulse towards social welfare and, for some, social activism. A wide range of research topics came under scrutiny, beneath the initial rubric of geographies of social problems (Herbert and Smith, 1989). ... Other significant research topics include poverty and deprivation, social polarization, social exclusion, education, and housing and, in the consumer age of neoliberalism, geographies of leisure, tourism, sport and consumption." (Ley, 2009: 693)

As this quotation from *The Dictionary of Human Geography* (2009) explains, these social movements also influenced how geographers thought about their own role and about the role of academia as a whole. By taking the 'geographies of social problems' as a key focus, geographers could demonstrate the value of geography as an academic discipline, a significant benefit for a discipline struggling with its identity and status in academia, although clear tensions existed between those inclined to 'revolution' (Harvey, 1972) and



Figure 39 Percentage of social geography and cultural geography dissertations per cohort

its institutional settings: for instance, the IBG's Social Geography Study Group was renamed the IBG's Social and Cultural Study Group at that time (Philo, 1991).

those simply wishing the discipline to be more 'relevant' (Berry, 1972). Such a distinction can perhaps be detected in a few of the Glasgow dissertations. The social geography dissertations in the archive of the late-1970s and 1980s, as well as the urban geography dissertations (which also peaked during the 1980s), focus to some extent on those big social issues such as poverty and deprivation⁷², crime⁷³, segregation⁷⁴ and housing⁷⁵, yet these offerings also share the stage with projects emphasising consumerism⁷⁶ as well as recreation⁷⁷ and tourism⁷⁸ in the late-1970s and during the 1980s. The field of social geography was seemingly already well developed and positioned in the overall discipline and in the Glasgow undergraduate curriculum, based on the prevalence of all kinds of social geography dissertations. The foci of inquiry are diverse, although the type of research was often very similar: students were looking for patterns – social distribution patterns, retailing patterns, mobility patterns - using methods appropriate for finding these patterns, emphasising quantitative conclusions and remarks. The 'dip' of social geography in the early-1990s is significant yet does not indicate a disappearance of social geography, with over 10% of the dissertations that can still be categorised as such. The increase of social geography dissertations from the late-1990s, however, represents nothing less than a landslide, both in numbers and the actual research endeavours of these many undergraduate students. The cohort of 2000 presents an absolute peak of more than 30% of the students of this large cohort doing a social geography dissertation: the years after present high numbers as well, although slightly lower than 2000. To understand this popularity of social geography around the turn of the century, it is important to consider an almost simultaneous development in human geography: the rise of cultural geography. The peak of cultural geography in the dissertation archive lies just a few years later than this peak of social geography and appears almost 'out of nothing': some cultural geography dissertations are written in the late-1990s, followed by an explosion in the 2000s.

Addressing this simultaneous second rise of social geography and first rise of cultural

⁷² For instance, *The geographical analysis of urban poverty and multiple deprivation in Paisley* (McCurrach, 1983), and *Multiple deprivation in Inverclyde District* (Gairns, 1985).

⁷³ For instance, *Residential crime in Glasgow, 1987* (Paterson, 1988), and *Vandalism and the urban public park: A Glasgow case study* (Reid, 1984).

⁷⁴ For instance, *Trends in Asian segregation in East Pollokshields*, 1960-1982 (Rundell, 1983).

⁷⁵ For instance, *Housing Action Areas: Aspects of housing rehabilitation in Rothesay* (Coleman, 1981), and *Multiple deprivation and public sector housing in Glasgow* (Harley, 1984).

⁷⁶ For instance, *The impact of a new superstore on a traditional retailing pattern: A case study* (Gillan, 1982).

⁷⁷ For instance, Angling and boating on English rivers - A study on the Warwickshire Avon (Ewing, 1982), and Unemployment and provision of leisure facilities in Glasgow (Martin, 1986).

⁷⁸ For instance, *Galloway and Speyside: Attractions compared for camping visitors* (Booth, 1986).

geography in the undergraduate dissertations asks for some broader disciplinary reflections: going back to 1980. In this year, Peter Jackson published his paper 'A plea for cultural geography' (1980) in *Area*, explaining how British geographers were only just becoming aware of 'its potentialities' (Jackson, 1980: 110). Even within the Anglophone community, there seems to be a big discrepancy between national disciplinary traditions, and Jackson asks for a 'pact' between social and cultural geography in Britain: "Cultural geography can finally only be of interest to the British geographical profession if it can successfully accomplish a rapprochement with social geography, in a joint commitment to study the spatial aspects of social organization and human culture – not just those aspects which are directly observable in the landscape" (Jackson, 1980: 113). Jackson's paper was an important provocation for the direction of travel for work on social geography in Britain, leading to a significant reorientation and renaming of the relevant Institute of British Geographers study group (Philo, 1991).

Indeed, the boundaries of cultural geography and social geography turn out to be difficult to distinguish (Ley, 2009: 693). There are some examples of research on the far end of the

spectrum that are obviously cultural, for instance in a dissertations such as *Dancing identities: The cultural geography of Highland dance* (Brogan, 2006: see Figure 40), or evidently social, such as *Social cohesion in Kinning Park: To what extent does a community exist?* (Clark, 2006). However, with the 'culturalisation' of many branches of geography (Gregory *et al.*, 2009: 129), social geography has not become never far away from 'culture' and



cultural analysis. It is not my aim to

Figure 40 Title page (Brogan, 2006)

discuss the rise in social *and* cultural geography in general, however, but I would like to add two things to the narratives about this rise. First of all, as already expressed in the introduction of this chapter, there are many research projects written about in undergraduate dissertations that are read by almost no one, yet are, in their quality and innovativeness, impressive geographical knowledge productions – and nowhere perhaps is this more obvious than in a number of the social-cultural geography dissertations from the mid-1990s and early-2000s. Second, I think it is important to emphasise the positive influence of individual supervisors, but also of small changes made in the undergraduate curriculum that were an impetus for students to research certain themes:

"I think that, talking about human geography what happened after the mid-1990s, is that Glasgow starts to become a place that is doing more up-to-date, contemporary human geography, and therefore we start to have appointments that reflect that. ... Once you got people like that in the human geography orbit, of course, everything's changing about what we are teaching, and the dissertations are changing, the subject matters are changing, but also people [students] are becoming more conscious about why they're doing what they're doing." (C. Philo, interview, 10 December 2019)

Analysis of the undergraduate dissertations demonstrates the importance of teaching practices in universities, opening a window on how different accents in the courses, different Honours options or different members of staff all help students to discover different, new interests or to realise the opportunities to research certain themes that they otherwise might not had considered 'geographical enough'. The near-simultaneous arrival in Glasgow of Chris Philo, Paul Routledge and Jo Sharp marked a new impetus for both research and teaching in the department, invigorating and in various ways melding social and cultural geography foci in the undergraduate dissertations. Sharp ran an Honours course called 'Cultural Geography', Routledge taught courses in which 'social movements' were centralised, and Philo commenced an Honours course called 'The Social Geography of "Outsiders" from 1997-1998.

This second peak of social geography dissertations focuses largely on the latter, societal 'outsiders', although the breadth of what might be considered as 'outsiders' still makes this collection of dissertations highly diverse: from elderly people, children and women, via homeless people, differently sized people, people with specific health conditions, through even to animal geographies. Some of these 'outsiders' perspectives were already researched earlier, for instance by Peter Soward in his dissertation *An investigation into the cognitive maps of the City of Glasgow as held by disabled persons* (1994):

"Due to the nature of this study it is important to remain detached from the sensitive issues found in conjunction with disability thus remaining unbiased. This results in a fairly cold, analytical treatment of an area that effects real people. This is unfortunately necessary to achieve results of value." (Soward, 1994: 2)

This dissertation is *about* outsiders, but Soward explicitly stated that it had to be written in a 'detached' way to have 'value'. During the later wave of social geography dissertations, many students justified an opposed approach, deliberately aiming for involvement, a more 'intimate' attitude of the student-researcher. A fellow 1994 student, Aileen Donaldson, also wrote her dissertation, entitled *Reasons why the retired elderly migrate to Crieff* (1994), about a specific social group often seen as 'outsiders' in geographical research, but her approach was not a social geography one but more connected to the subfield of population geography:

"Geographers have much to contribute to this field of study, conducting research in areas such as demographic trends, migratory patterns or settlement structures of the elderly. ... In order to investigate one specific component of population geography, it is necessary to locate research concerning the elderly within geography as a whole." (Donaldson, 1994: 2)

Donaldson also reflected on the position of 'the elderly' as a focus of inquiry in geography:

"Geography is a multi-faceted social science, therefore gerontological issues tackled from a geographer's perspective highlight both public policy and theoretical implications." (Donaldson, 1994: 3)

She rightfully addressed how 'the elderly' as a social group will prompt attention from geographers in years to come:

"Looking ahead to the twenty-first century, early retirement, and government health legislation will alter the patterns of migration both positively and negatively. There is no doubt that for geographers and society in general to attain a deeper understanding of the elderly's behavior patterns, more age specific research on a micro scale, such as this study of Crieff is required. ... As the number of pensioners continues to rise, research into the elderly must be a priority for society and government alike to ensure maximum quality of life for our elderly and efficient use of national resources." (Donaldson, 1994: 30)

These observations from Donaldson are in themselves instructive, revealing a student with keen (sub)disciplinary knowledge and able to locate her own study accordingly, but it is telling to contrast these contributions by Soward and Donaldson with the kinds of social geography treatment lent to 'marginal' groupings a few years later.

Four years on, for instance, Katrina Slater also addressed the elderly in her dissertation *Geographies of the elderly in residential care: Closing geographical lifespace?* (1998), but now wearing a very obvious social geography 'hat' alert to the broader span of what might be considered under this subdisciplinary heading. Indeed, she compared her 'target audience' to other, more 'popular' groups of outsiders: "The study of old age in academia has been going on now for quite some time, concentrating on the physiological, psychological, social, economic and demographic aspects of ageing. So far this has been relatively neglected within the field of geography as many see this as not 'exciting' enough unlike the 'in' subjects such as 'children's geographies' or 'gay and lesbian geographies'." (Slater, 1998: 1)

In line with Slater's last remark, children get a more obvious place on the 'geographical stage' in these years, certainly according to the evidence of the undergraduate dissertation archive, than do the elderly. One example is *'The terrible twos': A social geography of childcare* (Gallacher, 2002)⁷⁹. In her research, Gallacher analysed the daily geographies of childcare:

"As such, they [young children] cannot be ignored by Geography, written off as 'pre-social' and inconsequential. The internal, psychological space of individuals is also intimately bound up in the social relations in Stepping Stones [a nursery], informing the manifold of styles of control and resistance that continually contest and reconstitute social space." (Gallacher, 2002: 45)

Gallacher also explained how young children are underrepresented, and even more

poignantly, underestimated in geographical research:

"The existing geographical literature seriously underestimates young children: the under-fives should be seen as 'real' social agents whose actions do have relevance outside the family. My focus here is on toddlers because they are doubly stripped of social agency." (Gallacher, 2002: 8)

This last quotation demonstrates how the social geography of outsiders as revealed in the dissertations was often strongly connected to social theory – with



Figure 41 Dissertation cover (Gallacher, 2002)

⁷⁹ This dissertation was eventually reworked for publication in the journal *Children's Geographies* (Gallacher, 2005).

its recurrent emphasis on theorising the capacities and limits of human (social) agency – as well as to a sometimes political language concerning agency, responsibility, structure and power relationships. The point is that social geography dissertations studying 'outsiders' commonly operated at a different theoretical and conceptual level from their loosely 'social' predecessors: the focus was less about recognising and

describing behaviour and other

...

Collective singing

The children are taken into the music corner again by one or two members of staff for collective singing. The rest of the staff tidy up group time and set up free play with different toys.



Figure 42 Example of activity map of nursery (Gallacher, 2002)

patterns, but rather about the philosophical, sociological and geographical framings, causes, consequences and implications of such patterns, often studied on the microscale.

Another example of a dissertation that addresses children is Victoria Smillie's dissertation entitled *The geographies of a dance school* (2010). Similarly to Gallacher, Smillie asks questions concerning power over and agency of children in a particular space, but expressly connects these themes to the concept of embodiment:

"We also tend to overlook the force that power relations have over children's bodies, dismissively assuming that power is something which only adults are able to understand and utilise.

... Through an awareness of space and an understanding of their physical body within that space, the children of the Dance School learn how to embody the environments which they inhabit. Dance allows them to understand the physical, flesh and bones working of their body as well as the way it can be used.

In saying that, I do not feel that this project has become 'just' another version of existent children's geographies studies of schools, after-school clubs and play centres. It certainly echoes some of the issues raised by such studies, [but] the dance angle does seriously inflect these studies by foregrounding questions about the bodies of children, and their ability to embody, perform and resist." (Smillie,

2010: 35-36)

Smillie's innovative research here demonstrates how the 'microscale' of the body and the related concept of embodiment have recently acquired a place in academic geography. The latter is a concept that bridges social geography and cultural geography, and it is strongly embedded in conceptual approaches such as non-representational theory, focussing on practice and performance (Anderson, 2009: 505). This issue is discussed further in a later chapter, when reflecting upon the highly varied conceptual frameworks of adopted by dissertations in the cupboard.

The rise of cultural geography is often distinguished across two strands, with the first one drawing on work tackling questions concerning the sociology of culture and specifically researching cultures and subcultures in modern life, where the second strand is seen as 'cultural' both by topic and method (Crang, 2009: 131), placing geography in a more humanities-like tradition, akin to how other geographers connect their discipline to either the natural sciences or the social sciences. This second strand is recognisable in the early years of the century, with dissertations on, for instance, dance, such as Smillie's, or music. Isla Forsyth's dissertation *The place of folk music in cultural geography: Dick Gaughan, a modern day Scottish prophet* (2006) explicitly discusses what could be the role of music in the discipline:

"From the information gathered by the research and the reading carried out beforehand, it appears that folk music can have a potentially important role within the discipline of Geography. It offers the chance to experience and awaken a more dynamic discipline that waves goodbye to the elitist static notion of cultural geography so far dominating work, which is not representative of how people experience their culture. ... This can be used in bringing a new and more holistic geographic understanding of how people interpret their culture and environment, which in turns contributes to their wider sense of identity." (Forsyth, 2006: 22)

Cultural geography, and specifically the newly emerging field of geohumanities, does not ignore the physical landscape, and even sometimes goes back to the 'classic' idea of geography as a discipline studying the relationship between humans and their physical environment. This relationship is, however, then researched in a very different way from what was preferred by their regional geography predecessors. For instance, in the dissertation *The Mississippi Delta, its landscapes and the Blues* (Astill, 2010), the student-researcher connects social-historical research, the analysis of the physical landscape and cultural analysis of blues music in a compelling way:

"If we are to explain the extent to which the physical geography of the Delta influences Blues music, it is clear that there is a great extent of music designed around the concept of flooding which has been discussed throughout this research. ... The Delta itself provided an ideal breeding ground for blues fundamentally based on racial inequality and discrimination. The social climate is reproduced in associated soundscapes through the music, lyrics referencing inequalities were found to be relatively common, the social background of the Delta thus proves a significant influence to the Delta Blues[;] after all the Blues stemmed from suppression faced by slaves." (Astill, 2010: n.p.)

These examples of very obviously culturally-turned research projects demonstrate that geography as a whole has not necessarily strayed *so* far away from certain root conceptualisations and justifications about what geography 'should be' from decades ago. However, the foci of inquiry, methodology and conceptual frameworks are in many cases very different. With its more recent allegiance to the humanities, the research done under the banner of geography might be even more diverse than ever before, with inevitable knock-ons for the diversity of subject-matters researched by recent undergraduate dissertations, even when positioned under the subdisciplinary umbrellas of social and cultural geography.

Portraits

In this section I explore seven different themes that have been researched in the archive: vegetation, rural depopulation, outdoor recreation, New Towns, commuting, medical geographies and health, and social justice. Every thematic 'portrait' discusses several dissertations about a certain subject matter. However, the discussion shows how what at bottom is the *same* substantive focus for a study, might be researched in rather different ways, shaped by different social as well as disciplinary and conceptual lenses. Most of these portraits cover examples of different decades, but very broadly speaking, the portraits are built up from the oldest examples to more recent examples.

Vegetation

In the 1960s, biogeography was one of the options to take when writing a systematic dissertation, probably because the department was home to the distinguished biogeographer Joy Tivy. Several students chose to write a biogeography dissertation, and almost all of them focused on vegetation (and not on animals). They took an ecological perspective, emphasising the effects of different environmental factors on the vegetation of specific areas. In 1966, for instance, both Eric Barr and Gordon Dickinson wrote dissertations emphasising vegetation. In his dissertation *Vegetational colonisation of pitheaps* (1966), Barr explored several pit-heaps in North Lanarkshire, Scotland:

"This study was carried out on several pit-heaps in the Cleland, Newmains and Allanton districts of Lanarkshire, its purpose being to ascertain what factors influenced their vegetational colonisation, the species involved and any apparent successions present. Although some of the pit-heaps investigated possessed a higher or lower stone, ash, or coal content, and names such as the 'Midge' and 'Ham and Egg' supported this individuality, their successful colonisation by the surrounding vegetation showed that all were capable of supporting a vegetation cover, even to the extent that landscaping attempts, sometimes using transported soil, sometimes not, have been most rewarding." (Barr, 1966: n.p.)

Barr thus studied the vegetation of 'non-natural' areas. This work of Barr is surprising in some sense, because, unlike many of his peers, he used quite aesthetic language in the course of confronting certain deeper complications of human-vegetation relations:

"In conclusion, the evidence outlined shows that, given time, nature can colonise and provide a more pleasing appearance to one of man's [*sic*] ugliest contributions to the countryside. The dominating factor of time, allowing the stabilising of slopes, and the build-up of a significant vegetation cover, is something which the present generation has not enough of, so that pit-heaps are being cleared to give material for roads and brickworks while other have been landscaped in efforts to alleviate such eyesores. 'Patience is a virtue' for man, in raising up these pit-heaps, has in fact created mound of debris, potentially as fertile as the surrounding land, and which, when the interplay of those factors discussed attains an equilibrium condition, are capable of supporting just as dense and varied a vegetation cover." (Barr, 1966: n.p.)

Dickinson, a student of the same cohort as Barr, later a staff member and also an interviewee for my thesis, produced a systematic dissertation entitled *Mountain vegetation in south-western Rhum* (Dickinson, 1966b). In his dissertation, deriving from an expedition to the Isle of Rhum with other students and staff members from the department, he focussed on the relationship between local climate and the vegetation. He actively connected his study – tellingly cast here as an 'essay' – to other literature from the field, thereby showing an early awareness of needing to address (sub)disciplinary intellectual contexts:

"Throughout the essay, considerable emphasis has been placed on the severity of local climate, as it effects vegetation. In spite of the scarcity of climatic data, a very good indication of the true severity of conditions can be gained from comparison of the vegetation pattern of this area of Rhum, and the patterns described by Watts and Jones in the Cairngorms. ... Naturally, the problem is extremely complex, and there is no simple answer, nor theory which can be given. A far greater weight of facts and data would need to be produced, before proper hypotheses could be advanced, and as always in biogeographical studies, there is the problem of handling several different variables at once. However, it does seem that the wet, windy climate of the west may produce a harder environment for plants than the more 'continental' east. Frequent frosts and the resultant geomorphological

activity, diminished sunshine – a rather unknown quantity, physiological drought, and above all winds, make the mountains of south-west Rhum a very unfavourable habitat for vegetation." (Dickinson, 1966b: 23-24)

Equivalent biogeographical vegetation studies have been undertaken by later students as well, and are hence relatively 'consistently present' through time.

Rural depopulation

In many of the regional studies of the 1960s and 1970s, the topic of rural depopulation plays a central role in the analysis of the region chosen as study area. For instance, Paul Cortopassi explores a Scottish region in his regional study entitled *The Parishes of Elgin, Birnie, and St. Andrew's Lhanbryd in the County of Moray* (1966):

"... the problem of rural depopulation is as serious here as elsewhere, and it may be that Government influence be brought to promote industry here; and if so this would most likely be some form of agricultural industry of the 'Baxter's' type – meat packing, or perhaps fish canning, but the possibility is a remote one. This is an agricultural region with the advantage of having a centre in Elgin to supply sufficient work to absorb most of the young people leaving the farms, and there should be no complaints if things are left as such and allowed to progress and expand in the fullness of time." (Cortopassi, 1966: 20)

Dickinson, mentioned above, also analysed rural depopulation in his regional study *The geography of the Helmsley District* (1966a):

"Thus Helmsley has advanced to its present position, a town of around 1200 people, but at a cross roads in its development. The three developments mentioned have helped to arrest the economic decline and depopulation which had been going on for 300 years, but problems remain. As mentioned already, in several of the parishes of the region depopulation is still severe, and in Helmsley changes in age structure are notable." (Dickinson, 1966a: 24)

A later dissertation about rural depopulation, written in 1982 by Allan McMinn, examined the perceptions of secondary school pupils on their plans for the future, and its relationship to the area where they grew up. In his dissertation, *Perception of migration by pupils in fourth, fifth and sixth year attending Islay High School* (1982), he explicitly delimited rural depopulation as his focus of inquiry:

"This piece of work is concerned with ... rural depopulation, which may be considered as the reduction of the absolute number of people living in a certain area of countryside." (McMinn, 1982: 4)

However, his approach, methodology and the research question asked were very different

from the regional projects from the previous two decades that had also emphasised rural depopulation:

"The fundamental aim of the study was to determine the basic migration intentions of pupils attending Islay High School who were nearing the end of their school careers and to determine the main reasons behind those personal decisions." (McMinn, 1982: 7)



Figure 43 Graph of questionnaire results, displaying 'major reasons why people want to leave Islay (McMinn, 1982)

McMinn's approach not only differs from the regional dissertations because there is a more defined focus of inquiry, but also by the concern for 'intentions', 'reasons' and 'personal decisions', indicating an interest in more qualitative dimensions of how people interact with a phenomenon instead of just collecting more quantitative 'facts' of the matter. The change in language, expressed by this difference between McMinn's perception study and the earlier regional studies, is also caused by changes in what dissertations actually 'do' or encompass. McMinn, for instance, also reflected on the subdiscipline of rural geography compared to an allegedly more 'popular' urban geography, voicing a worry often heard in the academic literature of rural geography at this time:

"With the rapid and sophisticated growth of research and expertise in aspects of urban geography, the field of rural geography has been relegated to an inferior position. However, important functional changes are occurring in the countryside as traditional rural activities such as agriculture release workers from local employment." (McMinn, 1982: 4)

The central theme of 'rural depopulation' has been not only approached from a
demographic perspective, but also connected to very central questions about economy, industry and employment. In later years, specific rural social issues are still researched by some students, although the number of rural dissertations has become significantly lower than urban geography dissertations. Many of the rural geographies undertaken by students since the 1990s focus on the sense of community in a rural area or smaller towns, often emphasising the relationships between 'locals' and 'newcomers' in towns⁸⁰, rural economies⁸¹ and countryside tourism⁸².

Outdoor recreation

There are numerous dissertations undertaken about outdoor recreation. These take different perspectives: sometimes emphasising the capacity for and impacts of outdoor recreation in a certain area, other times the relationship between recreation and conservation, and on still other occasions people's recreation preferences. The influence of individual academic staff members is perceptible in relation to this topic. Dickinson, mentioned twice above and lecturer in geography at Glasgow from the 1970s to the 2000s, supervised many dissertations about Loch Lomond and outdoor recreation⁸³. The emphasis in many of these projects was on the difficulties of balancing the respective environmental 'needs' of recreation and conservation. One of the projects supervised by Dickinson was Frances Jarvie's dissertation The capability for outdoor recreation of southwest Stirlingshire (1974). In this study, she analysed the 'capability' of environments to support different kinds of recreation such as caravanning or walking. Such an analysis was then mapped, as seen in Figure 44: the overall score in one square being the sum of a score from 1 to 3 for slope, texture and drainage, leading to an overall value between 3-9 quantifying the extent to which each small areas, or square, could support an activity such as caravanning. These maps, organised per 'recreation activity', then formed the basis for the conclusion of the dissertation, combined with a survey asking participants to rank 14 photographs in order of preference with respect to scenery (see Figure 45).

⁸⁰ For instance, Bucknell, south Shropshire - A divided community? (Meanly, 1998), and Geographic dimensions of space and place involved in social relationships between 'incomers' and 'locals' within a small Highland community (Smith, 1998).

⁸¹ For instance, *The wind farm industry: Impacts on a rural economy* (Crossan, 2010).

⁸² For instance, *Developing a methodology for evaluating the social and economic impacts of tourism within a small rural community* (Stuart, 2003).

⁸³ For instance, Variations in recreational use on the eastern bank of Loch Lomond (Craig, 1993), and A study of opinions on the use of power craft on Loch Lomond: Is there a conflict between land and water based activities? (Wallace, 1994)



Figure 44 Map of 'caravanning' capability, based on slope, texture and drainage (Jarvie, 1974)

Another example concerning the relationship between recreation and the physical landscape was Rhona Thomson's dissertation entitled *Recreational erosion of the vegetated dune environment, Alagadi Beach, northern Cyprus* (1998). The focus of this dissertation also connects recreation and the physical landscape, but is somewhat the opposite in framing to Jarvie's dissertation: Thomson's starting-point was the 'carrying capacity' of the landscape, whereas Jarvie took the needs of recreation activities as her starting-point:

"The demand for public outdoor recreation, particularly in coastal areas has increased significantly in recent decades. This new trend has, however, been accompanied by negative consequences. Increase in recreational activity results in an increase in the human presence in these areas which in many cases can cause severe degradation of the natural environment." (Thomson, 1998: 1)



Figure 45 Photo survey, used to question participants on their preference with respect to scenery (Jarvie, 1974)

Recreation and conservation are hence often studied hand-in-hand, but the focus can differ greatly. There is no specific trend or change over time that is readily identifiable, and studies here are perhaps mostly formed by the student's own interests.

New Towns

British New Town policies after World War Two were related to the problems of urban housing. In 1946 the New Towns Act was passed, directly followed by the foundation of 27 New Towns, of which a few were located in Scotland: for instance, East Kilbride, Cumbernauld and Irvine (Cullingworth, 1979). The New Towns policies are regularly discussed in dissertations, from the 1970s to the 1990s, especially applied to specific New Towns in Scotland. The urban geography interests of staff member Ronan Paddison were central in this respect, and there is more that could be added about his impact on the urban but also political geography foci of many dissertations from the 1970s.

In 1974, James Scullion wrote his dissertation Irvine New Town: Population breakdown and social area analyses. In this dissertation, he investigated the differences between neighbourhoods within Irvine, and analysed the demographics of the town. He made use of a very basic questionnaire (see Figure 65), alongside observational work reinforced by photographs (see Figure 46) In the questionnaire he asked questions about the type of housing provided, how long people have lived there and where they lived before, how many people live in the household, and where they



Figure 46 New Town polaroids (Scullion, 1974)

work. The questionnaire data led into a quantitative data analysis:

"We have now examined the population of Irvine New Town in some detail: - we have broken it down into its constituent parts and examined them with respect to age, sex, family size, origin, reason for migration and mobility; we have analysed the distribution and standard of life of this populations. These were the basis objects of this study and to an extent these objects have been achieved." (Scullion, 1974: n.p.)

Scullion's dissertation demonstrated how quantitative methods were central to many systematic dissertations of the 1970s, but also how the New Towns policy was a fascinating focus of inquiry for people interested in urban planning and housing. Throughout the 1970s, every year there was at least one dissertation about New Towns (mostly about Irvine or East Kilbride). In the 1980s, the New Towns still gained attention, but the research questions asked changed somewhat: the key concept became 'self-containment', as in 'to what extent do New Towns have all the facilities that their inhabitants need?' J.G. Main examined this issue in his or her dissertation entitled *The self-containment factor of Britain's New Towns* (Main, 1982).

"All the new towns have been developed with the ultimate aim of creating selfcontained and balanced communities for work and living. ... Yet despite this common goal, some of the new towns have been more successful than others. This ... raises the question as to whether such an 'ideal' state is in fact possible.

Thus, with this in mind, it was decided, for the purpose of this study, to isolate one of the new towns' objectives – self-containment – and, by studying an existing new town, consider exactly what it involves, the problems which may be encountered and subsequently its chances of success." (Main, 1982: 1)

Main duly confronted the self-containment factor, and in this dissertation the study area is Cumbernauld, another Scottish New Town. In the conclusion, Main wrote about the different facilities, or sometimes lack of facilities, and took an interesting gendered approach which, unfortunately, was not unpacked further:

"... the overall impression of Cumbernauld is that despite the absence of a general hospital, the population is fairly well endowed by community facilities. Indeed with respect to education, Cumbernauld appears to have satisfied the vast majority of its residents. However, the apparent lack of day nurseries may be a cause for concern. Even in a time of equal rights for women, it is still regarded as being a woman's role to look after the children. Therefore, the lack of facilities may, in fact, discriminate against women who may want, or need, to work during normal working hours." (Main, 1982: 58)

Unlike in the quantitative study of Scullion, written in 1974, Main used the collected data to

make some more critical, engaging statements about the 'self-containment factor' of Cumbernauld. This difference arguably indicates a slow move towards more ethicalpolitical engagement in the dissertations, traceable across the decades.

From quantitative demographic studies to studies of the facilities, to questions concerning well-being and community spirit, by the early-1990s the New Towns were still being researched, but again the emphasis had shifted. In her dissertation *East Kilbride: Has it created communities by the planned methods of social balance and self-containment?* (1994), Janice Murray explored the 'community spirit' in one New Town:

"The central thesis of this study is to determine the social structure and community identity within the neighbourhoods of East Kilbride as initially the New Town policy emphasised social balance and self-containment as a means of encouraging social cohesion at both the neighbourhood and the town level. Through this study it is hoped to discover whether this policy is still important to residents and, if it is still important, whether social aims have been met by direct policy or indirectly – e.g. sorted neighbourhoods through socio-economic segregation." (Murray, 1994: 6)

Murray also uses questionnaires and statistical methods, but also mentions 'personal interview techniques' (Murray, 1994: 15) to gain more input. While ostensibly perhaps not *so* different from the Main study, the emphasis here had slid into something that might be deemed more humanistic, as I consider in Chapter 6, being concerned with the 'structures of feeling' held by research participants – their feelings about more intangible features of a place or community, such as its 'spirit' or influence on 'well-being' – rather than more objective measures of population and facility use.

Commuting

Already from the regional studies of the 1960s and 1970s, commuting or, as it was often called then, 'the journey to work' had become a standard element or theme of students' dissertations. For instance, in his or her regional dissertation entitled *Muirkirk and Sorn: Hope or Despair*? (1970: see Figure 47), J.C. Darroch considered the themes of industry and employment by discussing employment opportunities outside of the parishes that were studied:

"Despite the falling prospects of employment throughout the two parishes, from decline of the coal and textiles economies, very few of the displaced have moved on to the land, but prefer instead to 'journey to work' outside the parishes, where they can obtain the better financial rewards of mining or industry." (Darroch, 1970: 34)

In the 'systematic' dissertations (specifically urban geography projects) the journey to work has also been prominent, the question of commuting becoming the main emphasis of study instead of 'just' one aspect of recounting the region. Darroch's peer, John Weir, discussed the 'journey to work' in East Kilbride in his dissertation Towards a further understanding of commuting patterns in the new town of East *Kilbride* (1970), which of course also drew in the New Towns angle just reviewed. By means of statistical analysis of data provided by both East Kilbride **Development Corporation and**

MUIRKIRK AND SORN J. C. Darroch 20, Bryce Place. East Kilbride. 4th September 1970.

Figure 47 Dissertation Cover (Darroch, 1970)

nine different companies located in East Kilbride (eg. Rolls-Royce, Dictaphone Co, Schweppes), Weir probed the benefits and drawbacks of commuting – both for the business and for the region as a whole:

"Whether commuting is desirable or not is quite a hotly contested question. Certainly a very high proportion of commuters travel by car – either their own or a workmate's – e.g. Rolls-Royce have been forced to build two large new car parks in addition to the original two and this must inevitably cause congestion. It has nevertheless been suggested that this is the necessary price to pay for general benefits like segregation of workplace and home giving a certain flexibility." (Weir, 1970: n.p.)

Commuting patterns and the social dynamics of so-called 'commuter villages' were studied throughout the 1980s and 1990s⁸⁴, but fell out of favour from the year 2000. There are

⁸⁴ For instance, *A study of the transport network and commuting patterns of the Falkirk district* (Allan, 1983), and *Community? Mobility and social space in a commuter village* (Officer, 1984).

many other questions concerning transport and employment that continued to be researched after that date, but these dissertations emphasise commuting to a lesser extent and focus more on sustainability of transport and levels of accessibility to public transport. An exception is the dissertation by Caitlin King, entitled *Urban commuter cycling: Understanding the cyclist and their environments* (2014), which homes in explicitly on commuting. Again, though, there is a clear trend break with equivalent dissertations from a few decades before, because King emphasised *cycling*, a specific, sustainable mode of transport, but also the cultural aspects of transport in a manner consistent with more recent academic literature. In her research, King compared Hong Kong and Glasgow, deploying observation and interview materials to excavate how cultural and social aspects influence the use of bikes for commuting:

"Urban commuter cycling has been shown through this study to be distinctly affected by predominant cultures, environments and social influences within a city. Hong Kong and Glasgow were found to have differing cultural perceptions of the activity of cycling, and this in turn affected the predominance of urban commuter cycling. These cultural attitudes were shown to be heavily influenced by governmental attitude and policy." (King, 2014: 31)

Commuting has thus remained an aspect studied throughout the decades, but one more recently researched increasingly through 'a sustainability lens'.

Medical/health geographies

Dissertations about health are discernible throughout the different decades in the archival collection, but there is a clear shift concerning the approach taken by such health-related studies by students. Generally, the main focus of medical geography studies by students before the mid-1990s split across three elements of health care: access⁸⁵, logistics⁸⁶ and spatial variations⁸⁷. Such studies often connected health to social-urban questions related to poverty, class and the urban environment. In her dissertation entitled *Spatial distributions of deprivation and children's heights in Lanarkshire* (1994: see Figures 48 and

⁸⁵ For instance, Utilization and attitudes towards the medical service in Kintyre as determined by accessibility (Watson, 1979).

⁸⁶ For instance, *Cross boundary flow of hospital patients and the allocation-location problem* (Whitefield, 1982).

⁸⁷ For instance, A study of the distribution of primary health care in relation to areas of multiple deprivation and low social class in Glasgow City (Gourlay, 1987).

49), Frances Murphy interrogated the relationship between poverty and health, focussing not on health defined by the 'absence of disease' but rather by another 'representation of general health', height:

> "The main purpose of this study is to discover whether or not there are spatial patterns in children's heights across Lanarkshire, and how these are linked to deprivation levels. Height was used as a representation of a child's general health, and the indicator of deprivation used was the number of children receiving free school meals." (Murphy, 1994: 4)



Her methods were mainly

quantitative, combining school

Figure 48 Dissertation Cover (Murphy, 1994)

medical records from the Lanarkshire Health Board and statistics showing the uptake of free school meals to relate 'deprivation' to 'height'. She explained why studies like these are important:

"This topic is of interest at the present time because of mounting evidence of an increase in inequalities between the richest and poorest segments of the population, with a corresponding rise in health inequalities." (Murphy, 1994: 4)

She also reflected on the subdisciplinary field of which her research might be judged a part:

"The field of medical geography has been especially concerned with describing spatial distributions of disease and attempting to explain why these variations occur. ... However, very little research seems to have been directed towards areal variations in other aspects of health, less drastic than disease." (Murphy, 1994: 6)

Murphy's dissertation can be seen as a clear example of the research done in the field of medical geography. The *Dictionary of Human Geography* provides the following description of medical geography, which clearly acknowledges the role of spatial diffusion:

"Medical geography is concerned with a variety of health and illness topics and is

very much multidisciplinary in nature. Nutrition, communicable diseases, spatial diffusion, economic development processes, chronic, or lifestyle diseases, disability, violence, substance abuse, environment – health relations, healthcare systems and philosophies, location of health service facilities, and allocation of those in need of care to sources of care – all have geographic components." (Earickson, 2009: 9)



Figure 49 Map: mean heights of P2 children in Lanarkshire schools (Murphy, 1994)

From the mid-1990s on, the connection between health and social-urban geographies becomes less present in the archive, and the theme of health is more often connected to research concerning development geography or hazard studies. The connection between flooding and flood risk and (public) health is more than once researched by students⁸⁸,

⁸⁸ For instance, *The social impacts of climate change: Investigating the association between flooding and public health in Scotland* (Watt, 2013), and A *comparison of the health and social impacts of flooding on people who have experienced multiple floods and those experiencing flooding for the first time* (Honeyman, 2014).

echoing claims made earlier about the influence of Rhian Thomas's teaching about hazards, flooding and health, while there are many examples of 'health and development' dissertations. Some of the latter focus on a specific disease⁸⁹, while others take an approach that connects health to socio-economic matters (somewhat similar to Murphy's 1994 dissertation mentioned above).

In her dissertation *The impact of disease on the socio-economic structure of the household in Dar es Salaam, Tanzania* (2010: see Figure 50), Sarah Scholes explored the effects of disease at several levels: "both at a household level as well as from a global perspective" (Scholes, 2010: 3). She identified a 'research deficit':

"The fact that the impact of disease on the household tends to be taken for granted is evidence by the absence of significant research in relation to places such as Dar es Salaam. As Steven Russell (2004: 143) explains, more research is needed on the household costs of disease, how the household responds to disease and the extent to which disease exacerbates poverty. This project seeks to readdress that research deficit." (Scholes, 2010: 3)

Scholes then stated the following research objectives:

"To establish the most common diseases and the extent to which they affect the socio-economic structure of households in Dar es Salaam; To establish how the members of the household 'live' or cope with disease; To analyse the effects of the loss of the economically active parent in the household and how this affects the family dynamics of the household." (Scholes, 2010: 10)

These objectives clarify how Scholes aimed to combine quantitative and qualitative research methods, striving to connect medical data, socio-economic data and behavioural and emotional data with each other. This emphasis is not so distant from Murphy's 1994 dissertation on physical health, and it is one recognisable throughout the full dissertation archive. Almost all of the medical/health geography dissertations that I sampled focussed on *physical* health⁹⁰, although from my broader perusal of dissertation titles I know that there are studies here that address *mental* health as well, reflecting a 'niche' strength of the Glasgow department, especially in the 2000s and 2010s. Many of such dissertations

⁸⁹ For instance, on malaria, *An analysis of the spatial distribution of malaria in Katete, Eastern Province, Zambia* (Cowan, 1994).

⁹⁰ Except, for instance, *An evaluation of how space, place, landscape and environment were bound up within the realm of mental health care, in the Fife and Kinross District Asylum, in the nineteenth-century* (Thomson, 1997), which is an interesting example of a study in historical-medical geography. Another example of such a historical-medical approach is the more recent dissertation *Historical geographies of Lennox Castle Hospital* (Roberts, 2010), focusing on one particular mental health institution.

become reconfigured as contributions to the social geographies of 'outsiders', as discussed earlier. There are, for instance, several dissertations on the histories of mental health institutions⁹¹. Overall, medical geographies or health geographies are traceable throughout the archive but the subdiscipline has nonetheless remained a relatively small focus of study.



⁹¹ For instance, An evaluation of how space, place, landscape and environment were bound up within the realm of mental health care, in the Fife and Kinross District Asylum, in the nineteenth-century (Thomson, 1997), The changing space and place of the Glasgow Lunatic Asylum 1733-1910 (Cameron, 1999) and The historical geography of Smithston Poorhouse and Asylum, Greenock, 1875-1900 (Farquharson, 2012).

Social justice

From the 1970s, dissertations appear that display some kind of 'social concern' emphasising problems such as poverty and housing. The expanding scope in social geography, discussed earlier in this chapter, goes hand-in-hand with the rise of radical and Marxist conceptual frameworks that is discussed in Chapter 6. The following two dissertations written by students from the 2010 cohort are not only exemplary of a 'trend' in the language of a dissertation title (a short quotation, followed by a colon and a more general description of the focus of inquiry), but also of a new way of emphasising the concept of social justice. Louise Boyle's dissertation, entitled *'Dear green place': Space, place and communication within the 'Towards Transition Glasgow' Network* (2010), explored a specific network, based on archival material, spatial mapping, questionnaires, interviews and participant observation. This network analysis not only offered insights into the involvement and ambitions of members of the network, but aimed to demonstrate structural power relations and social inequalities:

"Glasgow represents not only a facet of motivation through which people are given strength to pursue their interests and ambitions but a unique platform as a convergence space facilitated by constant pockets of activity; extensive connections; common platforms of collective action; overlapping circuits of solidarity and sites of contestation in terms of power and social relations relating to knowledge, dominance and social stature." (Boyle, 2010: 33)

The references here to social movements, 'convergence space' and 'solidarities' signal the influence of Paul Routledge, mentioned earlier, and also an emerging Glasgow speciality with respect to what has more recently been termed 'spatial politics'. Joanne Armour, also a student from 2010 who wrote her dissertation *"Think global, eat local": Insights to food localization in East Ayrshire* in 2010, undertook a very different kind of project, emphasising food localisation, and connecting this topic to social justice:

"One of the fundamental concerns of the social justice literature is that localization will exacerbate the already unfair and detrimental social problems that will be in place in certain localities." (Armour, 2010: 30)

Based on a large number of questionnaires and interviews, she concluded that social justice issues are often overlooked at the household and regional levels (Armour, 2010: 36). An overview of quotations from participants demonstrated a mixed opinion about the success of local food networks, with some, for instance, emphasising that only a small group within the community 'profits' from it. These two examples demonstrate that research questions can combine social research with more philosophical and conceptual analyses concerning social justice. It is also exemplary of research that is ethical in nature: demonstrating ethics not as a 'side issue' of doing research, but as a very central concept driving the research.

Conclusion

The analysis of the research endeavours undertaken in 2614 undergraduate dissertations – turning to their substantive subject-matters, allied to questions about the relations between physical and human geography, and about subdisciplinary allegiances – has provided an opportunity to add the experiences of almost as many geographers-in-themaking to existing narratives of 'the' history of geography. In this chapter, I sought to include general reflections on the dissertation as a whole alongside close-ups of sometimes extraordinary, surprising and innovative dissertations, as well as cross-referencing with dissertations that are arguably exemplary for a specific era or (sub)disciplinary tradition. It is interesting to remark that many (sub)disciplinary trends that are generally recognised in the history of Anglophone geography are often visible in the dissertation collection, but with a substantial delay. What I have argued is that such delays might be influenced by the fact that a trend only becomes recognisable in undergraduate research when academic members are appointed who are part of, or 'early adapters' of, specific (sub)disciplinary changes and trends. Their arrival at the university is an opportunity to bring new accents, new 'worlds', to the undergraduate curriculum. This does not mean that it is only such 'newcomers' who play a significant role in such innovative endeavours, however, since such a claim would deny that 'ongoing' staff cannot engage with, embrace and encourage work reflecting new (sub)disciplinary developments. It is also plausible that hiring committees, including current academic members of staff, explicitly recognise a lack of expertise in a specific subdiscipline or an opportunity to appoint new staff *au fait* with newest trends.

The undergraduate curriculum is a place where the subject of geography is taught as a unity, with human geography and physical geography (usually) 'peacefully co-existing' in this educational framework. However, there are convergent and divergent movements perceptible through time, with specific foci of inquiry providing bridges at times and epistemological and ontological conceptions driving them apart at others. When studying a longer period of time, as I am doing in this research, there are some clear breaking points recognisable: turning points perhaps for the research that undergraduate students are doing – or the ways in which they are justifying, explaining and reflecting on – their research activities. For the undergraduate dissertation archive, one decisive point is the regional dissertation requirement ending in the 1970s, as I discuss more thoroughly in the

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next chapter. After this time, more dissertations include hypotheses, explicit research aims and questions, and some explanation of the connections between such objectives and the methods used. The second major breaking point is during the mid-1990s: parallel but independent developments in the department caused renewed research opportunities (for instance, because of improvements of the research facilities and equipment for physical geographers) and renewed attention for geographical theory, methodology and reflectivereflexive practices. In the next chapter, I turn to the analysis of disciplinary awareness and conceptual frameworks as manifested in the collection of undergraduate dissertations.

Studying the geographical knowledge that has been produced by undergraduate students provides a view into the hybrid space between formal academic geography, taught by employed geographers, researching and teaching within the context of the discipline, and the non-specialist – or, rather, the as yet non-expert or, better perhaps, becoming-expert – geography of students. This discussion, combined with the portraits, offers a rich picture of ideas, concerns, intuitions, and preferences meeting in a middle ground, moving 'down' from staff and bubbling 'up' from students. This creates a sometimes predictable, but other times intriguing and surprising perspective. The undergraduate dissertation is relatively 'free form', and as such highly distinctive from almost all other work that students do, such as coursework assessments, examinations and lab practicals. Within a limited time period with limited means, students have to inject much of 'themselves' in their work sometimes by choosing a focus of inquiry close to their hearts, other times in the experience of independently executing all different aspects of the research. This chapter explored what was getting studied, and how students understood this diversity of subject matters, themes, questions and subdisciplinary contexts. In the next chapter, I address the conceptual frameworks, views of students on geography as an academic discipline, and their justifications of why geographical knowledge production is relevant. That discussion enriches this analysis of *what* is being studied, by asking the follow-up question: *why* are students, actually doing this kind of research?

CHAPTER SIX DISCIPLINARY AWARENESS AND CONCEPTUAL FRAMEWORKS

"Geography has often been defined as the interaction of man [*sic*] and his environment – which is broadly the essence of the matter. In geography we do not study man alone – a single entity – but rather a community of men, all inter-related and complementary in their functions. Environment should be interpreted in its widest sense to include not only the purely physical like climate and vegetation, but also such factors as communications, orientation towards and relations with other communities. The relationship between the community and its region is then the fundamental study in geography. It is itself an organism, two different aspects of which are represented by community and region. This organism is ever changing and growing where sufficient stimulus is provided and where we find such a healthy development we may say that there occurs a true natural geographical region. In all parts of the world we find such natural regions, and the most flourishing are, not isolated from all others, but in constant contact with them." (Munro, 1954: 1)

Introduction

The question of what geography actually is, or should be, is possibly a more relevant question for geographers-in-the-making, compared to students of other academic disciplines, since debate on the very 'nature' of academic geography is a constant factor in the discipline's past. There are, however, important shifts over time as well as individual differences in how implicitly or explicitly such questions are discussed in the dissertation, in how 'standardised' are reflections on the discipline and one's own work, and in the attention paid to situating research within a conceptual and theoretical framework justifying and explaining the epistemological and moral value of the project. The reflective notes in dissertations on what geography 'should be' and what a geography student 'should do' are telling of the complexity and hybridity of academic geography, but also demonstrate how one department and its staff translates its own status, ambitions and readiness into new ideas and new methods for teaching and supervision. Changes in this awareness of the discipline and of 'oneself' as a geography student might also be connected to a changing student population. In this chapter, I explore these different levels of disciplinary awareness, combined with an inquiry into the conceptual frameworks adopted, more-or-less explicitly, in undergraduate dissertations. This leads to a longitudinal perspective on how apprentice geographers 'find their ways' into their discipline, but also how in the process they may change, reshape and challenge the contemporary 'versions' of geography in which that they are being educated.

First, I explore the disciplinary awareness shown by many generations of undergraduate geography students: how did they reflect on the discipline of which they were part? Were students justifying their research aims or methodology by means of linkage to certain disciplinary traditions, or did they maybe critique these traditions? In this, I do not only address what students think *geography* should do, but also what they themselves, as geographers-in-the-making should do. Second, I discuss shifts in conceptual frameworks of the dissertations over time. These conceptual frameworks offer an insight into who students see as their 'geographical predecessors': with whom do they want to be affiliated? what conceptual 'isms' and traditions are their inspiration or justification for their own research? This also connects to institutional requirements for the dissertations, as already discussed in Chapter 4. For instance, the distinction between so-called 'regional dissertations' and 'systematic dissertations' up to the mid-1970s - and then the dropping of this distinction after the 1970s – suggests differing and changing views on the character, content and even purpose of academic geography held by the geography staff. Comparing a timeline of the conceptual frameworks found in the dissertation archive with existing timelines and narratives normally given in *the* history of geography illuminates interesting differences between how the history of geography has been told and how it is then inflected in one situated disciplinary educational context, and offers an opportunity to explore potential explanations for these differences. This meta-level exploration of the positionings, justifications and, perhaps, 'attacks' of undergraduate students on the contemporary status, nature and focus of academic geography shines a light on how geography has changed over time, and on how undergraduate students and the 'higher level' academic community are here inextricably interwoven and mutually affecting one other.

Disciplinary awareness

The quotation from Munro's dissertation *Aviation as a new factor in geography* (1954) about geography as a discipline is unique for the dissertations written in the 1950s and 1960s, since such meta-level reflections on the nature of geography – or indeed of its subdisciplinary fields – are extremely scarce in these earlier years of the Glasgow dissertation. In hindsight, it is often possible to place dissertations in a specific disciplinary tradition, drawing as they do (if not all that self-consciously) upon specific bodies of concepts and methods, but students in these early decades rarely explained how their work related to the wider discipline, nor why their research might be relevant within (or beyond) the academy.

As discussed in Chapter 2, standard disciplinary histories often provide narratives about shifts in methodologies and concepts used, sometimes conceived in terms of paradigms or relatively coherent 'isms' and 'ologies' (eg. Cresswell, 2013; Johnston & Sidaway, 2015). Unsurprisingly, the dissertations across the years roughly mirror these frequently described 'trend lines': the academic staff of a department shape and mould the undergraduate curriculum – sometimes more conservatively, sometimes more innovatively, depending on the particular staff members, their own generation and background – which is therefore not a separate reality divorced from wider academic trajectories. However, analysing levels of disciplinary awareness presented in the dissertations, asking about how students have seen the discipline (and its own subdivisions) of which they are part and hence the place of their own work within this discipline and its transforming conceptual landscape, opens a new window on how a discipline is indeed made, circulated, received and perhaps – if here only in minor ways – recast.

Disciplinary awareness can be distinguished in thoughts about *what* geographers are studying and *how* they do this. The following two quotations demonstrate two possible, quite different versions:

"In recent years the application of statistical techniques has become commonplace in helping to solve problems of a geographical nature. As this is a geographical problem being studied in this paper, statistics shall be used in accordance with this trend." (Hastings, 1990: 27)

"... mainstream Geography all but ignored children until the 1990s." (Moore, 2006:

9)

The two examples reveal either fitting in with the supposed conventions of a discipline or seeking novelty. The second quotation, about children's geographies, makes a claim about what geography is *not* doing or including (enough), according to this student, with the implication that something *new* is indeed required: a new move in terms of what gets studied. The first quotation is a justification of the methodology used in a research project, saying that, by following an already established orthodoxy, although arguably by 1990 a statistical orientation was already a bit dated or at least itself heavily critiqued within urban geography⁹², the geographical problem posed by the student can be solved. The contrast

⁹² What appears in the curriculum and filters down into dissertations will tend to lag behind the research frontier of academic publication, but not always! This issue of 'delay' has already been given some consideration in Chapter 5.

between 'following' the tradition and trying to change the discipline, or at least to fill a gap within the discipline, is probably down to differences in students' own attitudes and skills in tandem with the influence of their supervisors. It also might suggest an increased emphasis on 'novelty' in research, rather than following the 'rules', suggesting a really quite different sense of what a student-geographer might or should be able to contribute, itself reflective of how the overall dissertation task has been presented to them in preparatory classes and by their supervisors. Especially in the cohorts from the late-2000s and early-2010s, students explicitly use the language of 'originality' and 'novelty' in justifying all sorts of inquiries, probably linked to the rise of formal guidance that itself spoke about students needing to seek out 'gaps' in the literature that their dissertation might address. Such guidance inevitably demanded greater awareness of disciplinary and subdisciplinary literatures, including the capacity to encompass, describe and critique such literatures.

Adding this longitudinal analysis of views expressed by geographers-in-the-making to disciplinary narratives shines a fresh light on two aspects of the discipline. First, it exposes the 'step changes' in what undergraduate geography students are taught occurring between a few cohorts of students, maybe only a few years apart, inevitably influencing subsequent generations of postgraduate students and early career academics; and second, the obvious change in language, openness and awareness (of wider traditions, their changes and challenges) over time. The skills of reflecting on one's own role as researcher and about research methodology, tied in both respects to matters of research ethics, clearly took a giant leap around the turn of the century for these Glasgow undergraduates. Echoing changes in the cultural-intellectual conceptions (held by teaching staff) of what researchers 'should do', and in epistemological arguments around what is 'geographical knowledge', not only the questions asked and methods used by undergraduate students changed, so too did their reflexive engagement⁹³. Such changes from the early-2000s are perhaps even more perceptible in the attention given to a 'methodology chapter', the formation of not only a research question but also the stating of explicit 'research objectives' mapped across into methods, and also the including of sections about ethics and one's own positionality. This is not an entirely new insight, but there is arguably novelty in realising that not 'only' the vanguard of the discipline was starting to engage with such reflectivity and reflexivity, but so too were geography students, meaning that these novice geographers now started to approach their work with greater levels of both

⁹³ Research ethics and positionality are discussed more thoroughly in Chapter 7.

self-awareness and disciplinary awareness than was usually true of earlier students. It is not only the changing topics and concepts – for instance, the rise of dissertations on climate change and sense of place – that tell us what geography is, but also what geographical knowledge and, moreover, disciplinary awareness so many of these individual geographers – perhaps not continuing in academic careers, but geographers nonetheless – have come to display in their first big research project.

The disciplinary awareness of students is often expressed in brief remarks about the history of geography or that of a specific geographical subdiscipline, or indeed of the history of a particular body of geographical knowledge (maybe including people other than professional geographers). The time scale of these short historical analyses is diverse, from mentioning the ancient Greeks to summarising the most up-to-date disciplinary developments. Sometimes this history is told by means of referring to the 'grand names' in geography's history:

"W.M. Davis' slope profile development model was termed the 'Geographical Cycle'. ... The criticisms of the Davisian system have been widely expressed and include such points as denudation can only be important when a landmass is stable; and also that streams undergo 2 phases of activity namely rapid incision and then virtual dormance once its grade has been attained. Therfor [*sic*], his 1930 ideas are often overlooked but his name is still associated with the overall cycle of erosion and its flattening concept and development of a peneplain." (Mauritzen, 1994: 6-7)

Others refer to more 'amateurish' knowledges and interests:

"In the late 18th and 19th centuries many farmers and amateur geologists became interested in the reasons for the distribution of the different types of soil. They came to the general conclusion that there was a direct and fairly simple relationship between the character of the soil and the nature of the bedrock beneath it." (Watson, 1994: 3)

Although the scope of a standard chapter dedicated to the analysis of academic literature and the contextualisation of one's research increased, especially from the 1990s onwards, this *historical* analysis is often limited to a few sentences. Significantly more attention is paid to more contemporary contextualisation of the research question, both within academic geography and within the wider academic context.

To explain what they are doing in their research for their undergraduate dissertation, some students explicitly position themselves as *geographers* in a wider academic field. Especially in physical geography dissertations, students refer to geologists, as demonstrated in the

quotation just mentioned. There are two other disciplines regularly mentioned besides geologists by geography students: psychology and botany. It surprised me that these two disciplines were specifically mentioned several times by students situating their own research, whereas there are disciplines that seem more closely related to geography (for instance, sociology). However, it might be the case that, especially when students decide to choose an 'odd' dissertation topic,



Figure 51 Dissertation Cover (Todd, 1990)

not obviously geographical in nature, they need to explain how and why this specific subject might be geographical as well. This is evident in Tom Todd's dissertation entitled *An investigation of the liverwort Herbertus Borealis* (1990):

"It is perhaps not immediately obvious why a Geographical dissertation should take as its subject a single species from a relatively obscure group of plants. However it is believed, that by bringing a Geographical perspective and training to bear on a type of problem traditionally tackled only by Botanists, fresh insight will be gained." (Todd, 1990: 1)

The other discipline, psychology, is particularly mentioned in so-called perception studies:

"The study of perception has historically been the domain of the psychologist. The roots of perception within psychology can be traced back to 1919, when a behaviourally oriented approach became the dominant research direction (Pocock & Hudson 1978: 4). This behavioural trend ... refers to the idea that people hold mental images of their environment as a conception of their earlier experiences. ... Traditionally, the non-human environment was disregarded in work done on perception by psychologists. However, as their studies advanced, the necessity arose to question the exact nature of reality in terms of the interactions between man [*sic*] and environments, and as a result, throughout the latter half of the

twentieth century, research regarding perception has become increasingly widespread within a broad spectrum of social sciences. ... The value of perception studies in geography is clear. The work carried out into perceptions of residential movements and of consumer images of their retailing environments potential use is in the field of town planning." (Malley, 1994: 9-10)

Such positioning of the work of geographers, specifically in perception studies, is done by various students from different cohorts. Of the sampled 642 dissertations, 30 dissertations entail such perception studies, researching perceptions of, for instance, migration, population, crime, flood risk, wind farm industry and climate change.

How students position their own research within disciplinary traditions can, as discussed, be by justifying disciplinary traditions or by explicitly criticising these traditions. In many cases, though, it is a more 'in between' form of positioning, exploring both the benefits of the existing traditions and outlining the limitations. For instance, some of the regional dissertations of the 1970s acknowledged the fading out of the 'regional' geography tradition by exploring the difficulties of working at the regional scale:

"... it may be equally justifiable to divide the area into other regions on some quite different basis, and regional geographers, together with regional planners, forget that a region is a device for studying man [*sic*] on the earth's surface, rather than an immutable fact." (Ambrose, 1970: 22)

"Regional geography presents many problems, for although the regional method is an accepted system, it is also an intangible concept open to the indiscipline of conflicting opinion and susceptible for its lack of a clear and accepted definition. This essay has been based on a [*sic*] assumption that the main aim of a regional geographer is to identify unifying factors, and that by recognition of core characteristics, it is possible to discover inter-relationships between the physical and human elements which constitute the region." (Rycroft, 1970: 7)

Such 'late' renditions of regional geography by undergraduate dissertations are often more prone to criticise this framework and disciplinary tradition, matching with the decrease of regional geography in the Anglophone geographical community as a whole. Although the 'regional dissertation' retained its central position in the Glasgow undergraduate curriculum longer than might have been expected given claims in the published historiographies, it had yet to pass a few years of increasing critique and discussion of 'the region' as an organising concept before it became extinct.

The cohort of 1998: disciplinary awareness and conceptual framing

There is a notable increase of reflections on the position of students' own dissertation from the mid-1990s. In this section, I take one cohort, that of 1998, as an example to explore this 'breaking point'. From then, dissertations bear witness to disciplinary awareness and conceptual framing much more consistently and explicitly. By reflecting on the history of geography, or the history of a specific subdiscipline or concept, students indeed place themselves in a geographical timeline. Simultaneously, by framing their research in a specific tradition, they take a more-or-less self-aware epistemological and sometimes ethical 'position' within the discipline. Often such historical-philosophical justifications go hand-in-hand: by telling a specific (short) narrative about the history of geography, they address the need or 'overlookedness' of their own research.

The 69 dissertations written in 1998 explore different corners of the planet as well as corners of the geographical discipline. It is nonetheless obvious that there are some 'hot topics' addressed: for instance, crime and the fear of crime, the geographies of 'outsiders' and conservation (see also claims in Chapter 5). This span is also reflected in the subdisciplinary division of the 1998 dissertations: more than 20% are urban geography dissertations, followed by 15% social geography and 10% conservation. The human-physical ratio is 68% versus 23%, with 10% of the dissertations being about a more integrated form of geography.



Figure 52 Numbers of dissertations of the 1998 cohort per subdiscipline

Whereas before students may have commented on the task of 'the geographer' or what 'geography has neglected', many students in the 1998 explicitly demonstrated some *subdisciplinary* awareness: they were not only reflecting on geography as a whole, but

often more specifically reflecting on the history and philosophy of a specific subdiscipline of immediate relevance to their inquiry. This might indicate a stronger compartmentalisation within the discipline:

"The field of urban geography encapsulates some of the most complex philosophical theory and debates in the discipline of geography today." (Gaunt, 1998: 9)

"Glaciers have been studied scientifically for well over a century with Jean Louis Rodolphe Agssiz (1807-1873) being credited with the introduction of glacial theory. However, it was Ahlamann who made some of the first measurements on glacial mass balance during the 1930's. During the international hydrological decade (1965-75) there was a dramatic increase in the number of scientific studies carried out on glaciers. This greatly increased our knowledge and understanding of glacial processes." (Tickle, 1998: 1)

"Rural Geography was at the centre of Human Geography in the years preceding World War Two. Since the 1970s it has become less popular as interest in Urban Geography has grown, this interest has arisen with the need to understand the internal structures of cities. During the 1980s, however, Rural Geography was revived and now a vast range of work is carried out under the name of Rural Geography. Originally Rural Geography concentrated on agriculture and settlement/land-use patterns but now it has spread to include topics such as transport, employment and conflict." (Meanly, 1998: 1)

"The study of deformation tills is an expanding field of glaciology. ... The study into deformation tills is an important area of study as it is linked to many parts of glacial & quaternary research." (Shiels, 1998: 1)

It is not only the way students referred to the past of their 'own' subdiscipline, but the fact that almost all of them reflect explicitly on 'their' subdisciplinary field of concern demonstrates a difference between pre-1990s and later dissertations. For human and physical geographers alike, a geography dissertation needed to include some reflections on what academic predecessors were doing. This is an awareness that fits into the Glasgow-specific curricular changes that happened during the mid- and late-1990s, ones that might also be shaped by renewed attention to the history of geographical knowledge in the wider academic community (e.g. Domosh, 1991; Livingstone, 1992). That said, whereas in the community of British geography some geographers now focus their research *on* the history and/or philosophy of geography itself, not a single undergraduate dissertation in the collection takes such a topic as their main research subject! This meta-analysis thus became a standard element of the geography undergraduate dissertation, yet did not convince any student to take it on as their actual focus of inquiry.

Besides the historical awareness of geography, students of the 1998 cohort paid attention to the conceptualisation of their research by addressing the theoretical framework they are wielding. Again, the students writing their dissertations in 1998 were one of the first cohorts who do this on such a widespread scale; likely influenced by the third-year core course 'Geographic Thought', run since the academic year 1996-1997, which I discuss later in this chapter. Many students include Marxist or postmodernist thought in their framework:

"As for my geographical approach or framework, I am influenced from many directions – Humanistic, Behaviouralist, Structuralist, Marxist, Feminist but I am unsure if this then makes me a post-modern geographer. I see value in all these approaches and each in turn add to the 'awareness' and 'open mindedness' of geography and hopefully to myself as a geographer." (Adamson, 1998: 2)

"The emergence of radical geography in the 1970's with its strong Marxist connotation, initiated a strong attack on the conservative bases of positivism. Whilst poverty, and disadvantage have been attributed as conditions from which delinquency emerges, radical theorists delve deeper and see the origins of poverty and disadvantage in the class-based mode of production. The city is considered to play an important role as it provides the conditions necessary for the perpetuation of the economic bases, which in Western society is the capitalist mode of production." (Black, 1998: 7)

"My dissertation has been largely influenced by the ideas articulated by the postmodern approach to geography. Firstly, I have avoided using a metanarrative or a totalising discourse to structure my work around. Instead I am investigating the different discourses surrounding my theme, becoming more open to other philosophy and perspectives." (Kitchingham, 1998: 11)

As demonstrated by these three quotations from 1998, often the conceptualisation for a project was embedded in a historical contextualisation of specific 'streams' or approaches. Some students, however, presented a very well developed conceptual background to their own research: for instance, Katy Kitchingham, already cited above, did so in her dissertation entitled *Investigating 'nature' - A case study of Crawford Lake Conservation Area in Ontario, Canada* (1998: see Figure 53). Kitchingham remarked upon the history of the concept of landscape by referring to the ideas of Thoreau and Muir, yet also introduced social constructionism and feminist thought about landscapes:

"Landscapes are often seen in terms of the female body and the beauty of nature, by the dominant gaze of white, masculine, heterosexual knowledge. There are subtle indications of this at Crawford Lake. The terminology used to describe the different elements ranges from *beautiful, lush* and *pristine* on the feminine side to *rugged* and *majestic* on the masculine." (Kitchingham, 1998: 31)

She very clearly described what she was doing in her research, as well as what she was explicitly *not* doing:

"Looking at landscape from a cultural, rather than a physical geography perspective, it is clear that postmodernism has had a profound influence on how landscape is perceived. ... Landscapes are seen as constructions, representations of a material environment that have usually been created by the dominant discourse in society." (Kitchingham, 1998: 6)

Kitchingham connected subdisciplinary perspectives (landscape geographies in effect) to

conceptual frameworks, but was also not afraid to disagree with dominant trends or

attitudes, and intriguingly she anticipated how social constructionist approaches have since

been critiqued and reshaped by new 'materialist' orientations:

"The philosophical beliefs that underpin my dissertation can be described as both antinaturalist and realist. ... Although I embrace the new ways of thinking about human society that have been brought to the discipline by, for example, postmodernism and feminism, I still firmly believe that there is a material side to the Earth's existence that is not entirely created in our minds and systems of communications." (Kitchingham, 1998: 10)

Exploring an individual dissertation from the archival collection such as Kitchingham's

demonstrates that undergraduate dissertations are not necessarily inferior to other forms

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Figure 53 Table of Contents (Kitchingham, 1998)

of academic publications *per se*. In terms of originality, argumentation and eloquence, some of the undergraduate dissertations are surprisingly effective, and the conceptualisation and awareness of what the discipline of geography actually 'does' or could do is sometimes similarly sharp.

Conceptual frameworks

Researching the foci of inquiry of undergraduate dissertations is insightful because it tells us something about student-geographers' interests, about the gaps they notice in the discipline as whole and about what matters to different generations, for instance, the increase of dissertations on climate change and on climate change activism⁹⁴. However, besides what is being studied by students, it is also fascinating to explore how these choices in topics and themes are justified and valued. Such frameworks are sometimes implicit and other times explicit: but, generally, over time they became more explicit, with chapters dedicated to conceptual or theoretical frameworks, or at least references to such frameworks in either a literature review or a methodological chapter. As with the likes of Kitchingham's dissertation mentioned above, particularly from the late-1990s there is an explosion of such frameworks being laid out in the dissertations, but the scope and treatment of this in dissertations was still diverse: where some students might merely name-drop a few predecessors and their concepts, others would offer sustained critical engagement with bodies of thought. By the mid-1990s, such frameworks become part of virtually every dissertation. By placing their own research in such frameworks, whether cast as discipline-wide or set within a particular subdiscipline, students explain why their research is 'worth it', both in an epistemological and in what might be termed a political perspective. The absence of these frameworks before the 1990s does not mean that students from earlier cohorts were entirely unaware of their academic allegiances, but for later cohorts they tend to become explicitly mentioned.

After his arrival in Glasgow in 1995, Philo put together the aforementioned core course 'Geographic Thought'⁹⁵, focussing on the history of geography, particularly its older conceptual orientations, as well as various contemporary theoretical dimensions of

⁹⁴ For instance, *"Sympathy but not empathy?" A field study of children and climate change* (Paterson, 2011); *Deconstructing climate change activism: Influence, diversity and contested politics in a global movement* (Sutherland, 2011).

⁹⁵ For more information on the current content of this course and the place of this course in the overall undergraduate curriculum, see Simon Naylor's contribution to a journal theme section on 'Teaching the history of geography: Current challenges and future directions' (Naylor 2017, in Keighren, 2017).

geography. In an interview, he reflects on starting this course in the mid-1990s:

"There was a need [for] a stronger academic scholarly basis. I was brought in as a professor with the mission, to some extent, to change this. It wasn't me alone, but I did do quite a lot of the work of revising how we taught students. I was particularly supported by Jo Sharp and Paul Routledge, two critical human geographers. I put together the 'Thought' course, that still continues today. I took over a previous core course called 'The Evolution of Geographic Thought' - the phrase 'evolution' being telling, suggesting a somewhat banal, gradualist approach. It had very little content, and Glasgow students, when I arrived, had next-to-no grasp of disciplinary history, conceptual development or even how literature and concepts might be deployed to frame empirical inquiry. In fact, students struggled to name geographers or identify readings that influenced them. My version of the course was to an extent explicitly organised around 'isms' and 'ologies', and worked around a diagram that was a prototype of the one in the 2008 chapter⁹⁶. (C. Philo, interview, 10 December 2019)

Again, changes in academic staff, leading to changes in the curriculum, very much transformed the knowledge and understanding of how students might relate their own work to that of predecessors and contemporaries, and also how they might write down these justifications and relations. In this section, I address the 'conceptual spaces' of undergraduate students, and compare their timelines to Philo's 'conceptual space map' (2008), displayed in Figure 54, also accepting Philo's remark regarding the limitations of any such attempt to capture the entanglements of a discipline's conceptual history in a simple two-dimensional figure⁹⁷. In what follows, I focus on human geography, although some of the earlier conceptual shifts did also impact physical geography.

As Figure 54 demonstrates, regional geography can be pictured as followed by a 'decisive break' during the 1950s. However, in the dissertation collection, regional geography is still very much present until the mid-1970s. The decisive break was thus not as decisive in the local context of the Geography degree at the University of Glasgow. What is interesting to note here is that, whereas regional geography was alive and well for a long time, there are fewer traces of environmental determinism in the dissertation collection. A concern for human-environment relations has definitely persisted, but with the emphasis usually on the two-way nature of the relationship. In the following subsections, I address four of these conceptual spaces in detail: regional geography, spatial science, Marxist geographies and humanistic geographies, followed by a succinct overview of some other conceptual

⁹⁶ See Figure 54

⁹⁷ This timeline captures the discipline's conceptual history, though does this from an acknowledged 'Anglo-centric' perspective.

frameworks. They all have a very striking similarity (although these four were not chosen for this similarity, but for their relative size and recognisability): namely, there is a delay of approximately twenty years from their timeline in Philo's figure and the rough image of the timeline that emerges from the analysis of the undergraduate dissertations. This evokes questions about how much – or little! – the undergraduate curriculum is subject to change, and to what extent such change relies on individual staff members, either newly hired or



Figure 54 Conceptual Space Timeline (Philo, 2008b), also reproduced in *Geography & Geographers* (Johnston & Sidaway, 2016)

doing innovative research. The analysis in this chapter thus pivots between the 'overall' timeline of conceptual approaches in geography and the local conceptual space of geography at the University of Glasgow: I discuss the level in-between by mapping Glasgow's version of the timeline of conceptual spaces as it is expressed by students in their independent projects, with regard to the disciplinary timeline.

Regional geography

In standard timelines or narratives about the history of Anglophone and European geography, regional geography is often connected to the first half of the twentieth century (eg. Philo 2008: xii; Livingstone, 1992), supposedly supplanted by a massive shift towards 'spatial science' from approximately 1950 onwards. Pre-war, 'chorology', meaning the study of the region, was the 'cardinal principle', argued for by, for instance, Hartshorne. (Livingstone, 1992: 309). Although the region still retained its centrality in geographical inquiry over time, different approaches in geography, especially spatial science, replaced

> A 'REGIONAL STUDY' aimed at producing an understanding of the areal variation, adjudging the weight given to the physical, human, historical, economic and social elements in relation to their contribution to the character of the area.

Figure 55 A definition of 'regional study' on the first page of a regional dissertation (Darroch, 1970) the idiographic analysis of regions with nomothetic 'hard science'-like geography. This did not mean that the region as a 'scale of inquiry' disappeared in later studies or that regional geography was totally gone, but that it was not *the* key concept of geographical research as it had been before. The reduced dominance of the study of the region in the dissertation is thus to be expected from the mid-twentieth century. The appearance of 'systematic dissertations' clearly reflected wider debates about the increasing emphasis on ' systematic geography' as opposed to ' regional geography'⁹⁸: in a systematic geography dissertation

⁹⁸ For Hartshorne, systematic geographies were important, but their ultimate value still lay in their combination or synthesis in regional geographies: "... a full understanding of the differences between areas cannot be obtained by simply adding together the appropriate sections of systematic geography. It is necessary to study the totality of interrelations of all geographic features found together at one place; this is regional geography" (Hartshorne, 1939: 583).



Figure 56 An inevitable element of any regional dissertation in the 1960s: graphs about cattle (Black, 1962)

the student-researcher concentrated systematically on the geographical dimensions of a specific phenomenon such as plants ('biogeography') or the economy ('economic geography'), as discussed in Chapter 5. The decrease of regional geography and the increase of systematic geography hence closely related to the identification, or development, of different (systematic) subdisciplines.

Significantly, this research project starts in the 1950s, a time period often connected, as just noted, to this switch from regional geography to spatial science. The dissertation archive nonetheless comprises a large number of regional dissertations, resulting very much from the organisation of the undergraduate curriculum, since the 'regional study' version of the dissertation was, until the mid-1970s, not an option but a requirement. The 'regional dissertation' was a place where human and physical geography met in the educational context, perhaps representing the strongest 'unity' in the geography curriculum of all decades studied. I have already mentioned Margaret Rycroft's 1970 dissertation, in which some scepticism about 'the regional method' was conjoined with a statement about the assumed 'main aim of a regional geographer' being 'to discover interrelationships between the physical and human elements which constitute the region' (Rycroft, 1970: 7). As also already mentioned, the rapid decrease of regional dissertations after the mid-1970s was obviously based on the decision to abolish the requirement for a regional dissertation. After this, there are only a handful of dissertations (over several



Figure 57 Regional dissertations often include photographs or sketches of the region: some are merely 'snapshots', others are beautiful drawings (Evans, 1970).

decades) that can be categorised as regional geography. Some later dissertations still explicitly operate at and even name the regional scale in their research, to be sure, yet the 'nature' of such dissertations is very different from that found in the classic regional dissertations, consistent with general reflections on the wider place of the regional in geography:

"Regional geography may be a dormant methodological orientation in geography, but the concept of region, the process of regionalization, and the theme of regionalism continue to thrive within parts of the discipline." (Entrikin, 2009: 344)

The evident follow-up question is why, when regional geography slipped out of fashion in the 1950s, students in Glasgow were still required to do a significant amount of work as regional geographers right through to the 1970s. Ian Thompson, Professor as well as Head of Department from 1976 to 1986, might have been a big influence on this continuation of the regional dissertation, given his specialism in the geographies of France and debt to Vidal de la Blache's regionalism,⁹⁹ but the 'conservative' attitude of the department was widespread. Reflections and memories of former staff members help in interpreting this continuing importance of regional geography in the 1970s at the University of Glasgow. In

⁹⁹ Thompson conducted extensive work on the regions of France, defined administratively as 'planning units', not as Vidalian organic human-physical unities; and it is clear that Glasgow students were well aware of this distinction in how regional studies might be conducted (Philo, 2001).

the 2009 special edition of the *Scottish Geographical Journal*, celebrating the centenary of Geography as an institutionalised presence at the University, Gordon Dickinson discusses regional geography:

"At the start of the 1970s regional geography was still regarded as a major strength of the Department in both teaching and research. In the discipline's search for stronger conceptual bases, the kind of synthesis that characterised much midtwentieth century regional geography was held in high regard at Glasgow. This did not mean that quantification or the development of more philosophically based theory was ignored. Topographic Sciences helped develop the former within geography, whilst the latter saw innovation in the work of a number of the younger staff, especially in human geography." (Thompson *et al.*, 2009: 334)

Ten years after these reflections were published, I spoke to Dickinson myself and asked him more questions about the division between human and physical geography, and he explained further the 'synthesising' role of regional geography:

"There isn't unity, ultimately there isn't. Maybe geography ... it's just a temporary discipline and it will go off. Can you do a degree in botany in a British university? I think not. Chemistry is gradually fragmenting in[to] biochemistry and physics; though it has not gone yet. Economic history? It used to be a big player. The linkages between elements in subjects change from time to time. It seems to me that fundamentally the paradigms that are important in human geography don't rest very comfortably with the ones that guide physical geography – facts, measurements and observations. They really are quite different. When regional geography was a big focus that was one way how it was pulled together." (G. Dickinson, interview, 5 September 2019)

The disappearance of the regional dissertations in the mid-1970s is perhaps just a very late follow-up of the disciplinary trend moving away from regional geography to spatial science; but, as Dickinson expresses here, although spatial science was perhaps an attempt to connect to the natural science disciplines in academia, this move can also be seen as something that brought even more 'problems' to geography. If regional geography 'pulled it together', what is left when you end up with the opposing pillars of one discipline, with the evident bridge taken away?¹⁰⁰ Dickinson's reflections also address the fluidity of disciplines in general, and of academic curricula more specifically: disciplines grow apart, slide out of fashion, are split up into multiple specialisations that grow as independent disciplines, and such moves are of course mirrored in undergraduate degree studies as

¹⁰⁰ However, some geographers very explicitly argued that cleaving to being properly 'scientific' was itself a way of reuniting human and physical geography around a shared commitment to uncovering the fundamental spatial laws, or laws of spatial organisation, governing both human and physical features/landscapes (e.g. Chorley & Haggett, 1967).

well. Although the regional dissertation disappeared in the mid-1970s, the regional tradition indeed did not disappear as a whole, neither in Anglophone Geography nor in Glasgow's undergraduate curriculum:

"When I first came here [in the mid-1990s] the Honours options were divided into – it sounds bizarre now, really – human, physical and regional. The idea was that the regional options such as 'Africa', 'Latin America', 'France' or the 'Polar Regions' were mixtures of physical and human, that was the kind of understanding. We moved away from that for various reasons, with staff changes – that regional emphasis went a little bit out of fashion.

But we kept it in various ways: what we did, we talked about different ways you would synthesise physical and human. We started doing that in Level-1. Level-1 used to end with a regional component, ... North America: I taught slavery and plantations, and American city systems. And then, in Level-2 there was an idea that physical and human geographers taught together on environmental topics towards the end of that [course]. So, you would finish Level-1 with a regional synthesis and Level-2 with an environmental synthesis. And then, for a while we taught students explicitly how there was a passageway from that regional synthesis [in Level-1] to some regional [Honours] courses, and [that] there was a passageway from environmental synthesis in Level-2 to some environmental [Honours] courses.

For a while, that worked, but with a change-over of staff it ceased to work. In other words, the older importance attached to regions, the older importance specifically to human-environmental interactions, in a sense never went away, it just got reworked and re-badged ... which ultimately is to say that, yes, a certain kind of indepth regional specialism, maybe skills associated with reading regions, has probably disappeared – with consequences for dissertations." (C. Philo, interview, 10 December 2019)

Whereas the number of dissertations combining human and physical geography declined with dropping the requirement to do a regional dissertation, the regional tradition, perhaps slightly out of fashion, was still one of the ways to pursue disciplinary unity after the 1970s, although doubts about the 'artificiality' of this unity remained present. As Philo remarks, environmental studies was another example of disciplinary synthesis, perhaps proving a more consistent disciplinary 'bridge', as I discussed in Chapter 5.

Spatial Science

In Philo's timeline, spatial science is sandwiched by two decisive breaks, being a fundamentally different framework from the ones preceding and the ones following later, and this of course is because the underlying presuppositions of what geographical knowledge is, and what geographical research should look like, fundamentally differed between spatial science, its precursors and its subsequent antagonists. The first explicitly

spatial science dissertation in the archive arguably dates from 1965¹⁰¹ and the second one not until 1971¹⁰², while this approach, in its typical vein as introduced in the 1950s and 1960s, is traceable until the early-1980s. Quantitative research played a significant role in the research of many student-geographers in the 1980s and 1990s, although the distinctive spatial science emphasis on 'locational analysis' is not noticeable in such quantitative research projects, indicating a crucial difference between spatial science dissertations and the general use of quantitative methods. One example of a spatial science inquiry is Rosemary Brooks' dissertation *A study of spatial patterns of movement in the villages of Balfron, Killearn and Blanefield in relation to their varying distances from Glasgow* (1974). Brooks quantified the movements of residents of three villages based on a questionnaire, and the aim of her research was formulated as follows:

"By examining the bases for, and patterns of, spatial interaction we move a step closer towards an answer to one of contemporary Geography's most pertinent questions. 'Why are spatial distributions structured the way they are?'" (Brooks, 1974: n.p.)

The 'why' in her research question was perhaps overstated, because the dissertation itself barely discussed an answer to the 'why' and simply emphasised the 'linear continuum' of the three villages because of their relative distance from Glasgow. Although many later dissertations asked similar research questions, the approach here was slightly different because it did not include any other variables (potentially causal factors) that might be influencing residents' mobility. Many of the spatial science dissertations in the collection are part of settlement studies: clearly, therefore, some conceptual frameworks tend to be exercised within specific subdisciplines. Settlement geography is itself a somewhat split subfield: varying from descriptive studies researching environmental factors influencing settlement siting and growth, to spatial-science research aiming to measure and prove lawlike postulates underpinning the likes of Christaller's Central Place Theory.

Overall, the number of obviously spatial science dissertations in the archive is small, and different from the lagging timeline of regional geography in Glasgow compared to the wider geographical tradition; indeed, there is no similar significant delay in the drop-off of spatial science dissertations after the heyday of such studies in the wider discipline, partly

¹⁰¹ The pattern of central places north of The Caledonian Canal (Munro, 1965).

¹⁰² An investigation into the relevance of the 'gravity model' and related hypotheses for the purpose of explaining the volume of interaction between urban settlements in the Scottish counties of Fife, Kinross and Clackmannanshire (Urquhart, 1971).

because it seems as if spatial science – certainly in any developed, self-aware manner – never gained a massive foothold in Glasgow. It is difficult to find an explanation for this situation, but it might be that, with the continuing centrality of regional geography in the curriculum, there was a conscious or even unconscious aversion towards spatial science and its demands in terms of quantification, statistical analysis and maybe modelling. Alternatively, spatial science 'enthusiasts' – those students who might favour a more quantitative and 'technological' approach to geography – were maybe drawn to the Topographic Science degree that the department ran from 1964 to 2004. The emphasis upon regional geography was probably caused by staff preferences for such a form of geography, which is incompatible with the fundamentally different assumptions and expectations of spatial science that emphasise the 'law finding' character of the discipline rather than the particularising character of regional geography. Although hard to substantiate here, there is evidence to suggest that Glasgow staff of the 1960s-1970s were averse to, even afraid of, spatial science in anything but its more low-level and descriptive – spatial pattern-describing – manifestations (Philo, 1998). Not all of the central elements of spatial science disappeared entirely; some were later reinvented in the context of GIS and geospatial-computational methods, allied to the rise of 'big data', entraining both human and physical geography. GIS and automated cartography have remained and arguably become more prominent in many physical geography dissertations in Glasgow over time, as is clear from interview remarks reported elsewhere from ex-staff member Hoey.

Marxist geographies

The first mentioning of Marxist theories in the sampled dissertations can be traced to a social geography dissertation from 1986, entitled *An analysis of inequality in pre-school provision* (Allan, 1986). This emphasis on inequality makes its appearance in social geography dissertations in the late-1980s, as already signalled in Chapter 5. Margo Allan explicitly mentioned that geography had neglected the problems of pre-school provision and the role of 'territorial justice and injustice' in these matters, referring to 'contemporary neo-Marxist theories' (Allan, 1986: 33) and social theories on resource allocation. Overall, this dissertation was highly political, politicised even, and Allan paid a lot of attention to the theoretical and conceptual framing of her research. It is interesting to note that this dissertation is also a very early example of a dissertation explicitly acknowledging young children as a social group worth studying, hence also comprising an early brush with an 'outsider' group (also signalled in Chapter 5):

"In the last decade, geographers have examined many areas of public policy

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including housing, the elderly, health care and education. One set of services which has been almost totally ignored are those for children under five." (Allan, 1986: 1)

Besides the dissertations explicitly mentioning Marxist thought, there were some earlier examples of dissertations that arguably fitted into the Marxist tradition: for instance, Irene Hair's dissertation *The geography of riots in Glasgow and Lanarkshire, 1770 to 1850* (1978). This dissertation, clearly a historical geography project, addressed questions of riots, resistance and radicalism:

"During this period the Scottish lower classes became increasingly aware of radical political ideas – as seen by the increasing incidence of industrial and political violence; However radicalism seemed to have had less impact on the Scottish population than on the English – probably because, unlike England, Scotland had no marked constitutional element in its history. The price of bread, religion and the availability of employment were more likely to cause riots in Scotland than demands for universal suffrage." (Hair, 1978: 3)

Research projects such as Hair's demonstrate that it is not always easy retrospectively to impose a certain conceptual frame on the work undertaken, especially when it is not explicitly mentioned. Hair's dissertation is certainly a historical-political piece of work, but this is more an indication of what *subdiscipline* it involved: neither historical or political geography need necessarily be Marxist geography at all. However, the specific themes, emphasising radicalism, inequality and political activism, might indicate at least some 'light version' of Marxist ideas. Unfortunately, Hair does not mention her supervisor or elaborately discuss any literature. Glasgow's Geography department did employ academic staff during the 1970s that taught radical and Marxist geography. Ronan Paddison and Allan Findlay published on the contexts of theoretical-historiographic geography (eg. Paddison & Findlay, 1985) and Paddison also wrote about historical materialism in Glasgow's studentled journal *Drumlin* (Philo, 2020). As Hair's dissertation implies, there was at least some attention to such approaches, but it was not until the mid-1980s that dissertation-writing students convincingly presented Marxist geography dissertations.

The conceptual space of Marxist geography is recognised in the Glasgow dissertation archive significantly later than it is in human geography as a whole. In the late-1980s and during the 1990s there are still relatively few students referring to (neo-)Marxist literature or concepts, and it is much later, during the 2000s and 2010s, that the study of inequality becomes more prevalent with references to Marxist geographical researchers such as David Harvey. The socio-political dissertations of these years often provide in-depth theoretical and conceptual justification for numerous highly politically charged approaches¹⁰³. This development, as well as the relative 'lateness' of it is not only a very obvious reflection of, again, the roles of individual staff members¹⁰⁴, but also indicates a bigger shift, further and further away from the spatial science conception of human geography with its emphasis on the scientific method, positivism and objectivity. Furthermore, the sense became more palpable of geographers being able actually to *impact* the society that they are researching, and the increase of dissertations with such a leaning demonstrates that it must be one welcoming to more recent generations of geographers (again, acknowledging the uncertainty of what came first, a student population more interested in these matters or a curriculum that emphasised certain approaches).

Humanistic geographies

The conceptual space of humanistic geographies is placed from the mid-1970s to the early-1980s in Philo's timeline, with many conceptual frameworks following from this 'stream'. What might be judged as the characteristic concerns of humanistic geographies – peoples' senses of place and community; matters of perception and behaviour, where treated qualitatively not quantitatively – do feature regularly in older undergraduate dissertations, but not at all in any obvious, explicitly conceptualised way before the cohort of 1998. Humanistic geographies often go hand in hand with the attention to 'new' societal groups, seen in research projects studying geographies of children, of elderly and of the LGBT+ community, a development, as discussed in Chapter 5, clearly connected to changes in the curriculum. Humanistic and post-humanistic dissertations are also numerically 'high performers' in the scope of student discussions of such frameworks. I discuss three dissertations from 2002 as examples: first, Colin Dark's dissertation entitled Incomers to the food town: The effects of in-migration on sense of place in the small rural town of Castle *Douglas* (2002). In his dissertation, Dark structured his literature review under four themes: the concept of place, population movement and rural change, community and home, and 'centredness'¹⁰⁵. On the first page of the dissertation, he presented some reflections on

¹⁰³ For instance, *Environmental protest and democracy: Faslane peace protest camp case study* (Donnelly, 2010). A 'politically charged' dissertation sounds like a synonym for a political geography dissertation, but definitely is not. There are many examples of political geography dissertations that are not, such as A statistical and geographical analysis of the influences on the general voting patterns in Scotland, with particular reference to the Scottish National Party (Rogerson, 1982).

 ¹⁰⁴ As mentioned, Ronan Paddison and Allan Findlay in the 1970s and 1980s, but also the appointment of Andy Cumbers in the early-2000s played a role in this development.
 ¹⁰⁵ The apostrophes are used by Dark.

these key concepts:

"In this paper it is the underlying idea that places are constructed and are given meaning. Every place, whether it is a home or a town, is understood in common terms by those who use that space and interpreted in differing terms, by others who are observing that place as outsiders. This duality is described by P. Knox (1995) as the 'betweenness' of place." (Dark, 2002: 1)

The reassessment – and alertness to the heterogeneity – of the concepts of space and place evoke strong associations with postmodernist thought, not uncommon for human geography dissertations from the early-2000s. Dark refers in his review chapter to rural geographers such as Ilbery (1998), but also to more conceptual work of geographers such as Matless and Buttimer.

The second humanistic dissertation from 2002 is Catriona Skinner's dissertation *The iconic* status of Ben Nevis for Scotland and how it has influenced the growth of Fort William (2002). Although the title could also suggest an economic-focused, tourist geography study of Ben Nevis, Skinner took a very different approach by positioning identity and sense of belonging as her key concepts:

"This relationship between identity and the landscape is deeply embedded in the Scottish nation, and I aim to look at the special connection that Scots have with their country, and in particular the symbolic and iconic value of Ben Nevis, as its highest mountain, and the impact of this on the town of Fort William. I intend to investigate to what extent the town's importance and thus its growth has been influenced by its location at the foot of the highest mountain, not only of Scotland, but the whole of the UK. I propose to tie in Fort William with the romantic appeal of Ben Nevis and sense of place that it provides the town, as well as seeking to incorporate the notions of national identity and potential status within Scotland and the UK." (Skinner, 2002: 5)

Another clear cut at humanistic geographies is found in a later dissertation written by Chris Dickie: *The wonder years: Imagining the spaces and places of adolescence* (2006). His research emphasised memory, imagination and embodiment as key concepts:

"My general aim then is to provide an insight into the personal, and shared geographies of adolescence, not through means of an 'intrusive' ethnographic study of a group of adolescents, but rather through an exploration of the memories, reveries and imaginings of a few twenty something's [*sic*] who in a real sense were that 'other' in the not too distant past. My study in turn, will hopefully help hint at an understanding of the ways in which we use our bodies to fit in to the world, both in terms of culturally accepted categories of identity (childhood; adolescence; adulthood) and in terms of less obvious, homely, ordinary types of association." (Dickie, 2006: 2)

Dickie's dissertation also hinted at phenomenological elements, referencing 'bodies fitting in the world' and with aspects derived from non-representational theory, which was then less than a decade old as named approach within the discipline's academic literature. He referred to 'going beyond representation', 'exploring the full humanness' and research methods alive to the possibilities and insights of the human body as well as to the limitations. In the most recent cohorts that were part of my sample, there are many such dissertations, although Dickie lent relatively more attention to the building up of an appropriate conceptual framework. The ideas and approaches associated with posthumanistic geographies – retaining an interest in the likes of emotions, affects, embodiment and the 'vitalities' of being alive, but displacing the figure of the autonomous, self-controlling singular human being – are perhaps even more recognisable in the dissertations, with an even more explicit usage of conceptually-charged words and sentences than was true for the dissertations cleaving to earlier humanistic geographies. In the next chapter I explore further the methods linked to such conceptual frameworks, considering, for instance, 'participatory walking' and the use of memories.

Other conceptual frameworks

In the subsections above I highlighted a number of conceptual frameworks prominently present in the dissertation archive. By only discussing regional geography, spatial science, Marxist geography and humanistic geography, though, many other conceptual frameworks have been ignored. To some extent, conceptual frameworks such as feminist geographies are already discussed in other chapters, notably Chapter 5, because 'other' conceptual approaches (such as feminist geographies, postcolonial geographies and queer geographies) are often closely related in the dissertations to specific foci of inquiry or methodologies (such as, respectively, geographies of women or gender relations, geographies of 'development' and geographies of sexuality or gender identities). The somewhat 'brutal' omission of other conceptual frameworks is nevertheless also prompted by my sampling strategy: some of the conceptual frameworks are only present in a small number of dissertations in the sampled cohorts, which makes these frameworks appear, in the first instance, as only minimally adopted. By exploring the full index of the dissertation archive, however, it is possible at least to demonstrate the *presence* of important alternative conceptual frameworks in the full suite of dissertations. I not discuss such frameworks at any length here, but by addressing a number of examples it becomes still more evident how rich is this cupboard full of undergraduate dissertations, even with respect to difficult theoretical endeavours. I provide here brief examples for three further

conceptual frameworks: feminist geographies, postcolonial geographies and nonrepresentational theory.

The first dissertations focusing on women as a distinctive social group are found in the cohort of 1992¹⁰⁶. Such studies take sex and gender, both basically taken as biological givens, as a 'marker of identity', similar to, for instance, ethnicity, nationality or socioeconomic 'class'. It is not until the cohort of 1997 that geographies of women really seems to take off as a conceptually inflected focus of inquiry, with a substantial number of dissertations in the late-1990s taking gender as a concept and relating it to a variety of foci of inquiry: for instance, rural economics¹⁰⁷ and politics¹⁰⁸. Such studies addressed women, or gender, in relatively 'traditional' geographical studies, focussing on women as a social group, but are not yet building upon critical feminist ideas. This novel focus of inquiry in itself, though, already embodied criticism of how women were overlooked in the discipline before, hence showing disciplinary awareness. These examples of work on geographies of women have been followed by later projects emphasising two other themes: gender and identity¹⁰⁹ or representation of identity¹¹⁰; and gender and public space¹¹¹, the latter including many projects on gendered dimensions of danger, fear and the perception of fear. Unlike the earlier examples just mentioned, these dissertations sometimes engaged explicitly with the 'gender division of space', critically discussing gender inequalities in access to and utilisation of different kinds of physical (or even virtual) spaces. There is also one specific subdiscipline for dissertation work in which geographies of women have been markedly present, development geography¹¹²: such dissertations were mostly written in connection with fieldwork expeditions to Tanzania organised by staff members John Briggs and Jo Sharp. The appearance of dissertations on geographies of women in 1992 seems

¹⁰⁶ For instance, *The economic role of women in the Arab world* (Mathie, 1992).

¹⁰⁷ For instance, Women with young children in a rural community – A group of disadvantaged consumers? (Arbinger, 1997).

¹⁰⁸ For instance, Scottish nationalism – A gendered phenomenon? (Curry, 1999).

¹⁰⁹ For instance, Natural born killers vs. natural born carers – Exploring the issue of gendered identities within the military (Philip, 1999), and Gender relations in the workplace: The construction of a female identity (Kelly, 2009).

¹¹⁰ For instance, *Always in the passenger seat: Scottish cinema, society and gendered representations of space* (Sloan, 2007).

¹¹¹ For instance, *The role of gender in the time-space paths of eight participants in Glasgow* (Pau, 1997), *Study of public houses in the city centre of Perth. Is their modernization a female assertion in a masculine dominated space or the result of economic pressures*? (Fraser, 1999), and *Women's dangerous places and spaces, a comparison of Maryhill and Bearsden* (McGregor, 1999).

¹¹² For instance, *The critical assessment of NGO and government influences on Tanzanian women in agriculture* (Bannerman, 2009), *Livelihood opportunities in the waste economy of Dar es Salaam, Tanzania: the feminisation of waste?* (Deans, 2012), and *Empowering women: is education the way forward?* (Rafferty, 2012).

relatively late in relation to what was happening on the discipline's research frontier, but, as already discussed above, this delay is not uncommon. The sudden increase towards the end of the 1990s might also be explained by the hiring of Sharp, a leading feminist geographer herself, appointed in the mid-1990s and having an increasing influence on the department's curriculum as the 1990s progressed into the 2000s. Indeed, many of the dissertations from the later-1990s and into the 2000s covering feminist studies and geographies of women were supervised by Sharp. The increase of feminist geographies from the late-1990s also went hand-in-hand with the rapid rise of female geography students in Glasgow. Although the Glasgow geography degree from the start was admitting a mixture of male and female students (in the 1960s the percentage of female students was around 35%), towards the end of the century women, especially ones taking human geography dissertations that I encountered were written by female students!

The second conceptual framework that I succinctly discuss here is postcolonial geography. Literature from the field of postcolonial geography is, unsurprisingly, referenced in some development geography dissertations, but in the dissertations *not* part of the Tanzania research trips mentions of postcolonialism as a conceptual framework have been scarce. There are two critical postcolonial dissertations obviously identifiable¹¹³, one cultural geography dissertation on postcolonial representation¹¹⁴ and one historical dissertation on imperialism¹¹⁵. The organised expeditions to Tanzania, as well as to Egypt, will likely have attracted students in those cohorts who were interested in this school of thought, but it is still surprising that in the many cohorts when such expeditions were absent the entire cohort seems to ignore postcolonial thought and, more specifically, ignores continents other than North America and Europe. The cohort of 2006 includes one impressive example of conservation geography that draws upon the value of indigenous knowledge, entitled *Land, culture and conservation: A study of indigenous development within the Maori communities of Whakaki and Waimarama* (Donald, 2006). In this, Michael Donald investigated one conservation project from a postcolonial perspective:

¹¹³ For instance, A trenchant critique of the causes of Africa's present economic development (Gibson, 1994), and Postcolonial slavery – Moroccan immigration, socio-spatial exclusion and the new wealth in the Spanish Province of Almeria (Parkkonen, 2001).

¹¹⁴ Orientalism in film: How the west views the east (Topp, 1998).

¹¹⁵ Reviving Empire or promoting commerce: Which was the stronger aim of the 1938 Empire Exhibition, Bellahouston Park, Glasgow? (Harrison, 2000).

"The true empowering nature of the Nga Whenua Rahui projects at Waimarama and Whakaki is predicated upon combining conservation practices with traditional Maori systems of land rights and knowledge." (Donald, 2006: 35).

This project seems to be unique in the dissertation archive. It can be concluded that the expeditions organised for several cohorts were indeed a fundamental contribution to the broadening of horizons – worldly, conceptual and ethical-political – of student-geographers.

The last conceptual approach I discuss here is a combination of non-representational theory (NRT) and phenomenological thought. I am aware that these two conceptual frameworks do not fully overlap, but they share a kinship that is also recognisable in how they are referenced in dissertations. As mentioned in the section on humanistic geographies above when discussing Dickie (2006), discussions of NRT are often followed by references to phenomenological literature and *vice versa*. A second example is found in 2014, in the dissertation *The perambulatory geographies of Iceland women in Reykjavik* (Halliday, 2014). In this, Kirstin Halliday adapted a phenomenological approach, interviewing participants while walking and asking participants to create a 'time-space emotion' diary. In her dissertation, she referenced the work of anthropologist Tim Ingold, who is often aligned with non-representational thinking:

"... within non-representational theory and its phenomenological foundations, walking practices are fully accounted for by the accumulation of lived embodied knowledge through environmental immersion, rather than viewed as being resultant from a higher social world. Tim Ingold's theorisation of walking as a way of thinking reflects this assertion of the grounding of social life within lived walking practice (Ingold, 2004)." (Halliday, 2014: 8)

The emphasis on embodiment and also practice, the embodied practices of undertaking particular activities or tasks, increased from the late-2000s, which might be attributed to the hiring of Hayden Lorimer a few years earlier. Other examples of the influences of NRT found in the dissertation archive surface in geographical studies of creative disciplines and forms of art¹¹⁶.

¹¹⁶ For instance, *Theatrical participation across space: Geographies of a community theatre project* (Wylie, 2014), and *Dancing identities: The cultural geography of Highland dance* (Brogan, 2006). I mentioned the latter in Chapter 5 when reviewing the rise of cultural geography as a subdisciplinary orientation: such a 'new' cultural geography has itself been thoroughly imbued with insights from post-humanistic, phenomenology and NRT conceptual frameworks.

Overall, these 'waves' of appearances and disappearances of conceptual frameworks appear strongly connected to particular members of staff as well as to fieldwork opportunities and curricular changes. This point indicates that, although students in their dissertations undertake research independently, staff and curricular cannot but influence what student-geographers recognise as potential research foci and methodologies, and thus what 'kind' of geographer they want to become. The wide variety of conceptual frameworks *within* some cohorts indicates that geographers-in-the-making discovered what they actually found fascinating, interesting and worth studying, which can only have made their research experiences more positive. Learning about different conceptual frameworks and different bodies of literature is thus a fundamental aspect of becoming-ageographer.

Conclusion

Narrating the history of geography as it has been taught in Glasgow seems to make a very strong distinction between, on the one hand, regional geography, and, on the other hand, 'systematic' geography. The continuation of the requirement to produce a regional dissertation, up to the 1970s, indicates that there was a strong regional tradition in Glasgow. There was a long transition period towards more demarcated and specialist 'systematic' knowledge production during that decade, and, together with this shift of emphasis, expectations from students to pay more attention to research design also started to grow, if slowly. It was not until the end of the twentieth century that the presence of a strong engagement with academic literature arose, with conceptual framings and a strong awareness of how a student-geographer as a geographer-in-the-making might tweak disciplinary or subdisciplinary traditions, maybe by studying something new or studying something in a new way. So, instead of demonstrating a certain set of skills that proved students were 'real geographers', the students often aimed to affect a small 'change' in the universe of geography. Sometimes these practices of identifying a gap in the literature were more or less an echo of what was required of them, like a form-filling exercise – refer to some academic studies, identify a gap, reveal 'something novel' – but a majority of students seem seriously to consider these choices. Such a consideration asks for a self-awareness that is rarely explicitly found in the earlier cohorts. From the late-1990s, students were aiming to identify that 'gap' in the literature and tried actively to add something novel to existing knowledge.

This narrative is a very broad one, then, rushing over the valuable contributions of

apprentice geographers from different cohorts. Dissertation research is not necessarily inferior to that underpinning other academic publications, despite the status of its practitioners, but its primary purpose is very different. For the wider academic community, therefore, emphasising solely the procedural-educational aims of the undergraduate dissertation as a curriculum requirement does risk substantial amounts of (in some cases, really quite impressive) knowledge remaining behind closed doors. For instance, the discussed dissertation by Katy Kitchingham, Investigating 'nature' - A case study of Crawford Lake Conservation Area in Ontario, Canada (1998), distinctively connects together questions concerning conservation, tourism, gender and ethics of land ownership in a colonial perspective. Although I have emphasised human geography in this chapter, the narrative is quite similar for physical geography projects. The emphasis in the latter might be a little more explicitly on the application of techniques and skills, and such dissertations reveal an increasingly critical attitude to what specific methods can and cannot achieve, but here too there are signs of the student-physical geographers increasingly addressing the 'whys' and 'hows' of the work that they and their fellow physical geographers are doing. As noted at the outset of this chapter, whereas some students use 'the tradition' as justification, others emphasise their 'innovativeness' as the value of their work, with some suggestion of a tendency over the period from the former to the latter. These individual differences might be connected to students' academic self-assurance, their own inspirations and aspirations included, but also to the relationship with supervisors and curricula (and how they mutate).

This chapter demonstrates, once more, how entangled the narrative becomes. Dissertations tell us something about the department and its status and readiness to embrace differing disciplinary and conceptual possibilities. A changing student population in a changing department, part of a changing university in a changing society: it is almost surprising to find so many ideas and concepts running in a shared fashion like a thread through the cohorts. Disciplinary awareness as well as self-awareness are more comfortable parts of dissertation for later students, but, as seen in the opening citation of this chapter from Sheila Munro, more than 70 years ago, students – or at least some students – also thought about what they 'should do' – and, crucially for this chapter, 'should think' – as geographers. In the next chapter, I move towards the question of *how* these many apprentice geographers did their research, focussing on data collection and data analysis methods, particularly emphasising changes in the skills presumed necessary to become that 'real geographer'. Furthermore, I address research ethics, questions of

positionality and the 'final bits' of dissertation research: namely, the writing-up stage. Slowly, the images of the undergraduate dissertations become multidimensional, not only as a collection of projects done by individual students in a specific location and a certain social context, but also as projects taking up space in a wider, conceptually-informed disciplinary context.

CHAPTER SEVEN MEASURING, COUNTING, OBSERVING, INTERPRETING, MODELLING AND MORE: METHODS OF DATA COLLECTION AND DATA ANALYSIS

"I promise in future to never walk away from people waving questionnaires in my face on Byres Road again!" (Lewis, 2002: ii)

Introduction

Similar to decisions on fieldwork locations, foci of inquiry and conceptual frameworks of dissertation research, the choices made with regard to research methods were often inextricably connected to limitations in time and money, as well as to the preference and skills of students. Such choices were also connected to the formal expectations and requirements of what a dissertation should 'be', 'look like' or 'do'. From counting pedestrians and cars, to formal and informal interviews and focus groups, and from taking soil samples to vegetation surveys: the methodologies deployed by these undergraduate dissertations are diverse, and often within one dissertation several methods are combined. The collection of data is important and time-consuming, but the analysis of the collected data is just as important for the research to understand findings and to provide a valuable conclusion. Methods of data analysis have changed significantly over time, not only because of innovative technological and IT opportunities, but also because of shifting disciplinary trends. The practical approaches found in the dissertation archive also have value in discussing epistemological questions. Furthermore, the methods used provide a very tangible sense of the grounded experience that student-geographers have while doing their research: how do they interact with their fieldwork location? How do they see their own role as a student-researcher?

The aim of this chapter is to explore the different ways undergraduate students *do* their first independent research project. Questions of 'how' dissertations are actually made touch upon a variety of subthemes. This chapter, first of all, addresses the *methodologies* of the dissertations. I explore the methods of data collection as well as the methods of data analysis. Subsequently I address the interconnectivity of specific methods with one another, and of methods on the one hand, and specific concepts and subdisciplines on the other. Methodologies, of course, include more than 'just' the variety of methods used: a fundamental aspect of the analysis of the methodologies is related to the positionality of the student-researchers and questions about ethics, safety and power relations. In this chapter I hence address the 'how' of undergraduate research *before* the writing-up of the

dissertation, which is discussed in Chapter 8.

Methods of data collection

The process of undertaking research projects is often presented as a linear process, covering consecutive phases such as establishing a research question or suite of questions¹¹⁷, data collection, data analysis and writing up the research. In reality, as any researcher will know, the process is usually a lot messier. In this section and the next, I consider the methods of data collection and data analysis as self-contained phases in the project. However, by continuously connecting these phases to each other, I acknowledge the inescapable 'messiness' of the research process. The longitudinal nature of my research facilitates a chronological approach to identify methodological shifts, but some of the shifts over time are very subtle, and in some subdisciplines there are arguably more 'constant' factors of data collection methods than notable changes. Many student-geographers have combined activities such as observing, counting, measuring and asking questions for their undergraduate dissertation. By means of these four 'verbs', or practices of data collection, I explore how different generations of students collected data for their dissertation.

Observing

The act of observation as research method sounds like a passive way of collecting data: the observing researcher, as an outsider, studying their animate or inanimate research subjects. The dissertation archive demonstrates many of these 'observing outsider' forms of data collection, from observing material landscapes to observing human practices or behaviour. Whereas physical geography projects of later decades emphasise measurements and modelling, the art (or craft) of 'reading the landscape' was very prominent in these two decades. In 1966, Robert McAllister wrote his dissertation *Structure in the woodlands around Balmaha, Loch Lomond*. His research aim was to describe the forest structure in the woodlands around Balmaha. The observation and drawing skills of McAllister are very impressive (see, for instance, Figure 58), and both his 'regional' dissertation and his 'systematic' biogeography dissertation¹¹⁸ contain the most impressive

¹¹⁷ Not every dissertation included a research question or questions. This is the case for many regional geography dissertations and the (scarce) surveying dissertations, something even explicitly described by some, as in *A field survey of part of West Cleveland, North Riding of Yorkshire*: "The field survey was entered into with no predetermined theme of study; rather, it was left to the survey area itself to suggest characteristics on which a theme of study could be based" (Duff-White, 1970: 1).

¹¹⁸ As discussed in Chapter 4, from the early-1960s up to the late-1970s, some students produced both a 'regional dissertation' and a 'systematic dissertation': the degree called Geography (requiring

drawings I have found in the archive. I discuss his work further in the next chapter when discussing graphicacy.



Figure 58 Landscape sketch: Loch Riddon (McAllister, 1966a)

Although students were aware of the 'subjectivity' of observation, it was still seen as an important method of data collection. Observation would often be followed by other methods, such as collecting vegetation samples, to *confirm* the observations, as Dickinson describes in his (earlier discussed) dissertation *Mountain vegetation in south-western Rhum* (1966):

"The results obtained from these samples were used, primarily to confirm the subjective observations carried out." (Dickinson, 1966b: 2)

The observations and the sketches following the observations usually remained a substantial first step of collecting data and would also play a significant role in the writingup and displaying of findings. In more recent decades, observation is still regularly (if less often than in the 1960s and 1970s) mentioned in combination with other methods of data collection, but in many of these cases the observation is phrased as a 'secondary' method. Although the dissertations thus seem to reveal a decrease of the centrality of observation as a method in physical geography dissertations, it seems that the fundamental shift is in the view of observation as itself a self-contained method, such that in later eras observation became merely a self-evident aspect of the fieldwork experience, not something needing to be discussed separately or elaborately. This change has consequences for the attention paid to and value of representing observations visually, by

a regional dissertation to be written) could be combined with the degree called Systematic Geography. In these cases, students wrote two dissertations, but it was also possible to study a Single Degree (in that case, a student would produce one dissertation).

means of sketches and photos, as I argue in Chapter 8.

Observation is not exclusively a method of physical geographers since it is also used by many human geographers. Analysing the observations made in human geography dissertations display a big shift from observations of 'social landscapes' similar to the visual readings of physical landscapes, to a very different form of data collection by means of 'participant observation', not taking a 'observing outsider' perspective. This is research with ethnography – immersed inquiry in the social landscapes under research – as its main method, mainly used in social and cultural geography projects. I discuss here two different examples of this kind of data collection: one is a dissertation titled *The Faslane Peace Camp: Mobility and permanence in sites of resistance* (Wilbur, 2002), the other *Shenavall Bothy* (Henderson, 2010), already discussed briefly in Chapter 4. Andrew Wilbur considered participant observation as 'the foundational basis' for his approach to data collection, based on the following principle:

"... that the best way to understand the Peace Camp and its inhabitants involved spending time at the site, living as the residents do and engaging in the same expressions of activism as local participants." (Wilbur, 2002: 14)

As such, Wilbur's approach clearly entailed more than observing the inhabitants, and instead saw himself actively engaging with the Camp and its inhabitants, trying to 'live through' their experiences. This method is not without difficulties, and Wilbur described how people at the Peace Camp did not trust him from the start:

"I was immediately welcomed and introduced to the residents, though because as I was introduced as a researcher on my first visit I sensed a small degree of mistrust. I tried to eradicate this on my first overnight stay by expressing a commonality of purpose and participating in a small action at the base." (Wilbur, 2002: 16)

This form of 'observation' can be seen as a mixture of observing, asking and 'living' as ways to collect data. This is also the case for Stuart Henderson's research on bothies, or more specifically one bothy. Henderson emphasises that attempting to immerse himself in the surroundings and events that are being researched led to a subjective narrative, but one that is revealing in many ways. He grounds his research in phenomenological arguments and non-representational theory literature, and also adopts a corresponding writing style¹¹⁹, about which I also say more later. Observation, in this particular dissertation, is

¹¹⁹ For instance: "Buildings are straight forward: aren't they? Surely no reflection beyond the aesthetic or technical is needed and architecture covers those bases? ... We may give fleeting

undertaken through *all* the senses. Henderson aims are to tell 'a number of stories':

"To write this dissertation a number of stories will be told: of Shenavall bothy – its materiality and reverberations throughout the landscape; of individual human and animal residents and visitors that surround the place both recent and distant; of a literal journey, my personal narrative of the 'lived-in' experience of being in this landscape for a time. ... Hopefully what will emerge is something that although very local and idiosyncratic will still be universally relevant and transferable to a host of different places – not just rural but urban or suburban." (Henderson, 2010: 3)



Figure 59 Photo of a stag near the bothy (Henderson, 2010)

The examples discussed here demonstrate that observational methods for data collection are still very versatile: Wilbur and Henderson's observations go hand-in-hand with immersion, combining an outward as well as inward perspective. Such reflexive research means that the researcher is constantly aware of herself or himself and is questioning not only the specific focus of inquiry, but also how this affects oneself, and *vice versa*. Such reflexive practices are first mentioned in dissertations from the cohort of 1998 and become more common from 2006 onwards, itself a particularly clear indication of a changing discipline.

Measuring

In the 1970 dissertation A geographical account of the Parishes of Coldingham, Eyemouth,

thought to the previous occupants, especially in our homes where the markings of previous lives are most obvious: a child's height marked against a doorframe, an adult now, perhaps with children of their own" (Henderson, 2010: 22).

Ayton and Chirnside, in the County of Berwick, J. Graham describes the role of the regional geographer:

"Towards this end [helping the planner in determining the best future of the land in relation to the aims and values of the society concerned] the regional geographer may play his [*sic*] part in that, within his defined objectives, he assumes the role of field scientist who is concerned in principle to identify, measure, classify and describe the physical environment and the related socio-economic structures." (Graham, 1970: 3)

Seeing the role of the regional geographer primarily at the service of the planner is already an interesting perspective on the discipline, and not one that would likely have bothered Graham's counterparts doing regional studies from the 1950s into the 1960s. However, it is also interesting that Graham mentions a few verbs here: the physical environment and socio-economic structures should be *identified*, *measured*, *classified*, and *described*. Some of these verbs mentioned are connected to data analysis (classifying, for instance), and others to data collection, such as measuring; and, indeed, measuring is central in many physical geography projects. Measuring is, like observing, a method found deployed by all cohorts. I discuss two examples here, from the fields of coastal and fluvial geography. As discussed in Chapter 5 of this thesis, physical geography was in a quite worrying state at the University of Glasgow during the 1980s. Both these examples are thus from the period of a 'resurgence' of physical geography in the department, and demonstrate, besides the role of measuring in geography, aspects of how physical geography more broadly 'professionalised' during the 1990s.

The first example is *An investigation into the relationship between beach morphology and beach sediment characteristics, with reference to the lochshore site of Cashel, Loch Lomond, Scotland* (Booth, 1994). Rachel Booth combined taking sediment samples by using quadrats with measuring different variables, such as beach gradient, wave height, wind direction and wind speed. Booth pays a lot of attention in her write-up to describing the process of data collection and supports this by including several photographs of this process. She added a photo of her 'research assistant' (her boyfriend) demonstrating the use of the two-metre ranging pole used to measure wave heights (see Figure 60). This, again, reveals the importance of students' social networks in doing their research: for some projects, it was even a necessity to get support from someone else, in carrying material or for safety measures. Booth thanks her boyfriend in the acknowledgements, giving an embodied sense of the methods being used:

"Mr Andrew Cowie must also been given special thanks for braving the cold water

of Loch Lomond whilst collecting my offshore sediments and wave height readings." (Booth, 1994: 45)

Two other photographs (see Figure 61) reveal the methods concerning the measurement of the beach gradient using an angle meter and the use of a quadrat to sample sediment. Combining the measurements with the sediment collection meant that after the fieldwork, Booth had to process the data and analyse the sediments, using (unnamed) software programmes provided by her supervisor.



Figure 60 Fieldwork photo: the student's 'research assistant'/boyfriend (Booth, 1998)

Figure 61 Fieldwork photos: measuring beach gradient and sampling sediment (Booth, 1998)

The second example is the dissertation *The effect of tidal variations on sediment concentrations and fluxes within an intertidal mudflat creek, Chichester Harbour, W. Sussex* (Keith, 1998). In her dissertation, Gillian Keith researched tidal variations within a salt marsh channel, with data collection taking place over five separate days within "a full fortnightly tidal cycle" (Keith, 1998: 9). Based on (mainly) water samples, Keith took multiple measurements: tidal current velocities, accretionary measurements, weather measurements and suspended sediment measurements, combined with tidal data. Her



Figure 62 Fieldwork photographs: bridge built with help of staff (Keith 1998)

dissertation is highly revealing in the practicalities¹²⁰ of taking accurate measurements:

"Initially it was thought that it would be possible to stand on the bridge to take measurements and use crates to stand on when the water rose above the bridge this however proved difficult and impractical. Therefore it seemed best to use a small rubber tender anchored on the bridge to take measurements from. All equipment could be stored on the boat and measurements could be recorded

¹²⁰ Such a project would nowadays require a lot of attention in terms of 'risk assessment' and 'mitigation strategies' prior to going to the field – it might well not get approved.

easily from this base." (Keith, 1998: 8)

To get these measurements right, there was lots of preparation work and consideration needed to decide on the best instruments and materials:

"... a device was required that could take samples from different depths at the same time and could be used from the boat. ... Furthermore the system had to be cheap due to constraints in costs. ... With these considerations in mind I used bamboo sticks with a 1cm diameter and marked on them 0.5m 1m and 1.5 then attached three 500 ml bottles using bungee ropes, this quantity is suggested in literature as adequate for collecting suspended sediment samples (McCave, 1979)."

Keith based the choices in data collection on methods found in academic literature, but also reflected on the support and help of her supervisor (Trevor Hoey), as well as help with the equipment by supporting staff (Pete Chung). Although 'measuring' might sound like a straightforward practice of collecting data, these examples demonstrate that to collect useful and correct data, there is a lot of intellectual as well as practical labour involved. A department possessing staff with enough expertise, time and means made it possible for undergraduate students to experience, though small-scale, all stages of research and working with their own collected data, instead of working with, for instance, secondary sources (such as published tidal data).

Counting

The four verbs discussed in this chapter are not mutually exclusive and often complement one another: for instance, many dissertations combine measuring activities with counting activities. However, there are also projects that solely focus on counting. One example is the 1962 dissertation titled *A geographical study of the Glasgow Underground Railway* (Parker, 1962). In this, M. Parker¹²¹ explores the 'traffic problem' of Glasgow, attempting to discover the achievements and limitations of 'the railway' – meaning Glasgow's subway. Parker does address the difficulties with his or her research methods in detail:

"At first, attempts were made to travel in the trains and count the number of passengers present in them in-between stations, and to estimate the numbers getting on and off at each stop. Alone, this prove an impossible task, even if only one coach was counted (the front coach assumed to carry an equal number of passengers as the back one)." (Parker, 1962: 9)

Parker then continues with another method of data collection, described as an 'observation-procedure', but echoes a straightforward counting exercise, namely collecting

¹²¹ There are a few dissertations from the 1960s and 1970s in the archival collection that do not mention the student's full first name.

subway tickets and counting these:

"The observation-procedure was as follows. Each morning would be spent entirely at one particular station. At intervals during the period 7.15-9.15 a collection of the tickets handed in by arrivals at that station would be made, and their place of issue (I.e. the passengers' departure-station) would be noted. It proved impossible in practice to view and analyse all incoming tickets, so sample-collections were made: each sample consisted of the tickets from the train-door nearest the station exitstairway for a period of three trains each way (which usually took about ten minutes to pass). This was assumed to represent 1/3 of all arrivals (the reminder leaving the trains by the centre-doorways; usually their tickets are collected by a man who travels with the train, and not by the platform-staff. A typical page from the observer's notebook appears overleaf." (Parker, 1962: 9)

A scan of Parker's observer's notebook referred to in this citation is displayed in Figure 63 below. This method of data collection was chosen by the student because it made comparisons of the data from different subway stations feasible. The data was then assembled and represented in multiple graphs (see one of these graphs in Figure 64), displaying the collected quantitative data in a legible figure, including the data on starting points and exits of subway journeys at a specific time. This counted data was subsequently analysed, leading to the conclusion "that there are two distinct parts to morning rush-hour, what might be termed the 'Worker's Rush' and the 'Clerk's Rush'"

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St Enoch	1	1	1			
Bridge St	11111	1111	111	1111	11111	1
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opl'd Rd 1	111	111.11.1	1111	111111	11	

Figure 63 Observer's notebook: counting subway passengers (Parker, 1962)

(Parker, 1962: 12), based upon the respective busyness of the subway to either city centre stations (the 'clerks') or stations near the shipyards (the workers) at specific times. Parker did not include any observations of the people he counted, so no remarks on, for instance, the gender composition of the subway users. This dissertation is a classic example of 'low-level' spatial science: quantifying simple space-time patterns of movement, without any sustained attention to the social content of what is being counted.



Figure 64 Data visualisation of counting subway passengers (Parker, 1962)

Such very clear examples of counting as the main method of research are found among many different cohorts but are most often found in economic and transport geography dissertations from the 1960s, 1970s and early-1980s, counting numbers of shopping visitors or cars and other road users, and to a smaller degree in biogeographical projects, maybe counting birds. There is, however, also another 'form' of counting being done by a number of dissertation students, distinctive from the ones just noted which might be termed 'observational counting', and here I mean the counting of responses to closed questions as part of a large-scale questionnaire. Such questionnaires are not uniquely connected to a certain era, and are, without a doubt, the most used methodological 'instrument' for the Glasgow student-geographers over the whole time period of my study, either as primary research method or as a secondary, supportive, method. Collecting data from many respondents at one time might be seen as a relatively 'easy', low-intensive method now, but for the earlier cohorts it was often connected to long days of ringing doorbell after doorbell. Colin Thompson experienced this intensity, in his fieldwork for his dissertation Analysis of the shopping facilities of Grangemouth (1966). Thompson categorised the shopping facilities by type of shop, being a national, regional or local 'type of establishment', and collected data on numbers of shops and floor space of shops. After this categorisation, he designed a questionnaire to survey Grangemouth's inhabitants' shopping habits. His methods were ringing 'random' doorbells, followed by the ensuing approach when the person refused:

"In the case of such an occurrence as refusal to answer, or after three visits to one house still receiving no reply, the procedure of going to the house next-door to the chosen one, was adopted." (Thompson, 1966: 11)

In the end, he collected answers from 1 in 30 households of Grangemouth, giving a total of 212, which seems like quite an impressive number. Thomson himself was not impressed though:

"The results of such a questionnaire are ... extremely interesting, and are valuable for explaining some of the shopping habits of the Burgh's inhabitants. However, the feasibility of stating that such a survey is representative of the town as a whole is questionable. In this case, only 1 in 30 of the town's inhabitants were interviewed. However, it is believed that the general unanimity of answers to most questions may make this survey, if not actually representative, at least reflective to a certain extent, of some of the shopping habits of the town as a whole." (Thompson, 1966: 16)

Such reflections are exemplary of prevailing ideas about what a questionnaire survey should 'do': ideally, the sampled cohort should be demonstrably representative of the target audience. Proving statistical representativeness is hard, especially for students using 'availability' surveys, rather than statistically controlled surveys. Many students, of all decades, formulate such limitations of their survey methods in their dissertations.

Figure 65 to Figure 67 display (pages of) three different questionnaires from different decades. Many of the questions in the questionnaire are closed, and aim at basic demographic profile data of participants (e.g. age and gender): such questions can be answered by ticking a specific box. Other questions require an answer on a Likert scale, as seen in question 3 from the questionnaire in Figure 67, here to indicate one's level of concern about flooding. There are also many questions that require a numerical answer, about years of residence or years of working experience, or about number of visits to specific cities and sites. All of these forms of questions provide data that are easily counted and visualised graphically in some way. All these examples hence form a bridge between the data collection 'verbs' of 'asking' and 'counting': having data easy to count and quantify

is found in dissertations from all cohorts, although, of course, many questionnaires also include open questions which can be used to collect examples and nuances, colouring and complementing the quantitative data. Such open questions, soliciting more 'open-ended' qualitative responses, were rarer for the earlier cohorts using questionnaires in a 'social survey' guise – where lots of respondents and quantitative data is the goal – but became more common from the mid- to late-1990s, when humanistic geographies addressed the value of research of perceptions, ideas, and feelings, other than people as a source for 'factual' data. With such shifts in the focus of questionnaires, concerns about quantification came to matter less.

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			other	(please a	specify)	
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Figure 65 Questionnaire about demographics, housing and employment (Scullion, 1974)

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						Male Hale
	b. 1 Which sex are you?					Married Single
	c.) Which is your marital status?					Yes B
						No L
	d.) Have you any children?					
	If yes, how old are they?					-
-	e.) What is your occupation?					Yes
2.) Education	nal details a. J Have you left school?					
	If yes, at what age did you leave?				1	O' Grades Yes
	b.) Did you gain any qualifications while at	school?			3	H' Grades Yes
						Others C
						Yes F
	c.) Have you gained any qualifications since	leaving school?				No C
	If yes, what are they?					
.) Home details	a sufficient de una laura?					
. / Howe details	a,) Where do you live? b,) How long have you lived at this present ad	Idrace?				
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Figure 66 Questionnaire about social and environmental concerns (McHenry, 1990)

Appendix C1
Questionnaire (1) I am a 4 th year Geography student at the University of Glasgow and as a resident of Inverness I have decided to carry out a study of the flood risk perception in relation to the River Ness. Although a relatively short river, the River Ness drains one of the largest catchment areas in the UK and has a long history of flooding. The objective of this questionnaire is to determine how the risk of flooding on the River Ness is perceived by residents of Inverness.
Questions
1. Address (Just street name and area)
2. How long have you lived in the area?
3. How concerned are you about flooding in Inverness?
1 Not concerned
Very concerned 5 4 5 2
4. Do you consider your property to be at risk from flooding?
Yes No Don't know
5. Do you know how to find out if you are at risk from flooding?
6. Has your property ever been issued with a flood warning?
Yes No
 Did you know that the Inverness Railway Bridge collapsed in February 1989 as a result of
flooding?
Yes No
Have you ever here all a me
Have you ever been affected by flooding of the River Ness?
Yes No <u>If yes - go to Q9; If no - go to Q13</u>

Figure 67 Questionnaire about flood risk and flood risk perception (Clark, 2006)

Asking

Questionnaires are of course pre-eminent instruments to *ask* people things, whether it is about their lives and living conditions or about their ideas and perceptions. Asking questions has always been central to students while doing fieldwork, and not all of these questions are asked in a formal situation but rather when talking to strangers when students are on unknown 'territory', seeking help with historical, contextual and local knowledge of the specific place. Many of the regional geography projects seemed to rely heavily on these types of not-scheduled meetings with a variety of people from local communities, although, as already noted, methodologies are rarely explicitly discussed in any of these projects. Acknowledgements pages nonetheless reveal this reliance on existing community knowledge and also the anticipation of students that this kind of 'asking' is expected of them from their supervisors. Before turning to the 'classic' method of asking questions, interviews, it is revealing to look at the *other*-than-quantifiable questions briefly



Figure 68 Childrens' mental maps of their own neighbourhood (Thompson, 1998)



Figure 69 Mental maps of Newcastle's nightlife (Milligan, 2002)

discussed in the section about counting. Towards the end of the twentieth century, more and more students not only included more open questions to questionnaires, but also included 'mental mapping' exercises in their surveys: asking participants to draw maps of their own surroundings, whether these were maps drawn by children of their own neighbourhood (Thomson, 1998¹²², see Figure 68), or of nightlife consumers in Newcastle (Milligan, 2002, see Figure 69). Both students asked participants to draw maps and use

¹²² This dissertation was the basis for a joint-authored paper (Thomson & Philo, 2004), which included these children's sketch-maps.

these materials to research the spatial awareness and spatial behaviour of the participants. Thomson and Milligan both used a combination of these maps and focus groups to collect data. Milligan analysed the focus group by means of "simple word count on single words" (Milligan, 2002: 13) to identify key themes and key issues. Many other student-researchers use focus groups to collect lots of information or opinions at one time. This depends, however, on whether the participants chosen actually have the experience one is looking for:

"Unfortunately this did not yield the rich data I had hoped for as the volunteers did not seem to possess knowledge of the subject of sex trafficking in Scotland that would align with my research." (Elliott, 2014: 18)

Focus groups and interviews are to some extent similar but do hold important differences. Because of the number of 'interviewees' present in a focus group, the student-research is able to witness the 'intersubjective' discussions taking place among the participants: views, meanings and experiences are shared, discussed and perhaps contested. This might reveal more than the classic 'individual' interview, but also brings forward specific ethical as well as organisational challenges. Focus groups are regularly used by students from the cohort of 2002 onwards, and generally seem to be aware of such challenges. Orla Flanagan, for instance, used focus groups for her dissertation *"Sense of Community, Place and Wellbeing": an examination of the culture, identity and geography of the travelling community in the North West of Ireland and the impact this has on their overall health status (2006):*

"the researcher was aware that although using a focus group facilitated a more comfortable and easier discussion participants maybe reluctant to discuss personal opinions in front of their peers." (Flanagan, 2006: 24)

In her dissertation, Flanagan explains the focus group format, consisting of a general introduction, the assurance of confidentiality and anonymity, explanation of the purpose of the session, an ice breaker activity, a groups discussion of the experience of health services and suggestions for health services improvement. She decided on follow-up interviews with specific participants of the focus groups to discuss matters further.

Asking can be an activity that is non-scheduled, fluid and flexible, able to move in different directions, or an activity that is very much scheduled and nailed down. Questionnaires are often discussed with supervisors beforehand, and the rigid form of questionnaires makes it easy to 'stick to the plan'. Focus groups ask for an active presence of the student-researcher, because group discussions can easily deviate to other topics and themes. It is up to the individual researcher to decide how much 'freedom' a participant, or a group of

participants, has in deciding the direction of the conversation. Interviews, then, exist in many different forms: some are almost similar to questionnaires, whereas others are open conversations. Most interviews tended to be face-to-face, although there are many examples of interviews by mail, by phone, and online (both by using interfaces such as Skype and by asking questions per e-mail or chat). The face-to-face interview, though, remained the 'standard' form of interviewing throughout all cohorts. Many considerations in interviewing people, are ethical considerations. I discuss these in a later section of this chapter.

Mixed methods approach

Although I discussed four 'verbs' of data collection separately, many students from different cohorts have taken versions of a 'mixed methods' or a multi-method approach. Since the turn of the century students often expressly use this notion of deliberately 'mixing methods', especially in human geography projects, but combining methods was not uncommon for earlier students as well. Carol Welch, who went to Norway in 1974 to undertake fieldwork for her regional dissertation, wrote:

"Information was accumulated using written sources of information, personal contact with local people, correspondence with relevant bodies and through personal observation" (Welch, 1974: n.p.).

Archival and other documentary research, talking to people, and observing the physical as well as the social landscape often complement one other. Physical geography projects less explicitly mention this 'mixed methods' approach, but still demonstrate combinations of measuring and modelling, or mapping and observing, or any other combination of two or more ways of collecting data. Many geographers-in-the-making exhibit a variety of skills in the process of data collection, but bringing together these often very different data sets, requires skills in data *analysis*. Collecting data in the field often seems like a more adventurous activity than that of 'going home' and doing something with what has been collected, but it is in this transformation that the raw data might actually become knowledge, either 'new knowledge' or a (re)confirmation of existing knowledge.

Methods of data analysis

After collecting data in the 'field', whether this was from a landscape, a city, an archive, or any other form of fieldwork location, students returned to Glasgow, to the department or their own homes¹²³, and continued their project with the analysis of the collected data. The

¹²³ Although, increasingly in recent years, some students did online research and never 'left' their homes to do fieldwork: in principle, though, they still return from a 'virtual field' to the department.

details of this process are of course different for every student and every project, but generally consisted of some or all of the following steps: structuring, categorising data, calculating, modelling data, connecting the data to the literature, and visualising the data in conjunction with writing up the dissertation as a whole. Here, I address these activities concerned with data analysis: first, I explore two of the most dominant methods of data analysis, statistical analysis and coding; and then I address the transition from *mapping* and *describing* landscapes to the use of models. Data visualisation and the writing-up of the dissertation are discussed separately in Chapter 8.

Structuring, categorising and calculating data

The practice of structuring and categorising the collected data is dependent on the kind of data collected and on the research objectives. Research projects that are quantitative in nature ask for different forms of analysis than qualitative projects. However, in almost all projects – some of the regional geography dissertations that are mainly descriptive skip this step, but in most other projects, including regional geography dissertations that go beyond description and use their regional study to offer some conclusions about 'regional unity' there is a wealth of collected data that should be structured and categorised in a way. Some dissertations even have such a methodological categorisation exercise as their main focus; for instance, Ian Grieve's dissertation A capability classification scheme for marginal land (1970). In this, he uses the existing 'Land Use Capability Classification' (Bibby & Mackney, 1969), used by the Soil Survey of England and Wales, to test in the field whether it works to "gain an estimation of the potential value of the land that is being classified" (Grieve, 1970: 13). Such a project is an exception in the dissertation archive: other students had to come up with their own structuring methods – their own schemes for ordering, classifying and naming – and also, of course, their own justifications for choices made in the process.

Statistical analysis

Many students using statistical analysis as their main form of analysis mostly 'let the data speak for themselves' in their arguments, relying, usually with little comment or justification, on basic forms of tabulating, graphing and simple descriptive statistics (measures of central tendency and dispersion) in order to present, summarise and sometimes compare datasets. By the 1970s, though, there were students who explained that their own assumptions and ideas were influencing the decisions being made in determining and relating their variables. Jeff Collison wrote the dissertation *A geographical study of organised religion in an urban area* (1974), and in this, he explained that his

selection of variables was guided 'by intuitive reasoning'. He arrived at a total of seven variables, for instance, the actual membership per congregation and the percentage of people over 65 in the neighbourhood of the church. These variables formed the basis for statistical analysis, which was executed digitally: "the computational work was to be performed by a computer" (Collison, 1974: n.p.). Though a funny quotation on first sight, this is one of the first dissertations that mention 'the computer' as a research instrument. Collison was supervised by Ronan Paddison, and it seems that many of the 'early adapters' of the computer were supervised by him. He, along with supporting staff members, is thanked in a number of acknowledgements pages for his help with 'computing' or 'the computer programmes'. In these early years, the use of computers was mostly limited to running standard statistical analysis programmes, whereas in more recent years they have obviously become the standard device for writing up the dissertation, as an access to data because of the internet and as a 'portal' to fieldwork locations when researching the virtual world, but also thanks to software packages for word processing, graphics and, of course, quantitative analysis.

Another example of a student using computers for their data analysis was Alan Dowie, for his 1978 dissertation entitled *Cognitive mapping and the residential preferences of Drumchapel residents*. Early in his dissertation, he states his hypothesis:

"... it is hypothesized that adult preferences will vary considerably from youth preferences, due to the differences in their level of psychological development and experience of the three spatial environments used as stimuli for expressing these preferences." (Dowie, 1978: n.p.)

Based on the answers given by residents¹²⁴ when asked where in Drumchapel they would prefer to live, and by ranking their three most preferred and least preferred areas in Glasgow and Britain. In his dissertation, Dowie subsequently only discusses Drumchapel in the context of its desirability to other areas in Glasgow, so it is not evident why he also asked people about their most and least preferred areas in Britain as a whole. Dowie does, however, distinguish three *potential* scales to research the desirability of Drumchapel, and what the potential 'input' for any preferences on such a scale would be (e.g. direct

¹²⁴ He mentions a limitation to his sampling: "It must be stressed that people who were successfully interviewed are not therefore fully representative of the population at large, since there is a bias in the sampling towards those individuals most likely to be home at the times of the survey. This is most apparent in the over-representation of women" (Dowie, 1978: n.p.). Such critical reflection, particularly on the more 'social' dimensions of a sampling frame, has likely been encouraged by staff.

experiences, or images):

"At the local scale, Drumchapel can be perceived directly, although this may not always be the case with younger age groups, e.g. 12/13 year olds. At the regional scale, the city perhaps represents the largest area which can be perceived by way of direct experience by adults. ... At the national scale, where images, attitudes and mental maps, rather than direct perception or experience, play a more important role in forming any evaluation of distance places." (Dowie, 1978: n.p.)

Dowie developed a 'Desirability Index' for each area in Drumchapel. By using a crosstabulation programme he revealed popularity levels of these areas, the source for the visualisation displayed in Figure 70¹²⁵. Dowie's analysis was carried out by "a post-survey coding of questionnaire responses for a computer crosstabulation programme" (1978: n.p.): seemingly a straightforward method to organise and analyse the quantitative data, whereas the data was *visualised* manually (see Figure 70).



Figure 70 Mapping of questionnaire results: stated preferences (Dowie, 1978)

Especially from the late-1980s the use of more advanced statistical analysis became more common for undergraduate students. They also provide more details about the formulae used, often in appendices, and many students during the 1990s and early-2000s reflect on the use of Minitab. Mann-Whitney, Chi-square and Correlation or Regression tests are the

¹²⁵ The arrows represent the number of adults (black) and youths (red) in any neighbourhood expressing a preference to live in another neighbourhood (to which the arrow points).

three most frequently mentioned statistical tests in the many dissertations that used statistical analysis between 1986 and 1994. The use of statistical techniques becomes so standard in human geography, a consequence of – and some might say 'hangover' from – the laggard diffusion of spatial science into university geography teaching from the later-1950s, that its 'standardness' is used as a justification by students:

"In recent years the application of statistical techniques has become commonplace in helping to solve problems of a geographical nature. As this is a geographical problem being studied in this paper, statistics shall be used in accordance with this trend." (Hastings, 1990: 27)

The 'obsession' with statistical analysis in these cohorts is a short but intense one. Already in the cohort of 1994 the engagement with statistical analysis has changed: it still plays a significant role, but not in almost *every* dissertation, and, if used, is more strongly embedded in existing literature. With the 'professionalisation' of physical geography in the department mostly caused by staff changes around 1994, the data analysis in physical geography dissertations projects changed as well. The statistical tests used became more advanced than the four mentioned above, often being combined with other forms of indepth analysis, for instance particle shape analysis in the lab or deployment of modelling software such as Rocksoft.

Coding

In the same year there is also an interesting development perceptible in human geography dissertations. From 1994, the distinction between primary and secondary sources, already existent for earlier students, becomes explicitly addressed. This distinction saw students connecting their own research more and more to other existing academic literature, couched as 'secondary' sources, and using this literature as a starting point, or as inspiration or example, for their own projects and 'primary' data collection and processing. It does not sound like an important shift, but by distinguishing primary data from existing source material, students began more actively to strive for 'triangulation', between data and literature, at the same time as becoming more aware of the value of connecting different forms of data to one other. The most significant shift in data analysis in human geography dissertations arguably occurred in the tangled realm of 'coding' practices, where 'coding' is a broad-brush term covering different ways of organising – and deriving themes and meanings – from qualitative research materials. Especially from 2002 onwards, students have displayed a very structured way of analysing large amounts of qualitative data, as collected in questionnaires, interviews and focus groups or by participant

observation and (auto)ethnographic research. Codes are decided on after 'immersion' in the data and are followed by counting and 'mapping' (or inter-relating) codes, as well as feeding into structuring relevant quotes and observations contained in a dissertation writeup. Coding, thus, is not itself solely a qualitative way of analysing data, but also one which can lend itself to some basic semi-quantitative analysis: for instance, as a basis for identifying, if not necessarily giving a precise value to, the prevalence of issues, themes or meanings in an overall body of qualitative research materials.

One example is found in Gavin Fleming's dissertation *Fear of crime: a case study in Glasgow* (2010). Combining the analysis of crime statistics with a questionnaire survey, Fleming explores several stereotypes that exist about crime levels in these areas. He describes his questionnaire survey as 'short interviews, in which detailed answers were provided', as opposite to 'quick tick' surveys oversimplifying the analysis of fear of crime.

Themes/Codes Cou		Related quotes
Media	21	"you always see Maryhill in the media for the wrong reasons" "Newspapers are constantly reporting stabbings in Maryhill"
Outsider	9	"I wouldn't feel safe because I'm not from there" "most people feel comfortable when they're in a familiar place"
Youths	6	"the youths are a big problem in Maryhill" "there are so many gangs of youths there sometimes violent" "it is intimidating to see large numbers of youths roaming the streets drinking and causing bother"
Gender	7	"as a woman I do find that I sometimes feel intimidated" "I suppose I am always worried about rape and crimes like that yeah I would think all women are"
Personal experience	3	"I have felt intimidated when visiting Maryhill" "I have a friend who was attacked there"
Physical Invironment	4	"you know it's more dangerous just from looking around" " I think the biggest difference between the Maryhill and here (Hillhead) is the look, like graffiti and there's much more rubbis I think"

Figure 71 Codes and examples (Fleming, 2010)

Fleming structures his coding per question: this allows his short interviews/questionnairestyle of collected data and objectives to add in some quantitative analysis of open-ended questions. Figure 71 displays the codes, code count and related quotes for one of the survey questions. The structuring of the codes demonstrates that, although there are a variety of answers given, the media is mentioned most often. Two other examples of coding are displayed in the figure below. Figure 72 demonstrates the *process* of coding:

immersing oneself in the material, making notes, circling specific words and using colours and letters forming a provisional coding scheme. Figures and appendices such as these two are included in all dissertations from 2006 that use interviews as one of their research methods, probably in reflection of explicit staff advice about how best students should show something of 'their working' in their written-up dissertations. The use of coding software such as NVivo or Atlas.ti by undergraduate students seems to be negligible: this might have been different if my study included some more recent cohorts than the "Class of 2014".

Besides coding there are other instruments and methods of qualitative data analysis such as narrative analysis or discourse analysis, but these are in the minority. It is important to note that these essentially depend upon some form of 'coding' exercise: key elements (being, for instance, issues, opinions, feelings, ideas) are identified and subsequently categorised and discussed. Coding is thus not a data analysis method in itself, but similar to the data collection verbs discussed above (observing, counting, measuring, asking): an activity happening in a variety of methodological contexts. It should also be acknowledged that before students described their method of data analysis as coding, many students were already dealing with large qualitative datasets: they were reading, re-reading and immersing themselves in the data, and also identified key themes and cross-connections in these data. The same goes for the statistical analysis that I described earlier. Many of the earlier dissertations used basic quantitative and statistical analysis in their research, without actively describing the process of how they reached their conclusions. This does not imply that methods of data analysis were not as interesting or thought through, but it does indicate that for undergraduate dissertations, the focus might have been more on the final product, the outcome, and less on the presentation of what students actually did and learned along the way. Being self-reflexive, explaining what decisions had been made, and treating the dissertation as a 'learning experience' was expected of students from the early-2000s as discussed in Chapter 4.

<u>Appendix One</u>
Extract of interview transcript showing coding process.
Image:
KAC Vhen I was looking at Clyde Gateways work a lot of there developments

Figure 72 Example of coding process (Adamson, 2014)
Mapping landscapes versus modelling landscapes

The longitudinal perspective taken in my research offers the opportunity to study shifts over time, but also demonstrate some striking *consistencies*. In physical geography, fieldwork methods have remained relatively similar over time, with a focus on active field encounter and measurement, but innovation in research instruments has arguably made things easier for later students. In terms of data analysis, though, the dissertations in the archive reveal a stronger emphasis on models – either newly developed ones or existing models from the literature – as the key structure of their data analysis. One example is Doug Reid's dissertation *Can published models of coastal beach response to changing wave events be transferred successfully to U.K. inland lake locations?* (1998). In it, Reid describes the purpose of his project as follows:

"Inland lake beaches operate on what could be termed a smaller scale than coastal beaches. Inland coasts are in an environment of less wave fetch, less available sediment, and in all but the very largest lakes no tidal movement. The purpose of this field study is to determine whether or not published models of coastal beach response to changing wave events and wave induced currents can be successfully transferred to inland lake locations." (Reid, 1998: 4)

His aim was thus to find out if models that already exist for certain environments can also be *translated* to other geographical scales and contexts. He described this translation of models to other scales as something distinctive to geography:

"The range of scales that the geomorphologist works in is a distinctive part of our discipline, and have been considered a problem in regards to progress in theory development within the subject. But these wildly varying scales can be considered a skeleton of our discipline, and with understanding of the skeleton may come understanding of the rules linking events and forms on different temporal and spatial scales." (Reid, 1998: 6)

This approach distinguishes such 1990s physical geography dissertations from their earlier counterparts: in earlier dissertations students focused on one specific case study (and in the 1980s physical geography at Glasgow was seemingly in a state of crisis (as discussed in Chapter 5), with mainly biogeographical projects conducted and barely any geomorphological ones).

One example from 1978 perfectly demonstrates the difference with the 1990s dissertations. In The *glacial geomorphology of the Corrour area* (1978), Ian Young explains why he has chosen this particular focus of inquiry: very little has been written about the Corrour area. The starting point is hence comparable to the tradition of regional geography, merely identifying places as yet little-researched, and not that of 'systematic'

geography where one case study might be expected to tell us more about certain kinds of landscapes in general. Young's methods for data collection and data analysis were thorough: a long period of research in the field studying and measuring stone orientations and local relief, followed by the analysis of (existing) aerial photographs. All the academic references and secondary source material referred to aim directly at this area, not to any methodological sources. The result of his research is then a map of suggested ice movement in the area (see Figure 73): a very extensive research project. The physical geography projects of the 1990s were not entirely different in ambition and execution, although they do often perhaps express a deeper appreciation of more general 'laws'. For many of the projects of 1994 and later, the improvement of research facilities within the universities, such as laboratory facilities for chemical analysis, stream tables and the flume (see Figure 25), combined with the growing expertise and support of academic staff, meant that projects were expected to transcend their own case study, adding not only 'regionalspecific' knowledge to the discipline, but also more theoretical, conceptual or methodological insights.



Figure 73 Map of suggested ice movement (Young, 1978)

Methods and research design frameworks

Over time, the design of the methods received more explicit attention from students, which is in accordance with the general increase of attention that methodologies received. So, besides describing *what* they were doing, students also discussed *why* they planned to



Figure 74 Interview design chart (Read 2010)

do it that way. In many physical geography dissertations this was already happening since the 1990s, with very specific descriptions of how certain research set-ups were designed and why they were designed that way. The description of methods such as questionnaires and interviews, were often limited to answering who was interviewed, and about what that person was interviewed. Figure 75 exemplifies these types of timelines that are a combination of a research schedule designed before starting fieldwork and a logbook that looks back on the research done. It was not until quite recently, around 2010 onwards, that many students begin not only to describe who they talk to and why, but also sometimes make an explicit connection back to the overall research aims and objectives, demonstrating how each interview question is included to research a particular aim. For her dissertation titled Exploring the differential gendered migration experience in Dar es Salaam (2010), Alice Read developed an 'interview design chart' before travelling to Tanzania to do her fieldwork (see Figure 74). Read formulated three research aims and developed a number of questions per research aim to ask in the interviews: for instance, the research aim about the differences in gender roles was translated into questions about occupation and about one's one role in the household. The explicit translation from research aims and objectives into interview questions, indicates how the research is not just 'happening' to the student while doing fieldwork, but a planned process, thoroughly

thought through. There are dissertations that are very different from Read's, which emphasise the research process as more journey-like, open for surprises and detours. However, from the 1990s onwards, and even stronger during the 2000s and early-2010s, these decisions on planning and design are elaborately discussed. From the most recent cohorts studied (2006, 2010 and 2014) the most referred to pieces of methodological literature cited in the dissertations are *Practising Human Geography* (Cloke *et al.*, 2004), and *Methods in Human Geography* (Flowerdew and Martin, 2005). The increase of reflections on methods of data collection and analysis suggests an increase of attention to this in the undergraduate curriculum in Glasgow as well. The consistency of references to specific methodological textbooks¹²⁶ indicate that this development happened 'top-down', so was shaped by suggestions and requirements of supervisors and other academic members of staff.

		-1	Problems and Outcomes
Date Feb March 19	Data Types of textile manufacturer in 98 the study area	Source Yellow Pages, Borders Collection personal visits	2 dyers and finishers 10 garment manufactures 44 knitwear factories 19 spinners and weavers 16 support services
			out of date, didn't list all of them
June	Interview 98 Appointments	telephone and fax potential	1000 textile job losses
		interviewees	14 refusals 1 interview anonymous 29.6.98
July August	interview Appointments	telephone and fax potential interviewees	further 250 job losses
199	8		8 refusals 3 interviews anonymous 5.8.98 anonymous 10.8.98 anonymous 19.8.98
Sept.	interview	5 interview transcripts	further 175 job losses
1990	appointments interpret and code transcripts		19 refusals 7 interviews Pringle 1.9.98 LochCarron 2.9.98 Johnstons 11.9.98 Murray Allan 15.9.98
			Anonymous 18.9.98 SBE 25.9.98 SBC 25.9.98
	code interviews	6 interview transcripts	interpreted interviews and results
Nov Dec. 1998		interviews, literature, media	Answer research problem

Figure 75 Data collection and analysis timetable (Bell, 1998)

¹²⁶ Textbooks themselves raise many questions about canonicity and disciplinary traditions. Sidaway and Hall (2017) provide a fascinating reflection on this.

Ethics and positionality

With students becoming more reflective in their research, and simultaneous changes in the rules and guidelines around the doing of research, thinking about research ethics in general, and the relationship between researcher and researched in particular, has changed considerably over time. The biggest shift in the treatment of ethics in the dissertations is perceptible in the dissertations from 2006. Since the mid-2000s, students have been required to gain approval from the departmental Ethics Committee (see Figure 76) before doing any forms of fieldwork which include activities such as speaking to, collaborating with or studying individual people or groups of people. Since 2010 the ethics formalities have become stricter, with students studying populations deemed 'vulnerable' having to get approval from the Ethics Committee of the College of Science and Engineering, instead of through the committee on departmental level (as is still the case for most dissertations, except for the ones involving 'vulnerable' research subjects). This potentially discouraged students from researching children or those with mental capacity issues, populations that had previously been quite extensively researched in the Glasgow dissertation projects. This particularly influenced the social geography dissertations written in the context of the option course 'Social Geographies of 'Outsiders'': whereas it was still possible to research children's geographies through adult respondents and documentary sources, it was more difficult to get approval for actually *talking to* or *observing* children:

"In order to undertake this research ethically, certain research methods that involved direct contact with children or vulnerable adults were omitted and discourse analysis was employed as an appropriate and valuable research tool." (Herd, 2014: 14)

This is an example of how the formalities concerning research ethics fundamentally influence the foci of inquiry of students' knowledge productions. Simultaneous to the shift in formal ethical requirements, research ethics became a standard element tackled in most human geography dissertations. In the dissertation *Horizons of the future: investigation into residents' attitudes concerning the visible existence and visible proximity of Beinn an Tuiirc windfarm* (2002), Nicky Lewis addresses research ethics as follows:

The awareness of ethical considerations in research is paramount ... An explanation of the background and format of the interview and subsequent questionnaire was given, to allow people to make an informed decision as to whether to take part or not. Anonymity and confidentiality were guaranteed, this ruled out follow up surveys, which were considered to be unnecessary to the principal aim." (Lewis, 2002: 30)

Lewis's comments here are just one example of aspects such as anonymity, consent and

confidentiality being discussed in many of the post-2000 dissertations that use interviews or observation as research methods. The urgency for a stronger emphasis on ethics goes hand-in-hand with more in-depth qualitative research in the booming subdisciplines of social and cultural geography, which in the 2000s relied more on personal input from *individuals* instead of input about groups and more 'factual' circumstances. Whereas some questions concerning research ethics were already addressed in dissertations from the 1990s, in the 2000s the formalities became standardised, and even in dissertations drawing upon interviews about themes that are not very 'personal', for instance on place promotion (see Figure 77), include copies of consent forms as well as receiving some comment in the dissertation itself.

Besides these forms of ethics that require consent from participants, signed forms and reflections on the research methods by the student-researcher, students also start to write differently about *their own* role as a researcher. Especially in ethnographic projects, as discussed earlier, students become more of an 'insider' than an 'objective' outsider. This asks for reflections on one's own position as researcher, as an issue of 'real' engaged ethics during the research rather than just the 'bureaucratic' ethics of securing formal approval to undertake the research. From all sampled dissertations, mentions of research diaries are first found in 1998, but become more common in 2002. In such diaries, which were maybe already kept by students in earlier years but became an integral part of the collected data from the early-2000s, students reflect on their own attitude, feelings and thoughts. The data in the field diaries became 'evidence' in the dissertation text. Gillian Crawford, researching racial harassment experienced by asylum seekers and refugees in Glasgow, writes in her research diary:

"Beginning to feel very frustrated as it looks like there are less and less possibilities of interviewees – numbers coming to the drop-in have declined and those that come sit with friends and it's too awkward to broach the subject. I ended up leaving early as there was nothing for me to do. Research diary 14/8/02" (Crawford, 2002: 27)

It becomes clear from this citation that the combination of approaching people and talking about such a sensitive subject is difficult for her. A few pages further she writes:

"I felt my quite [*sic*] nature was preventing me from speaking with people and had to learn to overcome my own insecurities." (Crawford, 2002: 30)

Crawford worries about how potential participants would think of her. Her choice to volunteer at the refugee centre while doing this research causes her to "maneuver [*sic*]

between being an insider and an outsider ... I was aware that I was entering an already established group and I was firmly on the periphery" (Crawford, 2002: 30). In the end, she managed to interview five people at the centre, even though her aim was to interview more.

Although Crawford researched a group that can be seen as vulnerable, she still struggled with her own role as an outsider and as a shy student, at which point broader ethical concerns – to do with researching this particular population – intersected with more practical matters of how she negotiated various different aspects of her own positionality (and indeed personality). There are many other examples in which these struggles have been prominent, maybe because of existing differences in power between student-researcher and participants. These differences are often based on age or on gender, as experienced by Gail Foote in her research for her dissertation *Becoming 'invisible': the hidden spaces of Glasgow's homeless* (2002):

"Although the power relations tended to be in my favour, the homeless did have some power in that some intimidated me, which resulted in me, as a young woman, feeling vulnerable and choosing not to interview them." (Foote, 2002: 10)

Other times, the power relations have more to do with the specific 'status' or authority of the interviewees, as Alasdair Bisset experienced in his dissertation on the experiences of national identity associated with Scottish army regiments. He writes about adjusting his own appearance in preparation of the interviews:

"The thoughts of 'power relations' became an important consideration for both interviews. I would be interviewing men who held or had held fairly senior positions in the Infantry, for example a Major can command upwards of one hundred men. With this in mind I decided that it would be a more conducive interview if I were clean shaven and dressed smartly. Fortunately, the atmosphere wasn't too daunting thanks in part to coming from a military background myself and the friendliness of both officers." (Bisset, 2010: 17-18)

As Bisset describes, his own background played a role in how he personally experienced the fieldwork and interviews. Lots of students research subjects that are close to their own interests or own background, and this involvement with the research may sometimes be a benefit, but at other times a drawback: from being an ardent Celtic football club supporter researching the impact of Celtic Park, the club's home ground, on its immediate neighbourhood, potentially leading the student to bring their own very strong opinions into questions for interviewees (Irvine, 2002), to being someone familiar with certain religious traditions under research, thus being able to ask important follow-up questions (Kakela,

2014). From the 2000s, students have increasingly acknowledged their own positionality, and have actively sought to *use* it in their research and position themselves as knowledgeable, informed 'research tools', unlike some of their predecessors in the 1970s and 1980s, who tried to be 'as objective as possible' on subjects about which they were actually really quite opinionated.



DEPARTMENT OF GEOGRAPHICAL AND EARTH SCIENCES

DEPARTMENTAL ETHICS COMMITTE

2006-07

The above Committee is satisfied that the application submitted for Ethics Approval by Dissertation Candidate:

Matric no.: 0305803

Title:

The cultural geography of Highland Dancing

meets the conditions laid down by the Department of Geographical and Earth Sciences in accordance with the guidelines of the University of Glasgow's Ethical Committee.

The field work phase must adhere to the terms described in this application.

This document should be retained and bound with the student's dissertation.



Ethics Officer

DEPARTMENT OF GEOGRAPHICAL AND EARTH SCIENCES Main Building, University of Glasgow, Glasgow G12 8QQ, Scotland, UK Head of Department: Professor T & Hoey Departmental Office: 0141 330 4782 / 5436; Fax: 0141 330 4894 / 4817; University Switchboard: 0141 339 8855

Figure 76 Ethics Committee Approval (Brogan, 2006)

Appendix 3 copy of letter shown before every interview	
Appendix of letter shown before	
Department of Geographical and Earth Sciences	
East Quadrangle	
University Avenue University of Glasgow	
Glasgow	
G12 8QQ UK	
Telephone: +44 (0) 141 330 4782	
Department of Geographical and Earth Sciences East Quadrangle University Avenue University of Glasgow Glasgow Glasgow G12 8QQ UK Telephone: +44 (0) 141 330 4782 Fax: +44 (0) 141 330 4894 Dear Sir/Madam	
Lam currently conducting a	
I am a Geography student from the University of Glasgow. I am currently of Robin Hood'. dissertation project on the role that Place Promotion plays on the 'legend of Robin Hood'.	
dissertation project on the role that Place Promotion plays on the region of the role in helping me to The information obtained in these interviews will be of great importance in helping me to	
The information obtained in these interviews will be or grow a	
conduct my research and would be greatly appreciated.	
Yours faithfully	
Alexander Berman	
I consent to participate in Alexander Berman's research on Place Promotion: the Geographies of Robin Hood DATE	
Please tick the boxes that suit you (if any).	
I would like to remain anonymous	
I would like my job title to remain anonymous	
I would like my response to be used but not quoted	
I am happy for my name, job title and response to be used	
In order to be the to be used	
In order to help with the research I give permission for the interview to be recorded with the use of a Dictaphone:	
If you have any further queries about the	
used, then please contact my discontact	
If you have any further queries about the nature of this project or how my responses will be used, then please contact my dissertation supervisor, Danny Mackinnon at <u>dmackinnon@ges.gla.ac.uk</u> or at the Department of Geographic and the second seco	
University of Glasgow	
<u>dmackinnon@ges.gla.ac.uk</u> or at the Department of Geographical & Earth Sciences	

Figure 77 Consent form (MacKinnon, 2010)

Conclusion

In this chapter, I discuss *how* dissertations were made: from the collection of data and the analysis of the data to the reflections on one's one role as a student-researcher. In many ways, my analysis in this chapter reflects back on the analysis of Chapter 4, in which I explored the 'where' of dissertation research, emphasising the spatial and social contexts as well as the practicalities of fieldwork. These spatial and social contexts, then, are clearly entangled with questions of how dissertations are made. The consideration of data collection methods revealed some overlapping practices in very different research projects: observing, counting, measuring, and asking were four of the 'activities' that were, in almost

any combination, used in the majority of the projects. There was, however, a variety in the use of different 'instruments' in data collection, and over time the description of why *these* methods and instruments were used increased. Shifts in data analysis methods are mainly influenced by improvements of the university's facilities, as well as by developments and increasing accessibility of data analysis software: however, use of qualitative data analysis software is barely traceable in the dissertation archive. In physical geography, fieldwork methods have remained relatively similar over time, though later dissertations reveal a stronger emphasis on modelling. Shifts in methods were sometimes connected to broader disciplinary changes (such as the emphasis on statistical analysis, and thus the need for methods of data collection permissive of such analyses), but at other times were 'smaller' changes connected to one or two subdisciplines. This account leads to an image of an overall Geography discipline that for some (earlier) cohorts was relatively unambiguous, with many students producing relatively similar knowledge productions, but for some (later) cohorts became very broadly stretched, almost evoking questions how *on earth* students could still be part of the same curriculum and department.

Certain methods, or combinations of methods, were strongly related to specific subdisciplinary traditions: for instance, participant observation and ethnography are relatively common in social and cultural geography. This does not mean social or cultural geography dissertations always used such methods of data collection, on the contrary: many of the earlier social geography dissertations are quantitative in nature, and rely on the analysis of demographic data and on questionnaire surveys. Analysing methods in a longitudinal study such as mine, is thus complicated, because the many cohorts of dissertations demonstrate shifts in methods over time as well as differences in methods between subdisciplines (in, for instance, one cohort). This analysis reveals what it actually means to be a geographer-in-the-making: what does one do, what are reliable sources and how do student-geographers 'deal with' such sources? Unpacking such questions helps to understand the often overlooked perspective of students on the discipline, and on disciplinary traditions and disciplinary knowledge in specific. In the next chapter, I continue my analysis of how dissertations are made, by focusing on the 'final bits of research': what happens when all the data is collected and analysed? How do student-geographers write, draw and compose their final material dissertations? How are these dissertations subsequently handed in, marked and archived?

CHAPTER EIGHT PRESENTATION AND REPRESENTATION: FINISHING THE UNDERGRADUATE DISSERTATION

"Due to this project being late and not wanting to lose out on additional grade points, this project is missing a contents page, page numbers were forgotten and line spacing varies from halfway in. Furthermore the interview transcripts had not been typed up as I relied on hand written copies that were not scanned on time. These rough copies are available on request at any time. Sorry for any inconvenience." (McKinnon, 2014: attached note)

Introduction

In the previous chapter, I discussed methods of data collection and data analysis, and an important follow-up theme is the presentation – I might say the *re*presentation – of such data in a comprehensible way. Graphs, tables, sketches, photos and maps, the latter fairly or unfairly seen as *the* feature of geography, are used to display data in all different cohorts. 'Forms' of visual representation therefore display a measure of consistency across the period, but, when taking a closer look at the dissertations, there are some striking differences between earlier and more recent cohorts in the execution of visual representations of data, partly caused by the turn from analogue to digital modes of production. This turn has not only proved to be about different ways of representing data, but has also required very different skills of student-geographers. Furthermore, these visual sources are inextricably connected to methodologies of research. Besides the analysis of the 'graphicacy' of many generations of undergraduate students, I address aspects of their 'literacy', such as students' writing styles and the structuring of the dissertations as a whole. This consideration leads to questions about what skills future geographers may, or should, have at the beginning of their professional or academic career.

Subsequently, I discuss the 'final bits' of the extended process of the undergraduate dissertation: submitting the dissertation, grading the dissertation and, finally, archiving the dissertation. Some of the additional documents found in the dissertation archives, for instance many markers' reports, reflect on the reception and valuation of the independent research projects by students, and offer a glimpse into the dissertation as an 'assessment tool'. As this thesis has shown, I hope it has become clear that the undergraduate dissertation is really so much more than *just* an assessment tool, although the marking of dissertations and the giving of feedback to students – and indeed the student reception of marks and feedback – is another crucial dimension of the dissertation process, and thus of becoming-a-geographer. Students' awareness of the research being considered and

marked in a formal way as part of their degree is perceptible throughout the dissertations themselves, and analysing this marking and feedback process will circle back to some key questions in my own research: whose voices are we reading when reading the undergraduate dissertations? what do certain enduring aspects of dissertations as pedagogic and assessment devices, as well as the changing foci of inquiry, methods and writing styles, actually tell us about the history of geography?

Graphicacy as the geographical skill

Browsing through some randomly selected geography undergraduate dissertations, the presence of maps in the majority of them is obvious. Maps might be the first association that many people have with geography, and such an assumption seems justified from the evidence in the dissertation cupboard. There are, however, many more examples of graphic material that are found in dissertations. To explore these visuals further, it is interesting to take a side-step to another source, the edited textbook *Geography: An Outline for the Intending Student* (Balchin, 1970), because in this book Balchin provides a chapter presenting a full analysis of the skills that the 'intending' geographer needs. In it, he distinguishes literacy, numeracy¹²⁷ and indeed 'graphicacy'. The latter is described as follows:

"Although literacy is the most fundamental method of intellectual communication, graphicacy is the most distinctively geographical form. Without spatial records such as maps, photographs and diagrams, geography would not be geography. Graphicacy is the educated skill that is developed from the visual-spatial ability of intelligence, as distinct from the verbal or numerical abilities." (Balchin, 1970: 28)

Being skilled in graphicacy supposedly distinguishes the geographer-in-the-making from students in other disciplines. On the next page Balchin explains how geographers' graphicacy relates to the specific skillsets of other academics:

"It [graphicacy] is no longer looked upon as an independent art – almost a curiosity – but is recognized as a fundamental support for the whole of geography, distinctive in kind but analogous in function to the fundamental supports of other

¹²⁷ The chapter on numeracy is also very insightful for any historian of geography. In that chapter, written by S. Gregory, the use of the skill of numeracy is explained as something 'new' to geographers: "The need for geographers to be numerate as well as literate is no new development. ... Over the last ten to fifteen years, however, new trends have appeared in the subject, involving the more systematic and organized application of mathematical reasoning to geographical problems. These trends consist partly of a more sophisticated handling of the traditional type of numerical data, using more complex techniques of analysis and synthesis, and partly of the formalizing of known or assumed geographical relationships into general systems that are often capable of numerical or quantitative evaluation" (Gregory, 1970: 43).

subjects. Almost every subject has its own special methods of making visible what is really invisible. Thus meteorology depends on instrumentation to illuminate the invisible atmosphere, history upon documents to disinter the obscure past, and economics upon statistics to isolate data that are diffusely concealed among other aspects of daily life." (Balchin, 1970: 29)

In this section, I explore examples of graphicacy in the dissertation archives, following Balchin's threefold classification: the map, the photograph and the diagram. Such visual elements of undergraduate dissertations arguably deserve an entire thesis addressing the change of graphicacy as a skill taught to students; my analysis will be limited to a succinct overview of some of the more obvious shifts and changes over time, gleaning examples from the primary material.

Maps

Many dissertations include one or more maps. However, there is a distinction between maps made as a research objective of the student's project, maps displayed to contextualise the research area, or maps displaying results from the research. The first category covers maps that are the result of surveying exercises: for instance, in James Aitken's dissertation Report on the survey of the western part of the Island of Rhum (1966). The title of the dissertation already reveals that this is a topographic science



Figure 78 Area of Survey (Aitken, 1966)

project. In later decades, such exclusively surveying projects are not found in the dissertation archive, but this relates to the earlier-discussed presence of the other undergraduate degree programme that the department offered, Topographic Science, from 1964 through to 2004. Aitken drew multiple maps in his dissertation (see Figure 78). He likely joined the department beore the Topographic Science degree started, and hence his dissertation was presented as part of the Geography degree. The academic staff who taught him were, even so, probably the same as went on to teach on the Topographic Science degree.

Maps, though, remained central for many other geographers, even if their research was not about surveying. Maps as contextualising device have been used from the 1950s through to the present, simply to indicate where the region discussed, the fieldwork location or the case study area is located in the world: see, for instance, Figure 79. This map is part of David Eaglesham's dissertation Caithness: A study of a peripheral region (1974), and indeed, this map makes a geographical point



Figure 79 Map demonstrating that Caithness is indeed a 'peripheral region' (Eaglesham, 1974)

about the remoteness of Caithness. Contextual maps can therefore be more than 'just' about location. Such maps were often hand-drawn and copied from other sources, ones rarely explicitly cited in the earlier dissertations, but for the more recent cohorts Google Maps and Google Earth are often used, with no student cartography involved other than occasional additions of symbols or 'pins', and cited.

It becomes more interesting when moving on to the third type of map: maps used to display some of the findings of the research. Figures 80 and 81 display two examples,

respectively from 1962 and 2014. In his dissertation *The sphere of influence of the shopping and service facilities of Victoria Road* (1962b), Ronald Davidson explored where households go for their shopping and services. Each circle on his chief results map represents a household, the four quarters of each circle being respectively 'food', 'post office', 'hardware' and 'clothes', and the colours correspond with *where* these commodities are 'obtained' by this household. The map thereby indicates spheres of influence for different shopping and service facilities, revealing differences between different categories of commodity or service: some spheres are 'concentrated', others are 'broad'. Visualising questionnaire results on this map is not only useful as a form of visual report in the dissertation, but is also a method for analysing the data: the use of the colours providing



Figure 80 Mapped questionnaire results (Davidson, 1962b)

answers for Davidson himself as well. Maps combined with data can thus be an aspect of data analysis as well as simply reporting the findings. Figure 81, a map made by Fiona Johnston fifty years later than Davidson's, also displays questionnaire results, in this case based on a question about experienced fear of crime at subway stations in Glasgow. Johnston used specific symbols to make the data easy to read – 'graduated' symbols: same symbols, but with different sizes for different levels of fear – and in so doing attractively displayed answers to the survey question and immediately identified crucial differences between the subway stations. Davidson and Johnston represent a striking similarity through time, although their foci of inquiry differ greatly. Maps, in all their sorts and types, have been present throughout the decades, and remain a very central element in the works of student-geographers. Advanced mapping skills, however, are mainly, and



Figure 81 Mapped questionnaire results (Johnston, 2014)

unsurprisingly, only conspicuously present in the early 'topographic science' projects.

Photographs

Similar to maps, photographs can have different functions: contextualising the research question, displaying the study area, explaining the methodology, or as a visual supporting the results or findings. Photographs are, just as maps, found in dissertations produced by all cohorts in this study, but are also influenced by technological developments. An example of a black-and-white polaroid is found in Figure 82: Peter Crabb added several photographs to his dissertation *The Parishes of Tarbolton and Stair* (1958). The handwritten caption of the photograph demonstrates why he took this photo: it pictures a combination of several elements of the region that he chose to study for his regional dissertation. In it, he not only shows how 'his' region looks, but simultaneously also emphasises some key landscape features 'typical' of this rural region, covering elements such as vegetation and land-use. Although colour photographs appear from the



Figure 82 Polaroid photograph (Crabb, 1958)

1970s onwards, black-and-white photographs do not disappear completely until the 1990s. Figure 83 displays several photos from buses in Glasgow, taken by Neill Birch for his dissertation *Glasgow and Hamburg: Contrasting experiences in public transport* (Birch, 1986): these images are allowing the reader not to visualise a region, but rather the objects that he was studying.

Figure 84 displays two photos from a dissertation entitled *Environmental images of Glasgow City Centre* (Inglis, 1982). Inglis described his project as an urban environmental perception study, with implications for town planning. The photographs taken of the train station are part of a series of photos taken in the centre of Glasgow, contextualising the questionnaire results. The questionnaire consisted of a map-drawing question, asking participants to "sketch a map of Glasgow City Centre … imagining that you are describing the City Centre to a visitor, and including all the major features" (Inglis, 1982: 7). This question was followed by three questions 'borrowed' from academic literature, about how



Figure 83 Collection of photographs of buses in Glasgow (Birch, 1986)

participants imagined Glasgow City Centre when they closed their eye, what things they would remember from the area if they would move away from Glasgow, and what things were most important to them about Glasgow City Centre (Inglis, 1982: 7). The collection of photos was hence used to show certain locations frequently mentioned by participants. The number of photos (in both Birch's and Inglis' dissertation) indicates a change in the easiness and perhaps affordability of adding photographs to the dissertations. This development is also perceptible in later decades, with the commonness and cheapness of colour-printing making the photograph something with a negligible economic value.



PLATE 4: CENTRAL STATION



Figure 84 Another example of photographs used to 'set the scene' (Inglis, 1982)

Whereas the earlier discussed increased attention to a methodology section in the dissertations is perceptible from the 1994, it is also around this time that students actually become present *themselves* in the photographs (see Figure 85). Although authors of most physical geography dissertations from these cohorts barely refer to themselves in the first person, this presence in photographs indicates a growing awareness, or reluctant acceptance, that research is done by *someone*: a person who stood in the water, got cold, doubted their measurements, and decided to repeat certain measurements. It is not something that is discussed in the dissertations, but the sudden appearance of the faces of students on such photographs during fieldwork, and the choice to include such photos in the diagrams, indicates a change in awareness of the *process* of making a dissertation (consistent with broader claims made elsewhere in this thesis).



Figure 85 Fieldwork practice (McInnes, 1994)

In Balchin's chapter, he explores graphicacy as a *skill*: a skill similar to literacy and numeracy. The photographs displayed here are informative, interesting and sometimes revealing, but do not *per se* reflect on the skilfulness of the students in the art, or craft, of taking photographs. They are often even quite 'boring' and of low quality. It becomes more intriguing, though, when stretching the categorisation of respectively maps, photos and diagrams: Balchin included field sketches and landscape drawings within the category of

'maps', but I chose to include it in the category of photographs here. I chose to do this because the most impressive drawings and sketches in the dissertation archive do not themselves comprise surveying ('mapping') exercises, but are, in some cases at least, works of art. Unlike in the earlier displayed maps and photographs, graphicacy as an actual skill is very much present in these drawings. The most beautiful drawings are found in the two dissertations already briefly mentioned – one regional, one systematic – by Robert McAllister: both his biogeographical research project *Structure in the woodlands around*

10 11 Fig.1 : TRANSECT OF FOREST NEAR ARROCHYMORE POINT INCLUDING COASTAL ALDER BELT, BIRCHWOOD ON ROCKY GROUND, AND OAK FOREST WITH OPEN INTERIOR. Fig.2 : TRANSECT SIMILAR TO ABOVE BUT FARTHER NORTH, SHOWING SHRUB LAYER IN OAK FOREST ON FLATTER, WETTER GROUND. Fig. 3 : MORE SCRUBBY OAKWOOD WITH TALL BIRCHES ON HIGHEST, ROCKY PART OF CREAG MHOR.

Figure 86 Semi-diagrammatic sketches of woodlands (McAllister, 1966a)

Balmaha, Loch Lomond (1966a) and his regional dissertation South-west Cowal: The Parishes of Kilfinan and Kilmodan (1966b) include very impressive drawings (see Figures 58, 86 and 87). McAllister's work on the woodlands around Balmaha aimed to "describe the forest structure" and he explains his methodology as follows:

"First, each woodland sample was given a brief title indicating perhaps the general type of woodland, its physical setting, and location. Then a rapid, semidiagrammatic sketch of the woodland structure was drawn and annotated with the names of the most important species in their appropriate strata. ... To give greater precision, and even some small degree of objectivity to the records, a slightly simplified version of the structural formula described in the paper by C.S. Christian and R.A. Perry in 'Journal of Ecology' (see references) was employed." (McAllister, 1966a: 3)

Figure 86 displays three of these 'semi-diagrammatic sketches'; sketches, that, according to McAllister's later remark on objectivity, are *not* objective, though I might beg to differ (and McAllister does qualify his own statement with reference to what he borrows from the *Journal of Ecology* study). The drawn transects arguably offer flexible forms of both data collection (making such diagrams obviously asked for a well-developed 'geographer's eye') and data analysis, in which regard the drawings would later be used to formulate the findings, in a manner not do different from, say, what Davidson and Johnson were doing with their creative mapping exercises.

The other drawings displayed here (see Figures 88, 89 and 90) are three examples of a similar 'ornamental' usage of drawings in dissertations: the ferry drawings, also made by McAllister (1966b), are beautifully drawn, but do not perform any obvious analytical role. Ian Kelly's sketch of Airdrie (Figure 88) was part of his dissertation Comparative social and environmental studies within Airdrie (1974). In this, he compared two methods of social area analysis by applying it to a case study. The attached marker's report calls it "a rather mediocre piece of geography" with "quite mundane conclusions" (Kelly, 1974: attached marker's report), and although his sketches look pleasing, they also do not offer any additional 'knowledge' to them: it is not clear in this case why a drawing (except, perhaps, using such sketches as a way to display one's own skills) does more than a photo could do. The last example is taken from M.B. Evans' dissertation The evolution of the landscape in West Leicestershire with particular reference to settlement (1970). In this dissertation, Evans included several black-and-white photos, as well as a drawing such as the one displayed here (see Figure 89). Again, it is not evident how photographs and drawings might take on different roles, perform usefully different functions. The inference might further be that for these authors the essentially 'academic' purpose of the dissertation,

towards which all its component nowadays should, it seems, ideally press, was less than clear. Yet these drawings, the styles on show and indeed their mere presence, perhaps *do* open a window on a different conception of geography to that which now obtains: one imbued with senses of visiting a place, finding ways to describe or evoke that place, and doing something to suggest a long lingering in the place, such as sitting to complete a field sketch).



Figure 87 Drawings of ferries (McAllister, 1966b)



Figure 88 Sketch of Airdrie (Kelly, 1974)



Figure 89 Sketch (Evans, 1970)

Diagrams

Balchin distinguished the three classes of maps, photographs and diagrams, but acknowledged that they overlapped and foresaw even less clear boundaries for the future:

"It is certain that the overlap will continue to increase as geographers seek additional ways of combining the light shed on special relationships by diagrams with the speed and comprehensiveness of photographs and the analytical explicitness of maps." (Balchin, 1970: 42)

There are indeed many examples of diagrams that are based on photographs or maps and are in some sense 'hybrid' graphs. A first example is Jean Burns' diagrams/drawings of



Figure 90 Diagram of Norse house type (Burns, 1966)

Norse house types (see Figure 90) in her regional dissertation *A geographical account of the Parish of Wick* (1966). It seems like the drawings are very specific for a regional study that also covers descriptions of soil, vegetation, geology, climate, land use and agriculture, but again the drawings are based on observation in the field, and reflect what the student saw there and deemed important. Such drawings hence highlight specific aspects, describing and emphasising certain elements of the regional landscape of Wick (and, it might be said, if unknowingly, paralleling work on 'architectural geography', housing types and their diffusion as a window on 'folk cultures', and more).

The second example is from 1970, by Sandra Robertson. On one page (see Figure 91) she displays a photo of vegetation found, a table with quantitative information about vegetation found and a diagram of a section across the surface of a moss. Displaying all these elements together on one page provides a clear sense of how Robertson approached her fieldwork: paying attention to both particular elements as well as collecting quantitative data and offering an overview of the study area. The different ways of visual presentation also emit some authority: other than McAllister, who saw his drawings as



Figure 91 Diagram, table and photograph on one page (Robertson, 1970)

something at least partly subjective, Robertson's combination of photos, quantitative data and a diagram serves to give her research scholarly validity. Graphic elements can be used not only as explanation, contextualisation or justification of research, but also as *validation*. Some of the figures (especially McAllister's, but also other sketches, drawings and graphs from his contemporaries) reveal a skill that has perhaps been lost, replaced by other skills, or ceasing to be regarded as a skill deployable by the geographer-in-the-making. Making good drawings and useful landscape sketches requires a good 'geographer's eye': taking a photograph is faster and easier, but lacks the analysis as an integral aspect of creating that visual element. Translating field observations into useful drawings is thus an example of being 'literate' in reading a landscape, one that a later student might possess as well, but one arguably less easy to grasp by or from photographs. Of course, certain older projects, such as regional dissertations as well as geomorphological dissertations that aim to describe the landscapes (and landscape histories) of one region or environment, depended on – or could valuably be augmented by the use of – this skill more than is true of many present-day dissertations: visual-spatial literacy might have lost its dominance in the required skillsets geographer-in-the-making over time. Asking Philo about what 'has gone lost' in the undergraduate curriculum, he says:

"Probably some basic cartography. Some students ... used to be really good at cartography, drawing their own maps. They probably had a much better understanding, not only the ones that go on to do the specialist courses, but actually probably all our students had a richer cartographic tradition behind them and the ability to produce and use maps. There were probably other things that were strong. There was something about a skill in 'regional synthesis' and reading the synthesis in landscapes in front of you that was part of an older geography that probably disappeared to some extent, but not completely." (C. Philo, interview, 10 December 2019).

Graphicacy, as well as other skills – numeracy and literacy, but also computational skills and critical thinking – are intertwined with the foci of inquiry, methodologies and fieldwork locations and research facilities used by students for their dissertation research; and it is impossible, if not undesirable, to judge the loss or decrease of certain skills without alertness to these many contextual dimensions. Seeing a discipline as being in motion and continuously changing means that necessary skills will also move on.

Writing the dissertation

Over time, the discussion of academic literature in dissertations increased significantly: not only in terms of how many words student-geographers spent on the ideas, concepts, methods and examples of other academics, but also in the number of academic texts to which they referred. The increase of the citing of academic sources is probably partly caused by the expectations of 'the university' about what a dissertation should do, but also because of growing awareness of research ethics, emphasising the need to prevent (accidental) plagiarism. These two developments are neither specific for Glasgow nor specific for geography as an academic discipline, but are rather widely shared in academia. In the following sections, I emphasise the 'writing' component of literacy as expressed by undergraduate geography students in their dissertations, but the 'reading' component is obviously also very important. It has nonetheless already been, to some extent, discussed in earlier chapters when asking about how the student-geographers related to questions of disciplinary identity and conceptual frameworks.

From the (small) cohorts of 1954, 1958 and 1962, the majority of dissertations were handwritten (see Figure 92). The cohorts of 1966 and 1970 were a mixture of hand-written and typed dissertations, and after 1970 there were only a handful of dissertations that were *not* typed. As mentioned in Chapter 4, paid typists, mothers, sisters and girlfriends (when typists were mentioned by name, the typists were, without exception, female) were

"A Study of Functional Change in Park District" May , 1962 Mauren E. Balfon

Figure 92 Handwritten title page (Balfour, 1962)

regularly asked to produce the final version, but students themselves, of course, had to come up with the actual text and content. Many long days and nights were evidently spent at the university library to do this, often together with fellow students – sometimes fellow geography students, other times friends or flatmates at the same stage of their studies – all making the best of this laborious task:

"... thanks to my geography classmates who provided solidarity during late nights in the library." (Pattenden, 2006: 2)

Although some students seemed very passionate about their research projects, wanting to dig deeply into the subject-matters for their own sake, all dissertations were still written with a clear objective: submitting it on time as a required element of their undergraduate studies. After months of reading, coming up with a research question, planning for fieldwork, and actually collecting and analysing data, the end was in sight. There were just three more things to do: writing the dissertation, submitting it, and waiting for the dissertation to be marked. Nearing the end of my own research project here, my own 'big' dissertation, I discuss these final aspects of the 'dissertation experience', starting with the writing-up stage.

Writing style and structure

For some, the writing process seemed to be a relatively pleasant aspect of the research, paying attention to beautiful sentences, building an overall narrative with a beginning and an end. Examples of writings that seemed to come 'natural' to students are found in all cohorts:

"On the sixteen-mile journey between Knocking and Llanfyllin it is not difficult to notice a change in the appearance of the countryside, from the gently-rolling fields and wooded hedgerows of the Shropshire Plain to steep, rocky and bracken-clad mountains reminiscent of some of the wilder parts of North and Central Wales. To discover exactly where this change begins to take place is, on the other hand, extremely difficult." (Ambrose, 1970: 1)

"The humble chicken: an animal synonymous with rural life; agriculture; food, and play. As children, many of us have bwok-bwok-bwoked moving the chicken figurine from the path of an oncoming tractor on the play-farm. Or perhaps you preferred the shrill cock-a-doodle-doo of the cockerel in a bid to wake your parents from their post-lunch nap on a Sunday afternoon (was roast chicken on the menu?). Thus was my experience of chickens well into my late twenties. Yes, there were eggs, but to be honest the connection between egg and chicken was to me as unfathomable as the old adage 'what came first..?'" (McQuade, 2014: 1)

Generally, human geographers tend to pay more attention to the aesthetics of their language than physical geographers, but this is definitely not black-and-white. Despite the general conception that younger generations pay less attention to spelling and typing errors, it is also easy to find such mistakes being made by students from all generations.

The way student-researchers wrote about themselves, and indeed have or have not 'written' themselves into their projects, is both a 'generational' and a subdisciplinary or conceptual matter. Many social geography projects from the late-1990s onwards used ideas and approaches from a humanistic conceptual framework, as noted in Chapter 6, and in such projects a student's own experiences, feelings and ideas could become more central: the researcher was not just a research instrument, but a 'full' person. This led to writings in first person:

"I attempted to utilise ethnography during this time ... but this proved challenging and problematic for a number of reasons. The first issue, was trying to align this unobtrusive, sometimes internal, methodology with sensitive issues of representation and identity. At times I felt uncomfortable confronting certain tensions and this is reflected in my field notes:

Half of me thought that the underlying tension and issues makes for interesting research and the other half was uncomfortable about creating more tension or making, what should be an extraordinary, happy experience ... in any way negative." (Wylie, 2014: 16)

"At this point, I feel that it is appropriate to highlight my study location." (Brankin, 2014: 2)

These two examples from 2014 demonstrate writings in the first person to reflect on feelings and personal experiences. The first quotation, from Ross Wylie's dissertation Theatrical participation across space: Geographies of a community theatre project (2014), is a combination of a reflection on the methods used and a citation from his field diary. Such research methods and instruments explicitly rely on the experiences of the individual researcher, so this use of the first person is not surprising. The second quotation, from Laura Brankin's dissertation Sustainable fashion in Scotland: A study of the Love Your Clothes campaign and individuals' attitudes and behaviours towards fashion consumption, usage and disposal in Glasgow (2014), is different in nature: she uses the first person not as a choice that is based on research methods, but as a stylistic choice to narrate the whole dissertation in the first person. Such differences in usage of writing in the first person are hence influenced by either its connection to the methodology and conceptual framework of the research project or by a deliberate choice in writing style. The first usage is relatively common within specific subdisciplinary contexts (mainly in human geography dissertations), whereas the second is a touch more uncommon. Independent from subdisciplines, from the mid-1990s students tended to write in the first person more frequently than before, but in many cases only in the introduction, the methodology and sometimes the concluding sections of their dissertations. Often, first-person writing was used to explain why students chose to study this particular subject and how they did this, sometimes reflecting deep personal involvements and commitments (such as, for instance, experiences, either direct or via kith and kin, of health problems – in health geography projects – or political activisms – in political geography projects).

Besides the use of the singular first person, many students used the plural first person, 'we', in several different ways. Some use 'we' referring to 'we, the people':

"Modern contemporary shopping malls are no longer places in which we just shop. Today the mall is a portal to another world, a fantasyland made real. The modern mall is a place where we are invited to live out our hearts desires, all that is asked of us in return is that we purchase goods as payment for our pleasure." (Ferguson, 2002: 5)

... or 'we, geographers' in posing a problem that needs to be solved:

"... a decade later it appears we have come almost full circle and now people are asking is there still a place for children's geographies?" (Ferguson, 2010: 4)

... and sometimes 'we, the researcher (and any potential informal helpers)':

"By doing this we will gain the physical reality of the situation in Portballintrae at present and throughout the years. We will be able to gauge if the measures taken have been successful or unsuccessful." (McCandless, 1998: 8)

The use of 'we' in the dissertations is not limited to specific subdisciplines or specific kinds of projects. Besides the use of single and plural first person, some students referred to themselves in third person:

"She hopes to have achieved the objectivity of the outsider, though cannot claim the intimate first-hand knowledge that comes with long resident in the area of study, but at least hopes to have obtained a foundation for analysis." (Brooks, 1974: 45)

This construction became less common from the 1990s onwards, but did not disappear completely. Some students even used capitals:

"This is perhaps the reason why those organisations The Researcher contacted were so interested in participating in the study, as it seems that the safety related impacts of improving pathwork have never been studied." (Bryce, 2010: 5)

In many projects from before the 1990s student-geographers did not refer to themselves at all. This was possible because in many of these projects the research *process* was barely discussed, and in such projects sentences started with phrases such as 'This dissertation will aim...', 'It has been shown...', and 'It was decided to...'. The same approach remained common for physical geography dissertation until recently, although especially in introductions and methodology sections, 'I', 'we' and 'the researcher' have been used as well. So, overall, there is quite a mixture of ways of writing about oneself present in the archive, and the reasons for the different options seem diverse: sometimes rooted in the conceptual viewpoints of the projects, crossing differing scientific and arts-humanities views on the 'neutrality' or 'positionality' of the researcher, and other times seemingly just on personal preferences. Because in more recent years students have started to include more reflections on the research process, including their own role and their own considerations in the projects, generally the language has shifted from a more passive way of phrasing to a more active one, but with considerable variety within cohorts still remaining. Besides the writing styles of the dissertations, the structure of the dissertations also reveals some changes in implicit expectations, and perhaps explicit guidelines, as well as space for expressing one's personal style preferences. Figures 93, 94 and 95 on the next three pages display three tables of contents from respectively 1970, 1990 and 2010. Dissertations from before 1970 (and also some later dissertations) have not always included a table of contents, although these dissertations, of course, still tended to be structured in a particular way. Many of the regional dissertations comprised sections about particular aspects of the region, such as the geology, climate, population, historical background and agriculture, reflecting of course standard understandings of what regional geography entails and demands (see also Chapter 6). Figure 93 displays a table of contents for a systematic dissertation, entitled *Girvan: Development of the resort function and its*

<u>CONTENTS</u> INTRODUCTION HISTORICAL BACKGROUND GIRVAN 1870 GIRVAN 1870 - 1900 GIRVAN 1900 - 1930 GIRVAN IN THE FURTIES GIRVAN IN THE FORTIES GIRVAN IN THE FORTIES	<u>PAGE NO</u> . 1 2 4
INTRODUCTION HISTORICAL BACKGROUND GIRVAN 1870 GIRVAN 1870 - 1900 GIRVAN 1900 - 1930 GIRVAN IN THE THIRTIES GIRVAN IN THE FORTIES	1 2 4
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Figure 93 Table of Contents (McKenna, 1970)

expression in the morphology (McKenna, 1970)¹²⁸. This table reveals the chronological approach of the dissertation, trying to trace the development of Girvan throughout the last century, but with particular attention to the recent history as well as potential *future* of Girvan. The dissertation does not have any sections on the aims of the research project (apart from a short introduction), nor on theoretical and conceptual frameworks of the project, and nor on the methodology. Of the 44 dissertations in Alison McKenna's cohort (1970), only one student wrote a specific section or chapter on 'Methods of Study' and one on 'The Theoretical Framework'. This does not mean that the other dissertations completely lacked discussion of such matters, but they did not have a dedicated section on these aspects of research.

Figure 94 presents the contents page of Tom Todd's biogeographical dissertation *An investigation of the liverwort Herbertus Borealis* (1990), an example of an often-used and

a l		
i	CONTENTS	PAGE
	INTRODUCTION	1
-	AIMS AND BACKGROUND TO THE STUDY	2
Ì	THEORETICAL BACKGROUND AND REVIEW OF RELEVANT LITERATURE	9
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Figure 94 Table of Contents (Todd, 1990)

¹²⁸ Interestingly, this 'systematic' dissertation still had a particular place focus, Girvan, but here examined through the lens of settlement morphology.

'classic' structure of a dissertation (and also, of many other forms of academic writing). Here, there is a clear sectionalisation of the write-up that separates out the project 'aims' (hypotheses, research questions), its background in existing academic literature and 'theory', its 'methodology', its 'results' and their 'analysis', and then a discussion or 'conclusion'. This structure and also these kinds of titles different sections - sometimes called chapters, notably by human geographers – slowly gained ground during the 1980s, and became 'the golden standard' from approximately 1990. This structure in fact remains the standard up to the last cohort that I examined (2014), although in the later cohorts some students do start to give their sections or chapters some more creative titles. An example of the latter is given in Figure 95, where the first three chapters loosely correspond to 'aims', 'literature' and 'methodology' (from Figure 94), but where – as a more significant departure - the 'results' and 'analysis' (and discussion) become sorted into a sequence of separate chapters, each tackling a particular theme emerging from the fieldwork or other primary research, with more evocative namings. In this instance 'Hidden Homeless' is a final conclusion, something that in many dissertations becomes quite short, even seeming like an after-thought. Notwithstanding the differences suggested by comparing Figures 94 and 95, it is evident that students were aware of what was expected of them, and of what a dissertation should look like. The differences are not only seen through time, but, as mentioned, also indicate a distinction between human geography and

Contents	
The wall that lines the streets of Glasgow	2
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Figure 95 Table of Contents (Ferguson, 2010)

physical geography: the more interpretative approach taken by human geographers, basing chapters on distinctive themes from their primary research versus the more 'classic' journal paper sections of many physical geographers is evident when researching the dissertation collection.

Besides this standard structure – or two different iterations on essentially the same structure – some generational and individual varieties can also be detected in two elements that are part of the dissertation, but not part of the research project itself: the acknowledgements and epigraphs. The final sections that were written were probably for many the acknowledgements (as discussed in Chapter 4) and the addition of an epigram or 'motto' to start off the whole text, these two elements reflected very personal circumstances and considerations. Sometimes the motto reflected on the focus of inquiry, such as the poem written on Papa Stour that prefaced David Riddell's dissertation *Parishes of Walls and Sandsting, Shetland* (1970), displayed in Figure 96.

"An yonder staands da hoose at's lately vodd --Da windows coortenless; da doors fast shut; Da brig is bare, at mony a fit aince trod --Da lums is caald an reekless, ben an but.

An oh; I'm tinkin lang for da days at's past; I'm weary for da happy times at's bon! Foo is't at changes hes ta come at last? Why soodna things geng on as aye dey're don?"

> G.P.S. PETERSON Papa Stour 1965

Figure 96 Motto/poem preceding the dissertation (Riddell, 1970)

In other cases, dissertations have been dedicated to someone, such as Harriet King's dissertation *Geographies of middle-class unemployment and poverty: The case of Richmond* (1998), which she dedicated to her father:

"To my dear dad who I loved so much and always will. Let this aid awareness and help us all understand the turmoil the unemployed professionals go through." (King, 1998: n.p.)

Such openings reshape a dissertation into so much more than 'just' an assessment as part of an undergraduate degree: it demonstrates that in some cases this experience of doing independent research into a subject chosen by oneself, the student-geographer, was also a very formative experience for, in many cases, young adults. Such elements, although perhaps not adding an intellectual perspective to the knowledge produced by dissertations, are telling of the highly personal and social aspects of such research experiences.

The final elements of dissertation research

Writing the dissertation might have *felt* like the last 'substantial' phase of dissertation research, after coming up with a focus of inquiry, a fieldwork location, collecting and analysing data, but the process was not done entirely. There are a few things that had to be done before the dissertation was done: first, collecting and adding attachments and appendices, subsequently submitting the dissertation, and finally, waiting for the dissertation to be graded. All these elements precede the dissertation's pathway to its final destination, in the archival cupboard. In this section, I explore these final bits of dissertation research.

Submitting the dissertation

The *written* dissertation is not immediately a complete dissertation. Many attachments are added: from complete Ordnance Survey maps, to CD-ROMs, USB-sticks and even cassette tapes with collected data on it (which, by the mores of the 2020s, should really be destroyed: Figure 97). In the mid-2000s, the department experimented with getting students to submit electronic versions of their dissertations on CD-ROMs or USB-sticks, before designing a more fully developed online submission system. Concerns about the storage of space-consuming hard-copy dissertations played a significant role in the considerations for this move towards a digital submission 'route': and indeed, the archival cupboard, my field site, is already completely stacked with dissertations, with not much space for many more cohorts of hard-copy dissertations. I return to these considerations later.
ВҮ			
GEORGE ALAN LAWRENCE (CUNNINGHAM		
1 HIGHFIELD DRIVE,	COLCHESTER		
October 193	A Noise Reduction EO Normat : 120uts	B Noise Reduction EQ Normal: 120µs	
	G.A.L. CUNNINGHAM		
	DISSERTATION		-
	APPENDIX 2 INTERVIEWS 1+6		
			_
16			
		OCT 1982	

Figure 98 Taped interviews as appendix (Cunningham, 1982)

ROYAL GEOGRAP	HICAL SOCIETY
KENSINGTON GORE .	LONDON SW7 2AR
President THE RIGHT HON, 101	AD SHACELETON BC OBE
Director and Secretary SIR LAI Telephone 01-589 5466 Cal	JRENCE KIRWAN, KCMG des & Telegrams obterras london swy JAF
	NO & TERMIN ORTERRAS LONDON SUJ SAS
COPY.	
	5 April 1973
Dear Mr Maclennan	
tions Committee for consid in the <u>Geographical Journ</u>	Paphical Society has Essay Prize for 1972 Instion and reconsidera- effect in the diffusion to-Scale". The prize to present this to you eneral Meeting on the Society's House, the for you to be bomitted to the Publica- teration for publication
Yours s	sincerely
	Director and Secretary
and the	Director and Secretary
Duncan Maclennan Esq MA c/o Department of Geograph The University GLASGOW G12 8QQ	ıy

Figure 97 Letter from the Royal Geographical Society about the Society's Essay Prize (Maclennan, 1971) Some of the attachments are more unique than maps or CD-ROMs with collected data:

consider, as displayed in Figure 98, a letter that was included in one dissertation of 1971 upon which I stumbled in the archive. The letter is one written to a student, Duncan Maclennan about his dissertation, *A re-examination and reconsideration of the neighourhood effect in the diffusion of innovations at the micro-scale*. He won the Society's Award Prize for 1972 with this dissertation, the prize being £30, and he was invited to the Annual General Meeting of the Society. Attachments such as these reveal wider academic contexts of undergraduate students and of dissertations, but it reveals something more: Maclennan's dissertation was written in the summer of 1971, and he finished his undergraduate degree in 1972. The letter was sent in the following year: the date on the letter is 5 April 1973. The letter is a 'copy', according to a handwritten scribble on the letter, and so a member of staff, academic or administrative, must have added it to the dissertation later, valuing the letter as something that should be kept with the dissertation itself. It shows that such archived sources are not static *per se*. A version of this dissertation was published as a full academic paper in *Area* in 1978, co-authored by Allan Findlay, almost certainly Maclennan's dissertation advisor (Findlay & Maclennan, 1978).

For the students from 1994 and later, there was one more document to be attached: a Declaration of Originality. This Declaration increased from a one-line Declaration (see Figure 99) to a more elaborate Declaration (see Figure 100) including number of words, an explanation of what plagiarism is and a reference to the university's guidelines on plagiarism. This indicates an increased focus on research integrity. Such mandatory elements provide a remarkable consistency within the cohorts, but also indicate shifts over time. The same goes for the way dissertations are bound: after getting familiarised with the archival collection in the cupboard, it is fairly easy to 'guess the decade' of a dissertation solely based on the cover and the first pages, even without paying attention to titles and fonts. This consistency seems to have been steered by departmental requirements: the changes in dissertation folders (see, for instance, Figures 4 and 5) are so much in accordance with the cohorts that, for instance, the red folders of the 1970s were probably provided by the department itself. These dissertations received a stamp with the date, presumably provided by the departmental office staff. The dissertation was done, the student could go to the pub, or home, with a sense of relief and accomplishment!

'This dissertation is submitted as part requirement of the Honours Degree in Geography. I declare that the dissertation is original and is the product of my own work. ' igned 5th Jan 1995 Dated

Figure 99 Declaration of Originality (Baff, 1994)

Matriculation Number: Course Name: GEOGRAPHY File of Dissertation: THE COMPARISON OF STREAMFLOW CHARACTERISTICS OF TWO FRESH WATER PEARL MUSSEL RIVERS IN SCOTLAND Number of words: 8,874 Plagiarism is defined as the submission or presentation of work, in any form, which is not one's own, without acknowledgement of the sources. Plagiarism can also arise from one student copying another student's work or from inappropriate collaboration. The incorporation of material without formal and proper acknowledgement (even with no deliberate intention to cheat) can constitute plagiarism. With regard to dissertations, the rule is: if information or ideas are obtained from any source, that source must be acknowledged according to the appropriate convention in that discipline; and any direct quotation must be placed in quotation marks and the source cited immediately.		University of Glasgow				
Declaration of Originality (Bind this page into the dissertation following the title page) Name: EILIDH WELLS Matriculation Number: Course Name: GEOGRAPHY Title of Dissertation: THE COMPARISON OF STREAMFLOW CHARACTERISTICS OF TWO FRESH WATER PEARL MUSSEL RIVERS IN SCOTLAND Number of words: 8,874 Plagiarism is defined as the submission or presentation of work, in any form, which is not one's own, without acknowledgement of the sources. Plagiarism can also arise from one student copying another student's work or from inappropriate collaboration. The incorporation of material without formal and proper acknowledgement (even with no deliberate intention to cheat) can constitute plagiarism. With regard to dissertations, the rule is: if information or ideas are obtained from any source, that source must be acknowledged according to the appropriate convention in that discipline; and any direct quotation must be placed in quotation marks and the source exited immediately.	Department of Geographical and Earth Sciences					
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in the <i>Departmental Undergraduate Handbook</i>). It is your responsibility to ensure that you understand what plagiarism means, and how to avoid it. Please do not hesitate to ask class tutors or other academic staff if you want more advice in this respect.	from one student of The incorporation of no deliberate inte dissertations, the ru source must be a discipline; and any cited immediately. Plagiarism is consid	opying another student's work or from inappropriate collaboration. of material without formal and proper acknowledgement (even with mtion to cheat) can constitute plagiarism. With regard to ale is: if information or ideas are obtained from any source, that cknowledged according to the appropriate convention in that direct quotation must be placed in quotation marks and the source dered to be an act of fraudulence and an offence against University plagiarism will be investigated and dealt with appropriately by the				

Figure 100 Declaration of Originality (Wells, 2010)

Marking the dissertation

After submitting the dissertations, they were of course marked. One value of physical archives is that hard copies here often include documents that more-or-less accidentally ended up being slipped into their pages, such as the MacLennan letter, which usefully illuminate aspects of the archive's main constituents. Specifically, in the case of the dissertation archive some dissertations include a marker's report. One from 1954 received the following feedback:

"This work has been carried out in one term besides normal classwork & the student was ill for a fortnight ... The soundness of this essay owes much to a wellpropounded view of geography. However, prints relevant to the idea of 'community' + 'region' which are made in the text are not mentioned in the conclusion. One would have expected a return to the original idea but the conclusion is tame + lame." (Marker's report attached to Anon.¹²⁹, 1954)

The feedback on one dissertation with a 55% grade in 1974 was as follows:

"This is an odd dissertation without a proper beginning or end. The subject is very broad and the aim (objective) of the study is not stated i.e. what problem or aspect to be treated. ... Factually O.K. but lacking in conceptual framework and originality of either methods or ideas." (Marker's report attached to Anon., 1974)

This 2006 dissertation received a B2, equating to mid-60s (%):

"There is a clearly defined local rationale for this project. ... [S]ome literature is used in setting out the framework for the project – this is generally good and is clearly explained. The field methodology is sound and good use is made of existing data." (Marker's report attached to Anon., 2006)

... and this student from the same cohort received an A5, equating to low-70s (%):

"This is an interesting piece of work with clear evidence of intellectual ability. ... There is an excellent articulation of a research problem that is grounded in, and seeks to develop, a good literature review." (Marker's report attached to Anon., 2006)

... while the following student received a C1, equating to high-50s (%):

"An uninspired topic that does not ask very pertinent or relevant research questions, either for wider theoretical or policy debates. The rest of the dissertation suffers from poor identification of research themes. The results are rather bland and simplistic. There is some particularly bizarre material presented on safety on board buses." (Marker's report attached to Anon., 2014)

The elements discussed in markers' reports remain relatively similar throughout the decades: there is a lot of criticism about the writing, regular issues raised about the

¹²⁹ It was felt ethically proper not to identify the student here, unlike my practice elsewhere, particularly in the case of 'negative' or critical marker's reports.

demarcation of the project, and originality is often welcomed. Although the elements of criticism do not change that much, the language shifted over the years to usually (but definitely not always!) a more constructive tone of voice. At least two reasons might be adduced for this shift. First, it might reflect on more regular meetings and feedback moments at earlier stages of the dissertation research, which meant that students were not entirely 'by themselves' while doing the research or when waiting for a 'verdict' at the end. If students followed the standard process of supervision, most students would have received any potential major criticism at an earlier stage, which is not to say that they would have necessarily acted upon it. The formalisation of rules and guidelines as well as the standardisation of the different steps to be taken (see, for instance, the dissertation record card, displayed in Figure 14) made students more aware of what was expected of them. Second, over time there have been changes in the formal standing of the undergraduate dissertation: from a 'Finals' paper, not allowing for feedback to be issued if, indeed, it was ever issued – until after all 'Finals' papers had been marked and degree classifications published, to the more recent position whereby summative and formative feedback on dissertations is given to students *before* they complete their degree work. Once staff knew that students would see and read the feedback while still taking classes, there was a change in the 'culture' of how the markers wrote their reports, with a more constructive tone adopted rather than merely a stark final judgement. Besides the few markers' reports found in the dissertation archive, there are also a few other attachments that refer to the process of marking: for instance the note displayed in Figure 101 where the Head of the Department (Professor Miller) granted permission for a late submission date because of the personal circumstances of one student. The student's advisor also gave permission to the student to do a project involving 'a minimum of field work'.

The 'weight' of the dissertation grade has changed over time as well. When asking about contemporary discussions and grade inflation, John Briggs (Professor in Geography from 1979 to 2018) explained that in the 1980s students were rather indifferent about their grades, because failing the dissertation would barely impact upon overall grade. He describes that for a few years in the early-1990s, it was policy that when a student failed their dissertation, the overall mark would go down one mark. Later, it was decided at university level (for all undergraduate degree schemes) that a fail in a student's major 'independent project', which in the department was the Geography dissertation, meant



Figure 101 Noted attached to dissertation about personal circumstances (Anon, 1970)

'not graduating'. Performance on the dissertation hence became anything but a matter of 'indifference'. The changes in supervision and the increasingly formalised nature of guidance, as Briggs went on to describe, also meant that levels of student support for their dissertation labours were much greater for post-2000 students than before.

After the dissertation was graded, and the students completed all the coursework, the student was ready to graduate. But what, then, did the dissertation 'mean' in the grand scheme of things?

"They [students] probably mostly are concerned with the assessment while they are here. Once they leave – there have always been examples of students that have come back after they have left and said, 'oh, I got a job and I showed them what I have done in my dissertation and they were terribly impressed that I used this type of equipment or that type of analysis'. I think the dissertations are actually really valuable to the students, but they don't always know why until afterwards, which is the case with a lot of learning." (T. Hoey, interview, 10 July 2019)

"I have had some fantastic dissertations over the years. I would say, probably tens of those dissertations could easily have been written through [for] high quality journal articles. I have often encouraged students to do that, but very few of them do. Many leave with high intentions but many enter the world of work and they forget. That is how it should be. There is [nonetheless] so much good stuff sitting in there, in that archive, that should be published." (C. Philo, interview, 10 December 2019).

As described in Chapter 3, discussing the Reunion of the "Class of '94", some students barely remember their dissertation, whereas others feel like they started their careers there, whether in academia or beyond, or at least look back at the dissertation with warm feelings. Besides the sometimes fascinating knowledges produced, as the two quotations above emphasise and as mentioned previously, the dissertation is clearly a significant rite of passage, a key transition point often in ways beyond merely being assessed and graded as part of a student's 'credentialisation' for the next life stage.

Archiving the dissertation

The pathway from a dissertation being graded to it finding its place in the archival cupboard is not clear for every cohort. As explained in Chapter 3, it was not until 2014 that the dissertation archive was formed or at least formalised with a proper organisational and cataloguing logic, financed by a Chancellor's Trust Award. Richard Lowdon, a former PhD student, spent several weeks in the archival cupboard – it was only after the 2009 Centenary celebrations that the dissertations were moved into one cupboard -, cataloguing and indexing all the archival sources and structuring the material on the shelves. Before this, one 'chunk' of dissertations was already brought together, yet unindexed, and other dissertations were stored at 'random' places in the building. Lowdon's efforts were invaluable for my research project. It is fascinating to find out, though, that, after he completed his task, the dissertations of the following cohorts were not added to the archive. It is clear that without some clear 'ownership' by someone in the department, the archive will not be taken care of. Of course, my own role as the prime researcher using the archive also gave me this role of temporary archivist, or at least the role of 'keeper of the cupboard'. I brought the dissertations of the two cohorts following the last cohort in my sampling to the cupboard but did not yet complete the cataloguing and indexation that Lowdon started. Hopefully, there will be a post-pandemic moment to fix this. Unfortunately, from 2017 onwards, the dissertations are only saved digitally, which makes them in some ways even more vulnerable. This leaves the state of the dissertation archive precarious. It is up to me, as a historian working with this archive, to 'spread the message' of the value of the collection, but its future will depend on departmental awareness of its value and, hopefully, its usage as source material.

Conclusion

The markers' reports and reflections on a dissertation's 'road' to the archive provide some final glimpses into the typical 'life cycle' of the undergraduate dissertations researched in my project. The object-oriented approach taken in my research means that I did *not* include a thorough analysis of the grading system, the discussions, or perhaps complaints students had and filed with markers about their grades, and on how the dissertation research might have influenced students' subsequent lives, careers or self-confidence. The entire 'world' existing *beyond* the dissertations nevertheless shines through the words in the dissertations, or by what is disclosed in the photos, drawings and maps. Many of the different elements discussed here, such as the grading process and the different skills that students used, would have deserved far more attention than I gave them. Furthermore, there are specific elements left aside, such as developments in GIS and the use of specific software packages, which would also offer further perspectives on the changing experiences of becoming-a-geographer.

The skills used in the productions of dissertations share the same similarities and dissimilarities within cohorts, but comparing between cohorts, I cautiously draw one broad conclusion about the crucial 'how' of dissertations as examined throughout the last two chapters (7 and 8). Computational and digital innovations have asked later students to use different skills than those asked of their counterparts before, often entailed learning to work with software programmes that demand lots of time for students seeking more than casual familiarity with how they work and what they can offer (at the stages of data collection, analysis and presentation). The skillsets of 'reading the landscape' and being able to draw and sketch this landscape seemed to have gone, lost, together with the regional expertise – the sense of how places are composed – that was found in regional dissertations. These shifts go hand-in-hand with the 'direction' of geography as a discipline, with its move to being more systematic alongside some splintering into subdisciplinary silos, but also of the growing emphasis on 'employability' and the awareness that many students will not continue with a career in academia, but rather in another role. The writing of a dissertation, and the long days and nights it takes, is recognisable to anyone who ever wrote a dissertation. Every single source in the dissertation archive breathes these hours of hard work, frustration and, in the end, a sense of relief and accomplishment. In the concluding chapter that follows I revisit my research objectives and reflect on my own process in this likewise experience.

CHAPTER NINE CONCLUSION

"Three hundred and seventy-nine cups of tea and one hundred and fifty-seven mugs of coffee since I began this dissertation." (Wilbur, 2002: n.p.)

Writing a thesis based on independent research, supervised by academic staff, with specific requirements and procedures laid down in the guidelines of the University of Glasgow, leading to a formal degree, while researching many experiences of undergraduate predecessors doing something very similar: this 'meta-level' of my thesis has not escaped me. Whereas in the introduction of this thesis, I reflected on my own dissertation written as part of my Bachelors degree in Philosophy, the similarities are not limited to that specific academic degree, and the familiar support networks and emotions – from being very excited about the research undertaken to the inevitable moments of despair – brought some feelings of kinship with the many students Glasgow's 'East Quad', home of the Geography department, has seen over time. My thesis has indeed been a thesis about theses, or dissertations as they are usually termed in undergraduate programmes; I have been going through a not dissimilar process to what my undergraduate 'subjects' have been through, my experiences entangling with theirs. Of all the things I had expected from my PhD research, I never imagined living through a pandemic while doing it, and also suddenly losing access to all these primary sources in the dissertation cupboard, my field site. My own experience in this research process again emphasised the uniqueness of every project and of being a student in a particular day and age, whether it leads to a PhD thesis or an undergraduate dissertation.

In this chapter, I reflect on the research aims and objectives, taking me back right to the start. Furthermore, I address the value of my project, emphasising the way dissertations can be used as intellectual, cultural and social sources for historical research. This research has its unavoidable limitations – for instance, in its historical and spatial scope – but also in many choices I have made along the way: by exploring certain sources more than others and skipping some fascinating questions because of a sheer lack of time. However, this final evaluation of the value of my project, as well as its limitations, evokes some very clear directions for potential future research, and also challenges readers perhaps to change their attitudes to undergraduate dissertations, Masters dissertations and PhD theses produced in their own departments, and to consider these sources as fully-fledged academic writings. My meta-engagements with these materials may hopefully lead to day-to-day engagements with similar sources: in Glasgow, and elsewhere.

Disciplinary history from below

The empirical heart of this project was one collection of undergraduate dissertations, located in a cupboard in Geography's accommodation in the 'East Quad' at the University of Glasgow. This collection, comprising dissertations from 1954 to 2014, can be researched as a singular source: as a *re*source for narrating the history of one discipline, of one undergraduate curriculum, at one institution. Simultaneously, the collection contains a plurality of 2614 dissertations, each revealing a different side of geography, a different view on the experience of doing independent research as a student, and a different reflection on being a geographer-in-the-making in a certain place and time. My objectoriented approach was aimed at acknowledging the value of the archival collection of dissertations in both its singular and plural manifestations.

Narrating the history of geography from a student perspective started by exploring existing historiographical narratives, from 'usual suspects' such as Livingstone (1992) and Johnston and Sidaway (1979, 2004, 2016), to complementing or competing narratives such as Maddrell (2009) and Blunt and Wills (2000). Two central questions in considering this variety of narratives are: first, whose 'voices' should be included, and hence who actually 'makes' the discipline? And second, what is the structuring device in creating these narratives? Is it about geographical ideas, about practices, about texts, about certain supposedly pivotal individual contributions? Engaging with canonical historiographies as well as other narratives demonstrated a clear gap in the voices that were staged. Whereas professional, established academics were, evidently, central in many narratives, and while some historiographies emphasise geographical knowledges and ideas arising outwith academia, the group of student-geographers – in numbers easily the largest group of people found in universities – are often only present as consumers of geographical knowledges (for instance, as a target audience for textbooks: Sidaway & Hall, 2018) and almost never as producers of such knowledges. Students being the main 'practitioners' of geography vastly outnumber professional academics, and they not only consume knowledge but also reproduce it (Philo, 1998), and just sometimes too they produce new knowledge. Researching student knowledge productions from the past thus provides a unique, bottom-up perspective on how geography has changed over time: becoming-ageographer is a process (Lorimer, 2003a), and this process takes place on a 'middle level', in part set between 'elite' academic geography and grassroots versions of geography (Philo, 1998).

Studying dissertations from one discipline, one undergraduate curriculum, from one

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department might not be indicative of the experiences of *all* geography students in Scotland, in the UK or globally, but this local scale of inquiry is still very valuable: knowledge is *always* situated, and approaching science as a 'view from nowhere' (Haraway, 1991) would ignore the social processes integral to the production of knowledge and only emphasise the contributions of those established, well-known, 'elite' individuals. Exploring the dissertation archive, then, addresses many 'micro-histories' in a specific social and educational context. Although my focus is primarily on what might be deemed finished work, the written dissertations themselves, I also aimed to include inquiry into wider networks of which students were a part and into the dissertation research process as a whole, including doubts and feelings that students doubtless experienced during their first independent research projects. Acknowledging, thereby, that knowledge is not something 'placeless' means that one dissertation collection at one institution is potentially a highly instructive starting-point for this disciplinary history from below, representing many small voices of the discipline and, in this, demonstrating that geographers-in-the-making play a fundamental part in the history of geography (as themselves minor 'makers' of that geography).

The approach of this project was indeed object-oriented, taking one archival collection as its main source, with archival research being the main method of research. The grand collection of small voices was, as mentioned above, explored as a singular source, by organising and categorising all 2614 dissertations by means of certain distinctive factors, providing some quantitative understanding of the collection, but a sampling method was also needed to pull out – and in so doing to value – the dissertations as individually 'complete' pieces of work that deserved to be read from cover to cover. By collecting data about numbers of dissertations from certain subdisciplines and based on fieldwork locations in specific countries or counties, it was possible to see numerous key shifts over time: shifts that tell us something about a changing student population, a changing curriculum, a changing academic discipline and even a changing society. Such quantitative data perhaps raised more questions than it answered, but it gave a broad perspective on differences in being a student-geographer in, for instance, 1954, to being a studentgeographer in, for instance, 2014. Dissertations to be read from cover to cover were those produced by all final-year student cohorts graduating every four years from 1954, and reading entire cohorts 'in one go' it was also possible to consider cohorts of students as 'communities', although it should, of course, be considered whether such senses of community might be imaginary and imposed by me. However, by reading entire cohorts, it

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was easier to recognise names of peers in the acknowledgements, to see how some students travelled together to nearby or faraway fieldwork locations, and how for at least some students the process of producing their undergraduate dissertation was intimately connected to friendships with their peers.

Complementary research was done in the University Archives, to learn more about the development of the Geography undergraduate curriculum and the growth of the department (now technically a 'School'), and by interviewing a small number of former and current staff members. These interviews were designed to enrich the archival research, and turned out to be exactly that, an enriching experience. I absolutely enjoyed this method of oral history: it thickened the research in a sense of making the sources 'come alive', and some interviews were also vital for furnishing factual information (for instance, about regulations or guidelines for supervisions) that no longer exists in the department's remaining 'paper trails'. Even so, the many similar – all approximately having the same scope in terms of word size, produced by students in the same phase of their studies – yet distinctive – the foci of inquiry, methodologies and writing styles are *very* diverse – dissertation sources always remained at the heart of my research, and proved to fit well my multidimensional framework of combining questions on disciplinary history, sociology of knowledge production and the history of academic education.

Main findings

In this section, I first look back on the results of this project, before connecting these findings to my research objectives as described in the introductory chapter of this thesis. In the four empirical chapters I addressed respectively the 'where', 'what', 'why' and 'how' of the undergraduate dissertations. The first of these questions entailed the analysis of the spatial, social and educational contexts of dissertation research: from the physical fieldwork locations, to the facilities and support in the university; from the changing role of the 'virtual' world, to dissertation rules and requirements. Analysing the question of *where* dissertation research has taken place led to three initial findings:

• The 'producers' of knowledge are always ambiguous, and this is no different for undergraduate dissertations as it is for other forms of academic writing.

Dissertations are not entirely 'free forms' of writings, but are distinguishable from other forms of formal assessment such as exams. The educational contexts in which dissertations are written strongly influence the contents of these dissertations: specific courses, facilities and individual staff members affect the choices that students make. This raises the question of who exactly produces the dissertations: to what extent are studentgeographers independent, and how much are they influenced by the networks within their department? Multiple students reflect on the influence a specific member of staff held in their choices concerning their dissertation research; and even when it is not about a specific supervisor (sometimes called an advisor, implying a more 'hands-off' role), the curriculum presents a certain interpretation, or version, of geography, implying that a geography student in Glasgow will have a slightly (or perhaps significantly) different education from a geography student in, for instance, Edinburgh or anywhere else. This educational context and the local variations of geography seem to provide less 'ownership' of students on their research, but the same might be said for 'established' geographers: they are undoubtedly influenced by their intellectual backgrounds, by the institutions they studied and work at; and so the answer to this question of who produces the knowledge is always destined to be rather diffuse. To some extent, in dissertations it is less covert than in other 'publications', because the documents themselves very much 'signal' these networks in mentioning of the supervisor, naming of the institution on the front page, and via the acknowledgements.

 Social networks and socio-economic backgrounds of students raise unequal opportunities within cohorts, and this strongly affects the 'geographic community' as a whole.

The shift from research in, or close to, Glasgow to more international research is clearly perceptible in the archival collection, and there are multiple probable causes: generally, it has become cheaper and more 'normal' to travel abroad, student mobility programmes such as ERASMUS have led to new possibilities for students to go abroad, and the student population at the University of Glasgow has mutated from a population dominated by Glaswegian students and students from the West of Scotland's Central Belt to comprising a more diverse and international group of students. Despite this continuing internationalisation of the dissertation research, for the entire time period studied in this research (1954-2014), the majority of the projects were still Scotland-based. International projects bring specific practical challenges to do with accessibility, costs and language, but many other challenges are independent of fieldwork location: for instance, the influence of the weather, use and availability of instruments, and difficulties in finding participants. Some of these issues might be dealt with by determined effort as well as support from strangers, but others are fixed by reliance on social networks and a stronger personal (and familial) socio-economic position. Already, before (academic) careers actually start, some

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geographers have enjoyed fewer opportunities and less time to focus on study, potentially a very crucial factor in later career possibilities. The privileges of having a strong support network shape the academic possibilities of and for students, and, although local or regional research is by no means 'lesser' than international research, many students who have travelled to, for instance, Tanzania, Iceland or Norway, likely on expeditions associated with particular staff members, reflected on the positive influence for themselves, both as a geography student and as a person. Especially in terms of future relationships between the UK and the EU, it will be necessary to consider the specific challenges that some students will likely experience more than others in their choices concerning fieldwork options.

• The changing conception of what is the geographical 'field' has reshaped the experience of becoming-a-geographer.

The decline of regional geography, extensively discussed in this thesis, coincided with an increase in the variety of 'scales' of research and a broadening conception of what 'the field' actually is or could be, notably in how it is no longer just a clearly delimitable 'region' such as a Scottish parish or county. Questions of scale are obviously a spatial question, but are also connected to both specific foci of inquiry and practical methodologies: for instance, the possibilities of doing virtual fieldwork have gone hand-in-hand with the appearance of online surveys and social media analyses. With a present-day cohort of students with exceptional experiences in virtual research because of the Covid-19 pandemic, it is expected that this move to 'the virtual field' might have an impact on the nature of dissertation research going forward (both in how virtual research may have inspired staff and students or, perhaps a contrary development, with very strong enthusiasm reasserting itself for 'outdoor', 'real life' fieldwork as an 'antidote' for the experienced lockdowns). Expansions of fields are thus instigated by practical circumstances, as well as by disciplinary trends and innovations. Combined, this mix fuels a broad variety of dissertation research experiences, a changing conception of what 'geographical research' actually looks like, and a changing sense of what becoming-ageographer actually means.

Such observations are inextricably connected to the changing foci of inquiry, conceptual frameworks and conceptions of what geography is and should be that are discussed in Chapters 5 and 6, concerned with the *what* and the *why* of the dissertations, in relation to which a further three observations can be advanced:

 The 'unity' of the geographical curriculum is always on the move, in convergent or divergent motions, but 'bridges' between human and physical geography remain traceable in expected and unexpected ways.

Although probably not surprising to many, the relationship between human and physical geography in the curriculum is perceptible in all eras and cohorts. It was my own expectation beforehand, coming from a national tradition where human and physical geography are two distinctive Bachelors degrees, that the divide would be stricter. Geography, as a discipline with roots in and connections with multiple conceptual and methodological traditions is a versatile discipline. Generally, foci of inquiry such as disaster studies and environmental studies cause convergent motions, drawing together human and physical geography, whereas epistemological differences – concerning what sort of knowledge is to be produced, and how – at times drive them apart. These developments are strongly embedded in the curriculum and are not independent of changing conceptions of geography as a wider academic discipline, but their translation into curricula then decides the fast or slow integration of new concepts, theories and ideas in the education of student geographers. Becoming-a-geographer, then, is slightly different from becoming a human geographer or a physical geographer, although many dissertations do fit well in one of these two categories; and the examples that are more hybrid demonstrate that the nature of the curriculum still, to some extent, defies this binary categorisation.

• Using quantitative methods to analyse a large number of dissertations is a valuable and useful tool for recognising shifts in subdisciplinary trends over time.

Organising the dissertations in different categories such as subdisciplines can never be done perfectly: there are many dissertations that would fit in multiple categories, and even coming up with a manageable list of subdisciplines to use as categories meant leaving out subdisciplines that other researchers possibly would have included. Despite this inevitable imperfection of the overview created, it turned out to be very helpful for recognising shifts over time. The timelines per subdiscipline can be found in Appendix 5, and each of these graphs is telling of the development of one subdiscipline between 1954 and 2014. Some graphs show slow and subtle changes, others show subdisciplines that became popular within the timeframe of a few years. As discussed, some of these timelines relate to wider trends in the geographical academy, while others are a combination of such disciplinary developments and the influence of individual members of staff. It can be presumed that, at least to some extent, departments and hiring committees, when deciding on recruitment strategies, specifically identify a lack of teaching expertise on a certain subject or a specific expertise that is not 'covered' yet by the existing staff. This is not to ignore entirely the innovations and new ideas that academics can develop while already working at the university, but it cannot be denied that the expertise of newly hired staff provides a more *instant* change. Strong impacts are also found in new honours options, such as the earlier mentioned Natural Hazards course. The value of quantifying a large collection of dissertations over a long period of time lies in its potential to identify both slower and faster shifts over time, and to compare these shifts to ones displayed in existing timelines that are written down about the history of geography. It is a tool to see the interplay between geography in its research and its teaching contexts: a starting-point to address disciplinary, institutional and educational relationships between research and academic education.

 There is an impressive increase of explicit self-awareness and disciplinary awareness in the dissertations over time, which also calls for a next step: awareness from potential *readers* that these are actual and valuable geographical *contributions*.

Narrating the history of geography based on these sources from many geographers-in-themaking offers a kind of 'youthful' perspective on geography: students write dissertations they deem geographical, influenced by what they have learned along the way. This youthfulness – not in terms of age *per se*, but in terms of phase in their academic education and career – leads to perspectives on the discipline that inherently will be framed a touch differently than the perspective of geographers working in the discipline for several decades. As mentioned before, *of course* students are influenced by the professional geographers in their department, but among the 2614 dissertations there are quite a few that address a very original perspective on the discipline and on their own roles as geographers. Not every work is a slice of innovative, brilliant knowledge production, to be sure, and that is not what the aim should be. However, every dissertation is a unique, individual interpretation of a geographical question or theme, and should be acknowledged as such. Towards the end of this conclusion, I revisit this observation and discuss further my call to treat undergraduate dissertations as valuable contributions to geographical knowledge.

This point is strengthened by my analysis of the question *how* students did their undergraduate research, as discussed in Chapters 7 and 8. In Chapter 7 I explored the

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methods of data collection and data analysis deployed by many generations of undergraduate students. Although many projects are very different in their focus of inquiry, even between older and newer examples there is still a striking overlap in certain core 'verbs' of data collection: being, observing, counting, measuring and asking. Generally, however, the diversity within cohorts became broadly stretched over time, encompassing an ever-widening range of methods, whereas in some of the earlier cohorts many students produced relatively similar pieces of work using much the same relatively narrow suite of activities (not even necessarily conceived as 'methods'). Shifts in data analysis of course connected across to changing research questions and conceptual frameworks, but were also strongly influenced by technological and IT developments, as well as access to laboratory and IT facilities. Shifts in methods for data collection and data analysis caused the loss and gain of certain skills among the cohorts, which becomes apparent in elements such as maps drawn by students, as discussed in Chapter 8. I also analysed the struggles of students being an 'insider' or an 'outsider', how they dealt with research ethics and their own positionality as a researcher, issues only really becoming apparent in the dissertations from the mid-1990s. These considerations also demonstrate how, unsurprisingly, students do not always saw themselves as fully-fledged geographers, and sometimes struggle with guilt about taking up peoples' time and space in doing their research. This carefulness, sometimes even humbleness, is a good reminder that researchers are often supported by many others, from their own network and from networks of strangers. Formalisation of the research ethics process of course emphasises this sort of concern, while also potentially making some forms of research beyond reach for undergraduate students.

• Exploring undergraduate sources as *material* sources proves a surprising historical resource.

As discussed in Chapter 8, the binding and appendices of dissertations have changed so much over time: from folders to ring-binders; from including floppy disks and CD-ROMs to USB-sticks and then online submissions; from appendices such as complete Ordnance Survey Maps to advertisements and articles from magazines and newspapers. The forms of presentation have changed greatly too: from hand-written to typed to word-processed; from hand-drawn maps and glued-in polaroid photos to Google Earth Maps and scanned-in photographs. Indeed, the material dimension of the dissertations might have deserved an entire research project dedicated to it alone. The dissertations as material sources also include many marker's reports in them, accidentally or purposefully attached to the dissertations. These documents are informative, even though my aim was explicitly *not* to 're-evaluate' the dissertations by their quality, but they yielded insights into what was expected of students, how feedback was framed and written down, and on how certain grades were justified by the supervisors and other markers. The shift, for instance, from one supervisor being the marker to a system of the supervisor and a second marker marking a dissertation before deciding on a grade, with a third person stepping in if the two initial gradings were too far apart for a compromise to be agreed, is demonstrated clearly by some of these markers' reports.

The dissertations as material sources clearly manifest the labour of producing the final dissertation. Whereas for very recent cohorts there are sometimes multiple copies of the dissertation in the archive, this is never the case for earlier dissertations: of course, the ease of just printing an 'extra' copy for the second marker is very different from handwriting a second version of one's work. To have the dissertations actually in your hand, as the researcher, offers a different experience than just reading the content, and it allows a richer sensibility than would arguably arise simply by reading 'just' the texts in the dissertations. Seeing the dissertations organised collectively in one cupboard really is something different from unzipping a .zip file containing all dissertations of a cohort (as is the case when studying Glasgow's geography dissertations from academic year 2017-2018 or later): the lived experience of doing research, writing up a dissertation, handing in the dissertation and waiting for it to be marked, becomes much more palpable when browsing the crowded stacks of the cupboard.

Contributions of the thesis

In the introduction to this thesis (Chapter 1), I described three research objectives. With the recap of my main findings and observations in mind, it is now possible to revisit these three objectives and to address, in final, bold outline, the contributions made by this thesis. In short, the three research objectives were:

- To recover the otherwise under-represented voices of student-geographers from a near-unique archive of undergraduate geography dissertations;
- To demonstrate the use of undergraduate dissertations as intellectual, cultural and social sources illuminating diverse matters to do with the contexts, contents, concepts and conducts of student knowledge production;
- To consider the connections between these dissertations and the history of geography, the sociology and geography of geographical knowledge production,

and the history of academic education.

I address these three objectives in turn and connect the aforementioned findings of this project to the three specific research objectives formulated at the start of this project.

The under-represented voices of student-geographers

This project was designed to stage the voices of many geographers who are often neglected. Undergraduate dissertations are usually seen as ephemeral sources, read by only a handful of people, and yet writing a dissertation is a shared, formative experience for many, if not all, established academics, and thus a very recognisable practice. The centrality of undergraduate degrees in university departments (in terms of centrality to curricula, how they 'gather' together so much conceptual, methodological and (sub)disciplinary learning, and the substantial workload of staff supervision) as well as in the personal reflections of past students on their 'student life' (in terms of the undergraduate degree¹³⁰ taking up several formative years whereas postgraduate degrees are often either shorter – for instance, 1-year research Masters – or only experienced by a select group – for instance, PhD degrees) arguably demands a similar centrality of their voices in the discipline's history and practice. This does not mean, for instance, that academic journals and conferences should suddenly start carrying and presenting large quantities of undergraduate work, although maybe there could be a commitment to occasionally publishing versions of high-quality undergraduate dissertations or showcasing such work in other ways. Certainly, though, it should mean that the voices of studentgeographers not be kept silent solely because they are the voices of relatively inexperienced geographers. This thesis as a whole aimed to recover and to give an account of these under-represented voices, and other forms of publication and outreach following from my thesis (such as a publication in Area [Bruinsma, 2021] and several conference papers) have been aimed primarily at this research objective. I hope that, even given the reality of working at institutions with massive student numbers and an enormous workload, academic staff supervising, teaching and examining undergraduate students will keep recognising the surprising, beautiful, meticulous, well-written, exemplary, fascinating, and/or critical works of research produced by at least some of their students.

The choices made by many generations of undergraduate students reveal longitudinal

¹³⁰ Work for an undergraduate dissertation at Glasgow has commonly straddled two academic years, often lasting more than twelve months from initial conception to final submission, with different 'milestones' along the way.

trends and shifts in the discipline and its component subdisciplines, but they do offer more than that: in discussions about canonicity, or the lack of a geographical canon, studentgeographers as a wider grouping within (or at least fringing) the academic community prompt alternative ways to look at canonicity. The bibliographies of the dissertations disclose transient, 'temporary canons' that are widely shared by students at a specific moment and a specific place in time: for instance, the usage of the Statistical Accounts of Scotland were ubiquitous in the regional dissertations of students of the 1960s, as was Flowerdew and Martin's Methods in Human Geography (2005) for more recent human geography students around 2010. These temporary canons seem strongly shaped by members of staff. Sources used as undergraduate students will presumably influence later reflections on 'the geographical canon' when some of the undergraduate students become early-career researchers. My thesis acknowledges and draws attention to the insights that dissertations offer for the history of geography, but also addresses the complex and hybrid spaces in which geographical knowledge is produced, acknowledging the shared – maybe momentarily or even merely locally 'canonical' – foundations of future 'established' geographers as well as of many 'professional' geographers continuing their careers outside of the university.

Undergraduate dissertations as intellectual, social and cultural sources

The second objective to some extent complements the first. Whereas the first was moreor-less a 'political' objective, aiming to give voice to a specific group, this second objective was designed to reflect upon the value that listening to these voices will have for geographers. The dissertations can be studied as intellectual sources, adding new perspectives, confirming, rejecting or reshaping existing geographical ideas. The social and intellectual roles that students play in a department are significant, as are the social networks and connections that 'take place' beyond the words written down in the dissertation. The significant experience of writing a dissertation, undertaken by so many, also makes the dissertation a historical source that opens a window on an important rite of passage: annually done by so many, almost a ritualistic movement from being 'just' a student-geographer to being, as it were, an approved, acknowledged, even 'certified' geographer with the degree and academic title as 'proof'. These rituals shift over time, but are nevertheless still very much recognisable as this shared experience across time. This multi-dimensional value of undergraduate dissertations is examined in this thesis by exploring all these sides: sometimes focussing on the intellectual perspective, other times on the social or cultural perspective, but often acknowledging the multi-layered,

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overlapping use of the dissertations (as singular and plural source materials) for historical research.

There are also pedagogical implications with regard to the usage of undergraduate dissertations as historical sources. Especially by treating the dissertations as windows on the social and cultural 'coming-to-being' of the final intellectual knowledge productions, it becomes evident that many dissertation projects are influenced by social networks, economic support networks and the related time spent on part-time jobs (and time thus not available for research). The archive reveals a shift to more research occurring away from Glasgow over time, but it is also important to note that the inequality of means within cohorts is not decreasing – perhaps even on the contrary. The acknowledgements written by students from more recent cohorts reveal the opportunities some have enjoyed, as well as the resilience of many students to combine external as well as self-imposed obligations with their dissertation research. The impact of such combined responsibilities is not always negative, and might lead to innovative perspectives on, for instance, child care, employment and student life, but this reality might ask for awareness, or perhaps different forms of guidance, from academics supporting student-geographers in their dissertation endeavours. The pedagogical implications of changes in the social and cultural experience of becoming-a-geographer over time, alongside the differences between individual students, suggest in some cases the need, for instance, for flexibility, information about funding opportunities, and introductions to a wider network. It also means that some students might already bring very specialised personal or professional experiences with them, which might encourage and motivate students to choose particular foci of inquiry, methods, or fieldwork locations.

Connections with the history of geography, the sociology and geography of knowledge productions, and the history of academic education

The nature of this research project is historical, and this thesis hopefully contributes to existing narratives charting the history of geography. However, the in-depth analysis of and engagement here with many small knowledge productions, ones produced by so many different students, also shines a light on the sociology and geography of how knowledge is produced: the realities of questions about access, money, travel opportunity, language, and social, intellectual and practical support unavoidably, and sometimes profoundly, shaping the intellectual knowledge productions of these geographers-in-the-making. Social networks and socio-economic backgrounds raise unequal opportunities, as already highlighted, and the facilities and support within the university are also different for every cohort and every student. Societies change, universities change, curricula change, and students change, and all this change means that critical historical analysis of how geographical knowledge has been produced by many generations of students must evoke many specific questions about the circumstances in which these knowledges have been produced.

In comparison to other writing on the intersection of the history of academic education and the sociology of knowledge production, the emphasis placed on dissertations as advanced here in my thesis goes beyond the common treatment of students as relatively passive knowledge consumers. This emphasis has included reflections on the responsibility and autonomy of students in shaping their own research projects, organising their travels to fieldwork locations and building positive student-supervisor relationships. This thesis explored these spatial and social contexts of undergraduate students in depth and, by combining a historical perspective with this sociological and geographical perspective, has given agency to this under-represented group within the outer reaches of the academic community. By acknowledging their importance, both in size of the group of students and in their produced knowledges, their experiences deserve to be studied just as the research experiences of 'established' researchers are studied by sociologists of science.

The central role of 'fieldwork' in the geography degree adds a specific additional flavour to these questions, namely the status of independent research away from university, causing a spatial distance between student and university. The geographies of undergraduate students disclose worlds unto themselves: from laboratory to library, from rivers to mountain tops, and from chicken coops to shopping centres, student-geographers go just about anywhere, usually physically but sometimes only virtually. In work on the history of academic education the 'student experience' of undergraduate students is regularly studied, but the first individual research endeavours of undergraduate students are not (witness the almost complete absence of extant work on the history of 'the dissertation'). However, these experiences turn out to be highly formative experiences for many future researchers and play a similar role in the lives of geographers with other career paths. The lively and detailed memories that people share when asking about their undergraduate dissertation research prove that this element of the curriculum is something different from regular coursework. My thesis addresses the centrality of experiencing the challenges and opportunities of doing independent research in the field for future geographers, and brings the contexts of research and education together. This approach indeed shines a new light

on what it means to become an academic, and more specifically, to become a geographer.

The specific third objective of this research project was to weave the dissertation into the history of geography and then across into fields such as the history of academic education and the sociology and geography of knowledge production. The object-oriented approach made these connections *for me*: every single dissertation was a 'small story' of a student travelling to exciting or not-so-exciting places, of helpful or not-so-helpful supervisors, parents and friends, of insightful or not-so-insightful reflections on what it meant to be a student, a geography student, at the University Glasgow; but every single dissertation also constituted an intellectual piece of geography, written in a specific social, spatial and educational context, and it is my assumption – in certain respects, even my hope – that these aspects are as entangled in my own thesis as they were for all those dissertation students.

Possibilities for further research

Over the last three years, I have spent more time in a cupboard than I expected to spend in a lifetime. The main value of this project was rooted in the richness of the archive, which I know contains so many more particular narratives, experiences and knowledges that are not discussed here. The sampling method was a realistic and carefully chosen option, but it was also difficult to leave out three-quarters of all dissertations in the archive, not knowing, beyond the browsing of titles what 'treasures' remained on the shelves, unread. All passers-by in the corridor where the archival cupboard is located looked at me with pity as I entered my windowless field site, day after day, but I honestly enjoyed seeing all these spines and front covers with their titles, specific fonts and illustrations or photos, knowing that in many cases a lot of work had gone into creating that specific dissertation (or in a few cases, not that much work...) followed by the sense of relief at handing in the dissertation.

Despite the extensive amount of time spent with 'my' archival sources and the thorough analysis of these sources, there are of course limitations to this project. Looking back, I would have liked to have carved out more time for interviews. Oral history is a fascinating method, and it is a luxury in undertaking relatively *recent* historical research that it is actually an option to talk to people about the subject-matters of the research. It is a way to collect new information, but also to get a clearer perspective on how certain situations actually impacted human lives. Disciplinary history is about knowledge, about practices and about research, but most of all it is about *people* doing all these activities, building relationships with each other and with strangers. Seeing disciplinary history as the history of the people making up the 'disciplinary community' asks for very strong engagement with the practitioners. A potential follow-up research project, one that would strengthen and complement the research discussed in this thesis, would be to follow a cohort of undergraduate geography students while working on their dissertations: from choosing subjects, to meeting supervisors, to doing the actual research, to submission, right up to receiving the grade for the research done. Following a number of students in one cohort would offer the opportunity to get a close-up, ethnographic perspective, not just about what it *meant* to be a geographer-in-the-making, but also what it *means* to be exactly that, right now. Of course, such a project would be time-consuming, and it would not be possible for an individual researcher to collect so *many* of these small voices of student-geographers as perhaps I have been able to manage from trawling the written archive, nor to research these voices in such a decades-spanning longitudinal study, but I think it would offer a fascinating 'step 2' of the research reported here.

Besides this possibility of taking a more contemporary, close-up approach to the experience of becoming-a-geographer, from a historiographical perspective there are still many questions unanswered. Some questions came to mind during this research, but were put aside because of a lack of time or due to the fear of losing focus in this project. I would, for instance, be really interested in diving deeply into the bibliographies of undergraduate dissertations, using them to provide some kind of 'network analysis': to study what academic sources are often read in combination with each other, to see how certain texts are omnipresent in some cohorts but slip out of fashion within a few years, and many more specific questions about how textbooks, and other texts, are used by students.

Closing the cupboard door

So much knowledge is developed, created and written down by students, and often these knowledge productions get lost quite soon after the dissertation is handed in, graded and archived. That said, former students take this formative experience of doing the research, as well as bits of that knowledge, with them into their subsequent lives and careers. The knowledge is hence not lost entirely for everyone, and in certain regards it is still very much 'out there' in the larger world, but this knowledge is arguably worth being better curated and, perhaps, made more widely accessible. Many professional geographers working at universities will teach, advise, supervise and examine undergraduate geography students, and will at times be surprised – positively or perhaps sometimes otherwise – by their ideas, methods and analyses. Just possibly these professional geographers would welcome being able to have ready access to a properly catalogued dissertation archive such as is furnished

by the Glasgow collection. Big questions remain, however, about how this archive might be maintained in the future – particularly now that the physical store needs to be supplemented by fresh efforts to update the digital store – as well as curated, rendered widely searchable and dissertations made accessible as hard or virtual copy. My research was funded under the Leverhulme Trust 'Collections' initiative, and it is exactly in this understanding of the dissertation archive as a historical *collection* that is striking: before I started this project, staff members have tried to collaborate with the University Library and the University Archives to store, maintain and save this collection, but questions of space, ethics and copyright were complicating factors. Likely, the dissertations will remain in their cupboard, dependent on the interest and concern of certain staff members, likely to 'battle' at some point for the need for more physical space.

In this longitudinal research, the increase of possibilities for international travels proved dramatically to reshape the experiences of undergraduate geography students at the University of Glasgow, and the same might be said about myself. The knowledge and experience gained here, in Glasgow, will definitely not be considered lost by me, but I also sincerely hope that I achieved a very small change in how knowledge productions of students, from whatever level or university, are considered for what they are: sometimes valuable, sometimes crappy productions of knowledge, with an entire 'world' going on behind the words that are written down.

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Appendix 1 Copy of table of key dates and events in the history of geography at Glasgow (Philo *et al.*, 2009: 224-225)

224 C. Philo et al.

Table 1. Key dates and events in the history of geography at Glasgow

	Table 1. Hely dates and events in the instery of geography at Chasgow
1908	Motion passed that University Court should consider establishing a 'Lectureship in Geography'
909	Appointment by University Court of Captain (Sir) Henry Lyons as 'Lecturer in Geography'
909-10	First academic session when a Geography 'class' is formally taught
911	Lyons leaves; appointment of J.D. Falconer as 'Lecturer in Geography'
913	Appointment of first 'Student Demonstrators' and then first 'Assistant' in Geography
914	Endowment of 'Livingstone Lectureship or Professorship in Geography' (never
1017	straightforwardly filled owing to financial shortfall)
916	Falconer requests leave of absence; appointment of Dr Marion Newbigin as 'Temporary Lecturer in Geography'
917	Falconer continues leave of absence; appointment of Dr James Cossar as 'Temporary Lecture in Geography'
918	Falconer continues leave of absence; appointment of Dr Alexander Stevens as 'Temporary Lecturer in Geography'
921	Falconer resigns; appointment of Stevens as 'Lecturer(-Examiner) in Geography' on rolling on year basis
1921	Geography accepted as a Single Honours degree (BSc) in the Faculty of Science, but first graduate with an Honours Geography degree is seemingly not until 1926
925	Stevens formally admitted to Senate, indicating that he was now seen as the established 'Lecturer in Geography'
931	'Department' staff now numbered Stevens and six teaching staff (including one other 'Lecture and five 'Assistants')
947	Institution of a formal 'Chair of Geography' (not the 'Livingstone Chair')
ate-40s	Geography accepted as partner in some Combined Honours degrees (MA) in the Faculty of Arts
953	Stevens retires; appointment of Dr Ronald Miller as 'Professor of Geography' and Head of Department
955	First edition of (<i>The</i>) Drumlin, student-led departmental geographical magazine (has appeare annually most years since)
955-61	'The Crofting Survey', led by lecturers Drs James Caird and Allan Moisley (see Lorimer & Philo, 2009)
958	British Association meets in Glasgow; Department was active in production of associated Handbook (Miller & Tivy, 1958)
963	Institution of two Postgraduate Diplomas in Cartography and Photogrammetry, subsequentl enlarged to taught MSc status, but eventually discontinued
964	Foundation of an Honours degree in Topographic Science (BSc [then MA] in Applied Science and first graduate with a Topographic Science Honours degree is in 1969
964	Reorganisation of Geography Honours programme: from single common course to mix of con and option courses (in 'regional geography' and 'systematic geography')
976	Miller retires; appointment of Dr Ian Thompson as 'Professor of Geography' and Head of Department
978–94	Establishment of the Departmental Occasional Paper Series (see Lorimer & Philo, 2009)
986	Thompson stands down; appointment of Dr Joy Tivy as Head of Department
986	Department officially renamed Department of Geography and Topographic Science
989	Tivy retires; re-appointment of Thompson as Head of Department
990	Department hosts IBG Annual Conference, coinciding with Glasgow as European City of Culture
992	Thompson stands down; appointment of Dr John Briggs as Head of Department
998	Briggs completes term of office; appointment of Professor Ronan Paddison as Head of Department
002	Paddison completes term of office; appointment of Professor Chris Philo as Head of Department
002	Department officially renamed Department of Geography and Geomatics (with Earth Science technically as a constituent 'Division')
2002	Institution of MRes in Human Geography, subsequently secures ESRC and AHRC recognition
2004	Department plays prominent role in 30 th Congress of the IGU, held in Glasgow
2005	Philo completes term of office; appointment of Professor Trevor Hoey as Head of

(continued)

2005 Department merges with Earth Science and officially renamed Department of Geographical and Earth Sciences
 2007 Institution of taught MSc in Geospatial and Mapping Sciences
 2008 Final closure of the Honours degree in Topographic Science (or Geographical Information and Mapping Science, as it had been renamed in 2001)
 2009 On the Honours degree in Topographic Science (or Geographical Information and Mapping Science, as it had been renamed in 2001)

 Table 1. (Continued).

2009 Centenary of teaching and researching Geography at the University of Glasgow

Source: Various, but see Philo with Lafferty (2009) for further details on the earlier years.

Notes: AHRC = Arts and Humanities Research Council (UK); ESRC = Economic and Social Research Council (ESRC).

IBG = Institute of British Geographers (now united with the RGS [Royal Geographical Society]); IGU = International.

Geographical Union.

Appendix 2 Information Sheet Interviews



Participant Information Sheet

Collecting worlds, learning geography: inquiries into the undergraduate geography dissertation

My name is Mette Bruinsma and I am a PhD student in the School of Geographical and Earth Sciences at the University of Glasgow. I am inviting you to participate in a research project looking at the history of geography as an academic discipline from a bottom-up and educational perspective. The project aims to broaden the narrative about the historiography of geography with the experiences of the great number of undergraduate geography students that have graduated, with an emphasis on the second half of the twentieth century.

Before you complete the consent form please read this information sheet which will outline my project and what participation will entail. Following this please feel free to contact me with any questions you may have or to discuss the project further on the contact details provided below.

1. What will taking part in the research involve?

Participation in this research project will consist of an interview. The time, date and location will be decided with you individually through further contact. Some of the topics I am looking to cover in the interview are:

- Your own history at the School of Geographical and Earth Sciences, University of Glasgow;
- Experiences in supervising and/or assisting dissertation projects by undergraduate geography students;
- Reflection on changes in the undergraduate geography curriculum;
- Formal and informal changes in dissertation projects over time (themes/methodologies/rules and guidelines);
- Personal memories of outstanding/surprising dissertation projects;
- The relationship between the department's own policies regarding dissertations and the general, university-wide rules and guidelines.

With your permission the interview will be audio recorded. This is to ensure accuracy of information and also to help with dissemination of my work. However, your consent is needed before this can take place.

2. Do I have to take part?

Please ask any questions you might have about this research before deciding whether or not to take part. You are free to choose whether you would like to participate. If you do agree, and then later change your mind, you may withdraw yourself and your data from the study without questions at any time. If you are happy to take part in the study, you will be asked to sign a consent form.

3. What happens to the research data provided?

The raw research data – recordings of interviews - will be typed up into Word Documents. Audio-files will be saved as these will be transcribed and used within the thesis. This information can then be analysed to produce the thesis. After publication of the thesis the audio-files will be deleted.

4. Who has reviewed this project?

This project has been reviewed by, and received ethics clearance through, the University of Glasgow Research Ethics Committee. The project is also being supervised by two members of staff.

5. Contact details

Researcher:

Mette Bruinsma School of Geographical and Earth Sciences, Email: Phone :

Supervisors:

Professor Hayden Lorimer School of Geographical and Earth Sciences, Email: hayden.lorimer@glasgow.ac.uk

Professor Chris Philo School of Geographical and Earth Sciences, Email: <u>chris.philo@glasgow.ac.uk</u>

Appendix 3 Consent Form Interviews



Consent form

Collecting worlds, learning geography: inquiries into the undergraduate geography dissertation

- □ I have understood the information sheet.
- □ I would like to take part in the interview.
- All information I disclose may be used in the research unless otherwise stated.
- I understand that I can withdraw from the research, without penalty, at any time.
- I give permission for a tape recorder to be used, knowing that all recordings
 will be kept safe and secure.
- □ I give permission to use my name instead of a pseudonym.

Signed.....

Date.....

Contact email/telephone.....

Appendix 4 Ethics Committee Approval Letter



Dr. Christoph Scheepers Senior Lecturer

School of Psychology University of Glasgow 58 Hillhead Street Glasgow G12 8QB Tel.: +44 141 330 3606 Christoph.Scheepers@glasgow.ac.uk

Glasgow, March 4, 2019

Ethical approval for:

Application Number: 300180127

Project Title: Collecting Worlds, Learning Geography

Lead Researcher: Professor Hayden Lorimer

This is to confirm that the above application has been reviewed by the College of Science and Engineering Ethics Committee and approved. Please refer to the collated reviews on the system for additional comments and suggestions, if any. Good luck with your research.

Sincerely,

Dr Christoph Scheepers Ethics Officer College of Science and Engineering University of Glasgow

Did you know? For projects requiring the use of an online questionnaire, the University has an Online Surveys account for research. To request access, see the University's application procedure at https://www.gla.ac.uk/research/strategy/ourpolicies/useofonlinesurveystoolforresearch/.

Appendix 5 Percentage of dissertations per cohort organised by subdiscipline

NB. The y-axes of these figures differ per graph, because the percentage of subdisciplines per cohort differ greatly per subdisciplines.













































