"The Sociological Imagination": Researching Sustainability, Using Phenomenography

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This thesis results entirely from my own work and has not been offered previously for any other degree or diploma.

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Abstract

Sustainability has become an area of increasing relevance and prevalence in higher education, most universities now practising and encouraging various sustainability and environment-based initiatives. However, the more specific areas of Education for Sustainable Development and sustainability in the curriculum remain widely contested. Whilst sustainability has been explored in the context of most disciplines, there is a relative paucity of published work exploring sociologists' perspectives. As a consequence, this study sought to investigate sociologists' perspectives about sustainability in higher education and in higher education curricula. Twenty-four sociologists were interviewed using the phenomenographic approach, which focuses on variation in understandings of a specific phenomenon. The design of the project accounted for suggested weaknesses in previous sustainability research, was undertaken at three different universities, and included an equal number of staff and student participants. All interviews were undertaken, transcribed and analysed by the researcher, and particular attention was given to the data analysis phase of the project, in which phenomenographic procedures were adopted. Analysis led to the development of two outcome spaces, respectively entitled 'Sustainability and me' and 'Sustainability and my discipline'. Each outcome space comprised a series of categories of description, demonstrating clear variation in sociologists' conceptions of their own relationships with sustainability, and of the relationship between their discipline and sociology. Based on these outcomes, it is argued that sociological perspectives could be important in guiding future education, practice and policy about sustainability. They provide insights into challenges and debates associated with sustainability and can play a role in offering ideas for the progression of relevant initiatives in higher education institutions. In addition, claims are made for new knowledge yielded by the study and limitations and ideas for future research are noted. Whilst a matter of on-going debate within the higher education sector, sustainability is of vital and urgent importance in contemporary society. As a representative of the educational research community, I intend this thesis to serve as an invitation to the sociological community to develop its involvement in this area.

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List of Abbreviations

BASc	Degree of Bachelor of Arts and Sciences
BERA	British Educational Research Association
DfE	Department for Education
DfEE	Department for Employment and Education (former organisation)
EAUC	Environmental Association for Universities and Colleges
EBSCO	Elton B. Stephens Co. Information Services
ECER	European Conference of Educational Research
EERA	European Educational Research Association
EfS	Education for Sustainability
ERIC	Education Resources Information Center
ESD	Education for Sustainable Development
ESRC	Economic and Social Research Council
HE	Higher Education
HEA	Higher Education Academy (now part of Advance HE)
HEFCE	Higher Education Funding Council for England (former organisation)
IJAD	International Journal for Academic Development
KPI	Key Performance Indicator
NUS	National Union of Students
QAA	The Quality Assurance Agency for Higher Education
SD	Sustainable Development
SDGs	Sustainable Development Goals
SEAD	Sustainability Education Academic Development Framework
SEDA	Staff and Educational Development Association
SLDP	Sustainability-Leadership Development Programme
STARS	Sustainability Tracking, Assessment and Ratings System
STEM	Science, Technology, Engineering and Mathematics
TEF	The Teaching Excellence and Student Outcomes Framework
THE	Times Higher Education
UK	United Kingdom
UNESCO	United Nations Educational, Scientific and Cultural Organisation
WCED	World Commission on Environment and Development ('The Brundtland Report')

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Next, a message to my family: my mother, father and two sisters, Nicola and Alexandra. Thank you for all your support and encouragement during this time. And of course, special thanks to Victoria, my loyal partner, for everything done and endured during some testing times. You have all been constants and I couldn't have completed this journey without you.

During the undertaking of this thesis, Anna, our daughter, and Alexander, our son, were born - now aged 3 and 1. We are lucky to have you. You are also both representatives of the next generation about which sustainability, the subject of this thesis, is based. This work is dedicated to you.

Note on the title

The title of the thesis is unusually short, its first part ("The Sociological Imagination") named after the sociological text of the same name by C. Wright Mills (1959). In this book, the author presents a vision for sociology based on linking individual and societal perspectives and sets out a distinctive role for sociology amongst the social sciences.

Lancaster University Friends Programme

Chapter 1: Introduction

1.1 Background

The issue, practice and study of sustainability has attracted considerable interest during the last 25 years in the higher education sector. There has been a proliferation of activity marked by a busy policy agenda, much increased research interest, the emergence of several journals, and numerous conferences. Further examples of this proliferation include, but are not limited to, the establishment of journals such as *Sustainability* (2009), the development of international networks such as the *Environmental and Sustainability Education Research Network* (part of the European Educational Research Association), the creation of higher education organisations such as the Environmental Association for Universities and Colleges (EAUC, latterly renamed The Alliance for Sustainability Leadership in Higher Education) which also organises sustainability-based awards and conferences, and new committees and professional services in universities across the United Kingdom (UK) and in many countries around the world. In the UK, organisations such as the former Higher Education Funding Council for England (HEFCE), the Quality Assurance Agency for Higher Education (QAA) and the Higher Education Academy (HEA - recently merged into Advance HE), have all been involved in policy and initiatives such as sustainable development policy (HEFCE, 2005, 2009, 2014), the Green Academy (HEA, 2011) and the Universities UK 'Statement of Intent' (2010).

The development of sustainability policy has occurred in parallel with the emergence of higher education league tables and rankings in both the UK and internationally, each attempting to measure, in slightly different ways, institution's progress in implementing sustainability initiatives, their criteria being both practical (in areas such as carbon emissions and procurement) and academic (providing students with opportunities to learn about sustainability as part of their programmes, or through the undertaking of relevant research). Examples of such schemes include the Green League (UK), the Sustainability Tracking, Assessment and Ratings System (STARS) (in the United States) and the *Times Higher Education* (THE) international 'impact rankings', based on Sustainable Development Goals (SDGs) established by the United Nations Educational, Scientific and Cultural Organisation (UNESCO, 2017), and which will be examined in more depth in the literature review. At its inception, STARS represented a major national strategy for tracking sustainability progress through a series of predetermined metrics, in an attempt to recognise the different aspects

of sustainability. UNESCO (2017) provide advice for implementation of its SDGs through policy and ESD (Education for Sustainable Development), offering country-based case studies of good practice for integrating sustainability in policy (citing Costa Rica and Kenya as examples).

In addition, various studies suggest that many students are interested in seeing sustainability issues progressed in their institutions and addressed in their curricula (Drayson et al, 2013; Drayson et al, 2014; Jones et al, 2010). Such interest and activity have yielded some successes: many universities have made progress in campus environment issues such as recycling, travel, reducing carbon emissions, and in food sourcing and supply.

However, there are also notable areas of debate, two of which warrant immediate comment for purposes of this study. The first concerns what sustainability means and encompasses; the latter, whether and how sustainability should be included in university curricula. The two areas are not mutually exclusive: a broad-ranging interpretation of sustainability might, for example, enable a more straightforward inclusion in certain curricula. But the relationship between sustainability and the higher education curriculum has sometimes been troubled, with some commentators providing a persuasive case in favour (Orr, 2002), others providing examples of how sustainability has already been included innovatively in particular curricula (Barlett and Chase, 2013; Cotton et al, 2012; Johnston, 2012; Jones et al, 2010), and others warning of barriers and disadvantages to its integration (Chase 2010; Reid and Petocz, 2006). So, whilst sustainability is associated with good intentions in the sector, it has also polarised opinion (Baughan, 2015).

It is with the understanding that there remain unresolved tensions in sustainability in higher education that this study was devised and undertaken. In particular, many of the challenges appear to be at the level of the discipline, with sustainability seemingly linking more naturally to some disciplines than to others. Therefore, to help further contextualise the work, the next two sections offer brief accounts, first, of sustainability itself, and, second, of the relationship between sustainability and higher education as seen through the lens of policies and initiatives.

1.2 Defining sustainability

Whilst we have seen significant progress in practical aspects of sustainability in the sector,

there are different interpretations as to what it means and encompasses. Various explanations have been posited, and numerous journal articles about sustainability and related terms include a discussion of this definitional problem, many beginning with the following, used originally in the Brundtland Report:

> [Sustainability is about] development that meets the needs of the present without compromising the ability of future generations to meet their own needs (United Nations / WCED, 1987).

This is a helpful starting point, but other, more detailed interpretations have been offered. It is not that these are all markedly different, but there is elasticity in the term and different emphases in accounts. Perhaps, then, it is useful for the reader (and writer) to be aware of several explanations:

> Sustainability efforts are defined broadly to include changes in campus operations, financial and administrative planning and/or policy, and/or academic curricula and research that facilitate positive environmental changes (Brinkhurst et al, 2011, p. 340).

> Sustainability is a concept, a goal, and a strategy. The concept speaks to the reconciliation of social justice, ecological integrity and the well-being of all living systems on the planet. The goal is to create an ecologically and socially just world within the means of nature without compromising future generations. Sustainability also refers to the process or strategy of moving towards a sustainable future (Moore, 2005, p. 327, adapted from a definition by Fien, 2002).

> [Sustainability] …represents a condition, or set of conditions, whereby human and natural systems can continue indefinitely in a state of mutual well-being, security and survival (Blake et al, 2013).

It is also helpful to be aware of the related concepts of sustainable development (SD) and education for sustainable development (ESD). Cotton et al (2009) untangle these terms:

> We use sustainable development... to refer to a broad range of environmental, social, economic and equity concerns, at both an inter- and intra-generational level. ESD [education for sustainable development] is used... to describe the incorporation of sustainable development into teaching (p. 722).

Overall, sustainability in higher education is best understood as an umbrella term referring

to activities including, but not limited to, environmental management, energy use, travel, recycling, university estates, carbon reductions, food sourcing, and sustainability in the curriculum. It is also used widely to cover social justice issues. Caradonna (2016) offers an historical analysis of sustainability and the sustainability movement, drawing upon ideas of ecological economics, environmental conservation, and social justice: his discussion provides further clarity on definition and will be returned to. He also identifies a series of future challenges and directions for the sustainability movement which will be revisited towards the end of the thesis. *This* work assumes a broad-based view of sustainability, although no single definition was offered to participants to avoid influencing their accounts (a range of examples were made available to participants if they asked).

1.3 Policy context

Sustainability, and particularly ESD, have formed the focus of a number of international policies and initiatives, the first high-profile example being the Talloires Declaration (1990), signed by university leaders representing 320 institutions in 47 countries, committing to environmental sustainability in higher education (University Leaders for a Sustainable Future, 2005). This was followed by the Rio Earth Summit (1992), which again emphasised the importance of ESD (Anderberg et al, 2009), as did the World Summit on Sustainable Development in Johannesburg (UN, 2002). Most prominently, the United Nations declared 2005 to 2014 as the 'Decade of ESD', and in so doing, established a series of Regional Centres of Expertise (RCEs), providing a major incentive for educational institutions to engage with ESD (Anderberg et al, 2009).

Mirroring and often responding to the above, sustainability policies and initiatives have also been a feature of UK further and higher education. Although some institutions have long been involved, the first national initiative was that commonly referred to as the 'Toyne Report', based on the recommendations of the Committee on Environmental Education in Further and Higher Education, appointed by the (then) Department for Education and the Welsh Office (DfE and Welsh Office, 1993). This advocated improved environmental responsibility in further and higher education, making 27 recommendations ranging from "formally adopting a comprehensive environmental policy statement and an action plan for its implementation, to 'cross curricular greening'" (Perdan et al, 2000, p. 267). It was an ambitious starting point - and a subsequent review of progress suggested that most institutions were largely indifferent to the report's recommendations (Alkaher, 1996).

Further initiatives were devised, including the Universities UK 'statement of intent' (2010), the Green Academy (Higher Education Academy, 2011), and most prominently, the publication of sustainable development policies and action plans by HEFCE (2005, 2009). The web link for the first edition (2005) of the HEFCE policy opened thus:

> Our vision is that, within the next 10 years, the sector... will be recognised as a major contributor to society's efforts to achieve sustainability – through the skills and knowledge that its graduates learn and put into practice, its research and exchange of knowledge through business, community and public policy engagement, and through its own strategies and operations. (p. 3)

However, the policy attracted trenchant criticism, Knight (2005) arguing: "It represents the final assault on the last remaining freedom of universities". Less than five years later, a second edition of the policy offered the following:

> Higher education institutions can make a substantial, sustained and exemplary contribution to the challenge of sustainable development through teaching and research, as campus managers, as employers and as protagonists in their local communities (HEFCE, 2009, p. 3).

This newer document stated that HEFCE and, by implication, individual institutions needed to "do more to support the educator role" (p. 6) yet curricula and pedagogy roles were handled briefly. Consultations were held for a third edition, but this was not published within expected time-scales. Instead, a new framework was published in 2014, entitled *Sustainable development in higher education: HEFCE's role to date and a framework for its future actions* (HEFCE, 2014). This appears to take a 'light touch' approach, given that, under its 'Action required' section, it says only "This document is intended to enthuse and encourage change" (p. 2).

In general, policy and awareness-raising initiatives have borne some successes, there being some impressive examples of environment-based innovations in the sector. Unfortunately, the curriculum issue endures: "the area of curriculum change has been, and continues to be, the most difficult aspect of the HE response to the sustainability agenda as regards its implementation" (Sterling and Witham, 2008, pp. 400-401). This suggests a need to further interrogate the issues, barriers and debates relating to sustainability in the curriculum, and, bearing in mind that sustainability in the curriculum poses different issues in different disciplines, and that sustainability has been better researched in some disciplines than in

others, undertake more research about sustainability and its relationship to *particular* disciplines. This should offer benefits to those seeking to develop pro-sustainability activities and teaching.

In summary, a wide range of policies and initiatives have been developed about sustainability at organisational, national and international levels. Many universities have developed their own policies about sustainability too, this being reflected in responses offered by some of the participants in this study. However, I did not refer to policies and strategies in my questions, since my study focuses on sociologists' broader perceptions of sustainability, and I did not want to steer their answers towards particular issues.

1.4 Sustainability, the disciplines, and sociology

Sustainability has been researched in relation to various disciplines and applied subjects, several edited collections documenting how aspects of it have been infused into specific curricula, often adopting creative teaching methods and approaches (see, for example, Johnston, 2013). Disciplines and subject areas represented in this body of case study research include psychology, geography, law, nursing, health science, travel and tourism, history, geography, mathematics, economics - and others. However, the research also illustrates the tensions associated with inclusion of sustainability in different disciplines. Witham (2010) found some academics to be uncertain about the relevance of sustainability in curricula and Chase (2010) added that widespread sustainable curriculum change is complicated by the fact that there are numerous curricula within any institution.

In spite of this disciplinary interest, relatively few studies have focused on the relationship between sociology and sustainability. This is surprising in view of the fact that sociology and sustainability share an interest in society and social change, and sociological research and teaching have addressed related areas such as the environment and consumption (Yearley, 1992; Soron, 2010). Indeed, issues which might be considered part of the sustainability endeavour are already addressed in specific branches of sociology, including environmental sociology, urban studies, and citizenship (Horne et al, 2016). There has been some attention to a 'sociology of sustainability' in, for example, blogs and on-line discussions. In addition, there are examples of programmes focusing on relationships between sociology and sustainability, such as the Degree of Bachelor of Arts and Sciences (BASc) in Sociology and

Global Sustainability offered by the University of Warwick. However, published literature on the issue is scant.

Furthermore, arguments that sociology should engage more deeply with sustainability have come from within sociology itself. Passerini (1998) arguing:

> sociology is uniquely equipped with the theoretical and methodological background to contribute scientifically accurate understandings of this phenomenon to a world much in need of such guidance (Passerini, 1998, p. 59).

The author adds that the sociological task:

> is to examine how social systems create or resist sustainability claims and action in light of society's dependence on, and inseparability from the natural environment (Passerini, 1998, p. 62).

Other authors have made the same case, albeit for different reasons:

> at a time of repellent levels of inequality connected with environmental exploitation and destruction, sociology should be fundamentally concerned with sustainable development… The argument that debates around SD have much in common with the debates at the core of sociology, lead us to argue for a greater embedding of SD within mainstream sociology, and, in particular, social theory (Smith, Donnelly and Parker, 2004, p. 193).

Consequently, this study examined the relationship between sociology and sustainability in higher education from the perspective of sociologists themselves, with the resulting argument that sociology and sociologists can offer specific contributions for addressing key areas of debate in sustainability. The rationale, research questions, and central line of argument, will all now be elucidated.

1.5 The focus of the project

1.5.1 Rationale

Sociology concerns the pedagogical view of society and of the individual in relation to their societal surroundings. Sustainability takes a similar starting point and considers the

relationship of society with its natural surroundings, the associated and commonly-held view being that we should seek not to harm possibilities for future generations. However, in spite of growing interest in sustainability, sociological perspectives about it remain under-researched. There are knowledge gaps with respect to how sociologists understand, experience and engage with sustainability, with only a small number of sources considering this relationship (Islam, 2017; Islam and Yuhan, 2017; Longo et al, 2016; Passerini, 1998; Smith et al, 2004; Soron, 2010; and Yearley, 1992), and none, that this author has been able to identify, which explicitly examine sociologists' views about sustainability in higher education. This project seeks to start addressing this gap in its focus on sociological perspectives about specific aspects of sustainability in higher education.

There were two other drivers for this project. First, whilst many studies consider staff views and attitudes about sustainability, fewer examine student accounts, and fewer still consider staff and student views. For this work, more richness (and, in accordance with the phenomenographic approach, variation) could be achieved by incorporating student *and* staff accounts, whilst a multi-institution approach also seemed important in view of Cotton et al's (2007) justifiable concern that a limitation of sustainability research is that it tends to be based at individual institutions - although the same point could be applied to much higher education research. Second, at a more personal level, sustainability represents a part of my own professional role: my teaching, research and institutional commitments all incorporate elements of it. As someone who also studied the sociology of the environment as an undergraduate many years ago, I was curious to examine, and keen to make a contribution to, researching sociological perspectives about sustainability.

1.5.2 Research question

The project investigated sociology academic staff and student perspectives about sustainability in higher education. It adopted the phenomenographic research which focuses on variation in participant experiences of a particular issue. The central research question was:

What variations exist in sociology academic staff and students in their accounts about and experiences of sustainability in higher education?

The project incorporated the following subsidiary questions:

What do sociology staff and students understand by sustainability?

Should sustainability be included in higher education curricula?

These research questions are addressed within the scope of the study, that is, by way of interviews with 12 students and 12 academic staff at three universities. Based on the outcomes, the central argument will be that sociological accounts and perspectives offer valuable insights into our understandings of the complexities, challenges and debates associated with sustainability in higher education. Whilst providing immediate insights about sustainability in sociology itself, the outcomes also present broader lessons which can be applied to other disciplines and areas of higher education activity, because sustainability is a societal phenomenon, and in this capacity shares traits with sociology. The argument will be explained and developed in future chapters, in light of the outcomes, whilst a further, methodology-based argument arising from the study will be presented in the next section.

1.6 Using phenomenography

This project adopts phenomenography, a research approach used for revealing variation in the way a given phenomenon (in this study, sustainability in higher education) is experienced amongst a group of participants (sociology staff and students). Phenomenography assumes that experiences may be captured in a finite number of qualitatively distinct categories of description (Marton, 1981), and the researcher seeks to understand the meanings of these categories and how they relate to one other (Entwistle, 1997). Phenomenography has been used to examine higher education issues including learning and teaching (Shreeve et al, 2010), curriculum (Fraser, 2006) and academic development (Åkerlind, 2007). It has also been used for the researching of sustainability in specific contexts (Carew and Mitchell, 2006; Corney and Reid, 2007; Reid and Petocz, 2006). As with all research approaches, it has attracted discussion and criticism on several bases, including: a suggested lack of consideration of an emotional dimension (Cousin, 2009); possible concerns over trustworthiness (Collier-Reed and Ingerman, 2009); the influence of researcher experience (Ashworth and Lucas, 2000); and concerns over quality (Sin, 2010). However, with its focus on the way difference is structured, it is well suited to researching sustainability – which is also characterised by difference, in terms of definitions, understandings, as well as in views about and experiences of the roles and responsibilities universities should have in progressing it. On this basis, it will also be argued that phenomenography offers particular benefits for studying sustainability. There is potential for phenomenographic research to cast

further light on areas of ambiguity and debate in sustainability, in different disciplines and amongst different stakeholders. This could contribute to better engagement with the phenomenon, as well as help shape future policy on sustainability and provide guidance for teaching staff about whether and how to incorporate it in their teaching.

1.7 Researcher profile

During the course of this PhD, I have worked in two full-time positions, first as Senior Lecturer in Educational Development at the Department of Learning Enhancement and Development at City, University of London, and latterly, as Principal Teaching Fellow and Programme Director at the Arena Centre for Research-based Education at University College London. I have attempted to link projects undertaken during this PhD in Educational Research with my professional duties. I have also published the following works based on projects I have undertaken during this PhD with further outputs to follow soon:

Baughan, P. (2016a). Narrative inquiry as an approach for researching student experiences of learning. Sage Research Methods Cases, London, Sage.
http://www.methodspace.com/page/sage-research-methods-cases

Baughan, P. (2016b). Using phenomenography to research sociological interpretations of sustainability in higher education. Sage Research Methods Cases, London, Sage.
http://www.methodspace.com/page/sage-research-methods-cases

Baughan, P. (2015). Sustainability policy and sustainability in higher education curricula: the educational developer perspective. *International Journal for Academic Development*, 20, 4, 319-332.
- Runner up 'IJAD Article of the Year', 2016.
- Honourable Mention '50th Anniversary of Higher Education Research in the Department of Educational Research' (Category: The best publication or set of publications judged by academic merit), Lancaster University, 2017.

Baughan, P. (2014). Conceptions of the sustainability–pedagogy relationship: should sustainability issues be introduced in higher education curricula? *The International Journal of Pedagogy and Curriculum*, 20, 4, 53-63.

Baughan, P. (2013). The missing meso: variation in staff experiences of an academic practice initiative and lessons for educational change. *International Journal of Educational Integrity*, 9, 1. http://www.ojs.unisa.edu.au/index.php/IJEI/article/view/849

In addition, the following book chapter provides an early, summary account of aspects of my Part 2 PhD project:

Baughan, P. (2017). Variation in sociologists' perspectives about sustainability in higher education: outcomes from a phenomenographic study [Chapter 18]. In: W. Leal Filho (Ed.) *Sustainable Development Research at Universities in the United Kingdom: Approaches, Methods and Projects.* Berlin, Springer.

As well as the above, I have presented on a variety of areas of my PhD at a wide range of national and international conferences, these papers based on both the focus of the projects themselves, and on methodological issues raised by them. The events at which I have presented include papers given at the European Conference of Educational Research (ECER), organised by the European Educational Research Association (EERA), every year between 2012 to 2018. In a way, the ECER Conference has provided a mapping of my route through the PhD but has also enabled me to collect valuable feedback on all the work involved.

1.8 Structure of the thesis

The next chapter (Chapter 2) provides a review and discussion of literature which informed the project. This is followed with an account of the research approach, and the design and implementation of the study (Chapter 3). The data analysis process is explained in Chapter 4 prior to the findings in Chapter 5, in which the two outcome spaces and constituent categories of description are presented and explained. The discussion offers comments and analysis of the findings in relation to the research focus and previous related literature (Chapter 6). Finally, in Chapter 7, the conclusion, I consider strengths and limitations of the study, identify areas for follow–up research, and offer closing reflections on the project and the future of sustainability in higher education.

Chapter 2: Literature Review

2.1 Introduction

This chapter provides the literature review: it offers a rationale and argument for the study, and contextualises it within a broader but selective field of related research. The literature search and review were undertaken, predominantly, in two phases: early in the research process to help crystallise the research questions, and following collection and analysis of the data. The chapter is structured as follows. First, I explain how I undertook the literature search and identify the search criteria that I set. Next, I discuss existing literature on sustainability in higher education, before moving to more specific themes in alignment with the focus of the project on sociologists' conceptions of sustainability in higher education. These themes are: sustainability in the curriculum; sustainability and disciplinary studies; theories that have been used in sustainability research; and the phenomenographic approach as applied to sustainability. The literature review discusses the use of phenomenography in previous sustainability research, since phenomenography was the research approach adopted for this study. Finally, the outcomes of the literature review are linked to my research question to illustrate how this project seeks to address a research gap and make a modest but authentic contribution to our knowledge about the area.

2.2 How the literature review was undertaken

There has been a proliferation of research about sustainability in higher education, leading to the publication of a wide range of books, case studies and articles. This growth is also demonstrated by the number of sustainability-based journals, which include *Sustainability, International Journal of Sustainability in Higher Education*, *Environmental Education Research*, *Journal of Cleaner Production*, and others. Thus, within a work of this scope, it would be impossible to provide a fully comprehensive review. Instead, I synthesise and discuss key studies within the aforementioned themes to reflect the scope and focus of my project. In undertaking the review, I was guided by sources including Murray (2011) and Foss and Waters (2007), the latter of whom identify incremental steps (some of which incorporate additional sub-tasks) for completion. I followed through each step, these being to: establish the focus of the research; conduct the search; locate relevant excerpts within the sources; code the literature; create a conceptual schema; and begin writing. Indeed, a

manual coding system of the literature represented an important part of my approach.

I used several library databases (Scopus, EBSCO [British Education Index], ERIC) and Google Scholar, inputting search terms including 'sustainability in higher education', 'sustainability in the curriculum', 'sustainability phenomenography', 'sustainability sociology', 'education for sustainability' and 'education for sustainable development'. In a second search, I used strings such as 'higher education' or 'university' or 'universities'. Whilst I did not confine my search by dates, I did undertake searches within individual years (2013-2017) and also sourced a minority of studies through other means, including those used in my previous research and several books obtained through my professional work in sustainability. Accounting for the fact that the study captures experiences from both staff and students, I was keen to include studies that involved students, so the term 'student' was included in some later searches. Finally, similar to Vaughter et al (2013) and Wright and Pullen (2007), I omitted the term 'environment' in searches on the basis that most definitions of sustainability incorporate environment.

The literature review process led to my use of some 200 sources, the majority of which were either journal articles or books. Nevertheless, other types of source were used as well, including reports, policy documents and conference presentations. The large majority of sources were about or in some way address either sustainability or the research approach that was used for the study, phenomenography. Other sources that I used address topics including sociology, higher education curriculum and pedagogy, qualitative methodology, and data analysis.

2.2.1 Literature based studies about sustainability

Also useful for informing the focus of the project were several previous literature-based studies. These identify areas of sustainability – and the related area of ESD - that have been under-researched, and possible weaknesses in existing research (Barth and Rieckmann, 2015; Gräsel et al, 2013; Rickinson and Reid, 2015; Wu and Shen, 2016). For example, Gräsel et al (2013) suggest a lack of congruence between ESD research on the one hand and current debates in educational research on the other, adding:

> without a fundamental reorientation in ESD research, ESD – and with it the concept of ESD - will not be able to fully realise its vital contribution in orienting society towards sustainable development (p. 115).

They suggest that stronger links are necessary if ESD is to improve its recognition in educational research. Second, Barth and Rieckmann (2015) examined research trends in ESD in higher education. They found that detail about data collection was provided in less than half of articles and that although published studies offer ideas about how ESD can be included in curricula, relatively few discuss what students learn from this. Third, Rickinson and Reid (2015) argued that future research in sustainable development in higher education could benefit from increased use of research synthesis, involving "careful review of the findings and quality of a variety of [related] research studies, undertaken in light of the possibility that their legitimate combination will enrich current and critical understandings of a particular topic" (p. 143). They add reasons for which research synthesis may lend itself well to sustainable development, arguing that "It is a diverse field of research spanning many genres, disciplines and sub-fields, and so it could become better connected and more powerful through well-conducted synthesis" (p. 156). Finally, based on their review of comparative empirical research on sustainability in post-secondary education, Vaughter et al (2013) suggested:

> the majority of this research has been conducted as case studies within individual institutions… case study research on sustainability… has not lived up to its potential for improving sustainability in post-secondary education, because of the lack of comparative studies (p. 2253).

The above publications were helpful in providing additional directions for this project. Although I have sought to make contributions to the field of sustainability, to educational research, and to phenomenography as an approach for researching sustainability, this project was undertaken at three institutions, and I have paid close attention to explaining the data analysis processes I followed, later making recommendations for policy and future research. Thus, my literature review provides a rationale for the project but also accounts for some of the possible weaknesses in previous related research.

2.3 Sustainability in higher education

2.3.1 Definition and scope

In the previous chapter, I referred to the range of published definitions of sustainability and

related terms such as sustainable development. Although useful to be aware of this definitional breadth, the issue remains for purposes of the present study: what is sustainability and what does it cover? These points have themselves provided important discussion areas in the literature, the lack of consensus about definition and scope bearing implications, with researchers adopting different definitional starting points.

Brew and Cahir (2014) document the etymology of the term sustainability in the French verb *soutenir*, meaning to 'hold up' or 'support' (Brown et al, 1987). They add that sustainability has become an overused term, applied differentially by governments, institutions and individuals. Reid, Petocz and Taylor (2009) also comment on this variety of emphases, considering some of the various interpretations: sustainability is about a journey towards a particular destination (Curran, 2009); sustainability is an educational endeavour, about skills, attributes, competencies, and dispositions (Ansari and Stibbe, 2009); sustainability is about types of work system (Docherty, Kira and Shani, 2009). For some, such as Perrault and Clark (2017), sustainability is better understood as a set of behaviours that encompass what it means to 'be sustainable' in areas including renewable energy, conservation, recycling, land development, water management, and responsible waste disposal (Emanuel and Adams, 2011). Blake at al (2013) regard sustainability as a set of conditions which need to be met to provide for the continued survival and well-being of humans and other species. However, Leal Filho (2011) is one of many authors who addresses the complications of the term, indicating that it does not refer to a unified subject *per se*, since it is too theoretical, too broad and too complex. Similarly, Wals and Jickling (2002) add:

> Sustainability is as complex as life itself... It differs over time and space and it can be discussed at different levels of aggregation and viewed through different windows (p. 227).

Schroer et al (2015) describe sustainability as being about 'wicked problems' - that cannot be solved in a systematic or linear way. Indeed, it has been suggested that the research community has often studied sustainability from narrow starting points, Wright (2014) arguing that its complex and diverse nature is not fully realised. Wright examines sustainability in the context of six countries, none of which have been focused upon previously in this area of research and which, she continues, demonstrate further complexities. The author also draws on notions of 'serendipitous learning' (unexpected, 'snapshot' learning) and 'meta-learning' (awareness and understanding of learning itself) to support this viewpoint, identifying distinctive attributes of or within each country which may bear more universal value in enhancing our understandings of underlying sustainability

issues.

Caradonna (2016) examines how myriad definitions of sustainability present the opportunity for misuses in practice, through the growing prevalence of 'green-washing', that is:

> use and abuse of sustainability language or imagery to mask conventional, destructive practices. Green-washing is a way of exaggerating or fabricating the environmental benefits of a product, practice or service (p. 248).

This undermines sustainability efforts. Others still have begun shifting attention away from sustainability and towards the distinct but related study of the Anthropocene, definable as an "era of intense, irreversible human influence on the earth's systems" (Stephens et al, 2008, p. 318). In most accounts, study of the Anthropocene involves examining how the relationship between humans and the planet has changed geologically, and what can be done to monitor the balance. As an area of study, this has a logical disciplinary home, having been addressed widely in geology (Gibbard and Walker, 2014). However, it is gaining broader currency and has been the subject of discussion in other fields and disciplines, especially in social science subjects (Bonneuil and Fressoz, 2017; Steffen et al, 2007) where it has also been the focus of some critique itself (Barnett and Campbell, 2010; Bonneuil and Fressoz, 2017).

A further conception of sustainability categorises it under 'Weak Sustainability' and 'Strong Sustainability'. The former developed out of the neo-classical theory of economic growth (Solow, 1974; Hartwick, 1977) and gained traction as interest grew in the wider sustainability movement. The key premise of Weak Sustainability is that technological progress should lead to improvements in human well-being in spite of any associated environmental costs, on the basis that manufactured (produced) capital is at least as important as natural capital. In this model, manufactured and natural capital are viewed as fully *substitutable*, with no significant differences between the benefits that each provides (Neumayer, 2012). More important is the *total* value of all capital, which should be maintained, or preferably increased, for subsequent generations. Manufactured capital includes resources such as infrastructure and labour, and natural capital covers environmental assets and ecosystems.

Whilst Weak Sustainability advocates unlimited substitution between natural and manufactured capital, Strong Sustainability assumes that substitutability should work within strict limits, since certain elements of natural capital are viewed as non-substitutable and

vital for human existence. Strong Sustainability asserts that manufactured and natural capital are complementary, because there are functions that the environment performs that cannot be changed, an example being the ozone layer. Thus, a key difference between these paradigms lies in their assumptions about the substitutability of natural and manufactured capital.

Limitations have also been identified in each of the approaches. For example, although we can measure the value of manufactured capital, it is rather more difficult to assess the value of natural resources to human and animal life. Indeed, although the debate is addressed through capital types, authors including Neumayer (2013) have questioned whether such a capital-based conception offers a valid mechanism for understanding the natural world.

Accounting for the above discussions, in this work, I adopt a modified version of one of the most established explanations of sustainability. My starting point is the 'three-pillar model' which presents sustainability as an intersection of economic, social, and environmental issues (Lozano, 2008; Sheth et al, 2011) and has its basis in The Brundtland Report (WCED, 1987). However, a criticism by Holden et al (2016) is also taken on. These authors present an adjusted version of the model, additionally drawing on three 'moral imperatives': satisfying human needs; ensuring social equity; and respecting environmental limits. Crucially, this model views sustainable development as representing a set of *constraints* on human behaviour, on the basis that human beings are exceeding limits of sustainability. Further, Perrault and Clark (2017) emphasise that sustainability is not just about the 'here and now', but, when applied properly, must include a futures-based perspective because current consumption behaviour should not prevent future generations from utilising necessary resources for their own needs. Finally, whilst the three-pillar approach acknowledges other key societal issues, many have found the environmental dimension to be the most widely understood (Bone and Agombar 2011; Cotton and Alcock, 2013; Kagawa 2007) and the most pressing issue:

> As to the task that humanity faces… the problem and the solution are environmental. The world's current concerns – rising nationalism, swelling migration, financial instability, worsening inequality and lack of confidence in governance systems – are to varying degrees caused by insecurity and fear about the future. Underlying that is an awareness (conscious or unconscious) that our current path of capital and carbon-driven development is wrecking our home planet, running down resources, devastating other species and building up environmental costs that are increasingly difficult to offload on distant countries and coming

generations (Watts, 2017, p. 54).

In sum, the working view of sustainability I adopt in this project begins with the three-pillar model, but accepts the additional issues raised by Holden et al (2016) and Perrault and Clark (2017). Further, I would concur with the view that, ultimately, most sustainability issues can be contained within the environmental dimension; the social and economic are part of the environment that humans have created. In this sense, understanding sustainability through the study of the Anthropocene is also useful, as the latter acknowledges that the relationship between humans and the environment is central for study and is itself changing.

2.3.2 Related terms

In addition to sustainability itself, several related terms are widely used. Education for Sustainable Development (ESD) refers to the inclusion of environmental and social content in teaching (Cotton et al, 2009). For Barth and Rieckmann (2015) ESD:

> is expected both to make people more aware and better qualified to take part in shaping future developments responsibly, and to raise their awareness of the problems related to sustainable development (p. 100).

Sustainable Development (SD) has been variously defined, Berglund and Gericke (2016) viewing it to offer holistic perspectives about the environment and human development, but accepting difficulties of the term, as it tries to bridge conflicting principles of continuous economic growth and sustainable consumption (Jabareen, 2008). Weller's (2016) broader-based remit for SD covers: "social, economic and cultural values such as social values, global citizenship and the promotion of sustainable futures-thinking" (pp. 46-47).

Hammond and Churchman (2008) use the term 'social sustainability' for linking sustainability to culture and how social systems affect and are affected by social, economic and political issues. According to the authors:

> Sustainability is necessarily about culture and includes the ways in which social systems influence and are influenced by political, economic and biophysical systems. This view of sustainability requires a consideration of values, culture, decision-making, democratic process and the social system (Hammond and Churchman, 2008, p. 235).

Similarly, Barron and Gauntlett (2002) conducted several projects examining 'sustainable communities' and developed a set of principles for social sustainability, these being equity, diversity, interconnectedness, democracy and governance, and quality of life. Social sustainability is also referred to in and used by governments and other agencies in the context of devising policies about and planning urban development, regeneration and housing (Woodcraft, 2012).

Kilinc and Aydin (2013) conclude that the concept of SD has developed independently from the input of educators, at international conferences and declarations, leaving teachers and educators with a 'fuzzy' picture of what SD and ESD should include. Consequently, the issue of whether all teachers have enough knowledge about SD and ESD presents a further challenge. The next sections examine some of the other themes in research on sustainability.

2.3.3 Key and emergent themes

Sustainability has developed into an active area of higher education policy, practice and research. Pro-sustainability campus initiatives have become far more common, prompted by new policy and funding streams in many countries, particularly in Europe and North America. Policy documents have also addressed sustainability in the curriculum (Baughan, 2015; O'Flaherty and Liddy, 2018). For example, United Nations Sustainable Development Goals suggest that by 2030 learners should: "acquire knowledge and skills needed to promote sustainable development"(United Nations, 2015, p. 19). Perhaps somewhat reflecting the above, Perrault and Clark (2017) opine that sustainability has become a ubiquitous term at universities. For others, progression of sustainability *should* be a responsibility of the university:

> [Sustainability] offers an opportunity for reflection on the mission of our universities and colleges, but also a chance to enhance the quality of the learning process (Wals and Jickling, 2002, p. 221).

On the same point, Cortese (2003) states:

> Higher education has unique academic freedom and the critical mass and diversity of skills to develop new ideas, to comment on society and its challenges, and to engage in bold experimentation in sustainable living (p. 17).

In the UK, QAA and HEA published a Guidance Document for higher education providers (QAA, 2014). This addresses the incorporation of ESD issues in learning, teaching and assessment, and in graduate outcomes, also offering a series of examples and case studies. The document includes its own account of ESD and offers prompts to help educators consider ESD in their own disciplinary contexts. There now exists a growing corpus of research about sustainability in higher education (Cortese 2003; Koger and Scott 2010; Shephard 2008) organised across various themes and areas, including staff-based (e.g. Reid and Petocz, 2006) and student-based (e.g. Kagawa, 2007) studies.

Within this, there are a number of emerging themes and arguments. One view proposes a 'whole-person' approach to sustainability and sustainability education: Podger and Mustakova-Possardt (2010) examine sustainability in conjunction with individual identity, motivation and higher order dispositions. The authors propose a conceptual framework, based on development of a 'critical moral consciousness'. Trowler et al (2013) explore other connections between higher education and sustainable development, including: campus environmental management (Barlett and Chase, 2004); curriculum developments (Jones et al, 2010; Sterling et al, 2013); and skills development (National Union of Students and Confederation of British Industry, 2011). They discuss how debates within UK higher education institutions have been stimulated by initiatives such as Higher Education Funding Council for England (HEFCE) sustainable development policy (2005, 2009; also updated in 2014) and the Universities UK (UUK) statement of intent on sustainable development (2010). Elsewhere, Brinkhurst et al (2011) examined sustainability and institutional change, making a case for greater 'intra' faculty and staff leadership in campus sustainability efforts – drawing on both 'top-down' and 'bottom-up' approaches. Franz-Balsen (2015) examine gender and diversity in sustainability research and advocate more gender sensitive approaches, acknowledging links between gender, environmental problems and sustainable development. UNESCO (2017) identified gender equality as one of seventeen Sustainable Development Goals (SDGs) for governments and educational systems to strive to meet by 2030: this publication is further considered below.

ESD represents a particularly debated theme. Winter and Cotton (2012a) found that policies relating to ESD have been "fraught with challenges: ESD has proved to be a contentious agenda" (p. 784). Cotton et al (2007) canvassed lecturers' views about ESD pedagogy, noting multiple interpretations of SD, and mixed ideas about forging connections between SD and their own teaching. The study did provide insights about both opportunities for and barriers

against including ESD in higher education curricula. Felgendreher and Löfgren (2017) criticised the research on ESD itself, as one: "dominated by descriptive, conceptual and exploratory research. Most of the articles use case studies and conceptual writing as main research methods" (p. 1). This is consistent with findings from the literature-based studies cited above, such as Gräsel et al (2013), who point to a lack of linkage between ESD and current debates in educational research. Like sustainability itself, ESD remains a problematised issue.

2.3.4 Student perspectives

There have been fewer student-based (as opposed to staff-based) studies on sustainability, though, in part due to activity by organisations such as the Higher Education Academy (HEA) and the Environmental Association for Universities and Colleges (EAUC), the number is increasing. Cotton and Alcock (2013) found that merely attending university may bear a positive effect on students' environmental commitment for several reasons, including their likely regular presence on the campus environment itself, which may be suited to the development of pro-environment views. Kagawa (2007) undertook one of the first student studies, a single-institution project investigating perceptions and attitudes to SD. She found the majority viewed sustainability as 'positive' in spite of limited familiarity with it. Winter and Cotton (2012a) examined student experiences of campus-based sustainability initiatives. Students reported a range of views, many being aware of energy and climate change - consistent with the aforementioned work by Kagawa - but were less aware of social and economic issues. However, participants also reported a lack of opportunities for involvement in sustainability policy or decision-making. Opportunities for a stronger student role in sustainability might, then, develop student commitment to it. Perrault and Clark (2017) found that many students equate sustainability with environmental issues, also understanding sustainability in terms of 'keeping going' – but not linking it to, or taking actions accounting for the needs of future generations. In other words, accounts were situated in the present.

Other research also suggests that students should be provided with better opportunities for involvement in sustainability at their institutions. Tilbury (2015) argues that student perspectives need to be better represented in sustainability research and initiatives, and could provide a strong driver for change. Warwick's (2016) work explored leadership of education for sustainability (EfS) in higher education, focusing on the potential role of

students as change agents. Warwick discussed the value of an integrated approach, linking teaching, research, campus sustainability, and student involvement – in which students become partners in sustainability innovations. He argues that this more student-focused model provides new opportunities for the development of sustainability in higher education. Further, students *want* sustainability to be more fully embraced at their institutions and in their curricula according to one study. Drayson et al (2012, 2013, 2014) found that 80% believe that SD should be applied in their institutions, and two thirds wanted it integrated in their curricula. They also found that student motivation to learn about SD increased during studies, and students preferred a reframing of curriculum content rather than the addition of bespoke courses or modules. These findings have been corroborated in more recent findings by the National Union of Students (NUS) (NUS, 2018; NUS, 2019).

Sustainability has been examined in other sectors of education, Loughland, Reid and Petocz (2002) surveying primary and secondary school children's conceptions of the environment. Their paper analysed responses given by 2,249 young people to an open-ended question asking them to state what they understand by the term 'environment'. The outcomes comprised six conceptions, from the most limited (environment as a place) to the broadest ('environment and person in a relationship of mutual sustainability'). However, quantitatively, the majority of respondents viewed the environment as an object. This has relevance in a higher education context, raising questions about how sustainability teaching is undertaken. For example, as the authors point out, a deeper education would be one in which students' own experiences of the environment were explored and discussed.

Emanuel and Adams (2011) explored students' understandings of sustainability and perceptions of sustainability at two United States based universities (Alabama and Hawaii) and found consistency in what students knew about sustainability but differences in student concerns and willingness to participate in sustainability activities between the two institutions. They identified small 'knowledge gaps' but larger 'commitment gaps'. They attributed these commitment gaps to the fact that students with greater commitment were based at the university (Hawaii) in which sustainability activity was already supported, and part of a broader local community where sustainable practices were present. In other words, student responses appear to mirror the sustainable practices in the broader local community, suggesting that students may follow community leads.

Drawing together the issues raised in the student-based research, it can be concluded that whilst many students favour sustainability to be included as part of their higher education, many also adopt a relatively limited view, often with a focus on a narrow conception of the environment and on maintenance ('keeping things going'). This may raise a concern, but also increase arguments for deeper inclusion of sustainability in curricula and greater student involvement in sustainability initiatives – students want both. It might also be worth considering linking initiatives and teaching to local sustainability activity. As Tilbury (2015) argues, there might be benefits to be gained through a greater involvement of students in sustainability which, in turn, may inform actions they take in their future lives. The next section moves the focus to these learning and curriculum issues.

2.4 Sustainability in the curriculum

2.4.1 Background

Of all the issues associated with sustainability in higher education, its inclusion in curricula is the most challenging and contentious. At a practical level, justifications seem reasonable: humans have inflicted deleterious effects on their environment, whilst poverty, inequality and other social issues provide on-going concerns. By educating about sustainability, future generations will be better informed about improving our stewardship of the environment. There are also many advocates for sustainability in the curriculum, Reid et al (2009) stating:

> sustainability is increasingly seen as an important facet of the knowledge and behaviour of successful graduates… sustainability can be regarded as one of a group of higher-level graduate dispositions… all of which will play an important role in students' professional work (p. 663).

Stough et al (2017, p. 1) add that universities should play an important role in promoting sustainability: "creating knowledge and transferring this knowledge to the society, and… preparing students for their future role". Also notable here are discussions about the related term of 'sustainability literacy', which Diamond and Irwin (2013) define as the adoption of key skills and attributes, for the benefit of self and others, for the long term. For Stibbe (2009) sustainability literacy is about learning and applying specific practices:

> As people gain sustainability literacy skills, they become empowered to read society critically, discovering insights into the unsustainable trajectory that the society is on and the social

structures that underpin this trajectory. But more than this, they become empowered to

engage with those social structures and contribute to the rewriting of self and society along

more sustainable lines (p. 11).

In a handbook dedicated to the subject, Stibbe and his colleagues examine methods for and

pathways towards sustainable literacy, including 'eco-criticism', 'grounded economic

awareness', 'new media literacy', 'materials awareness', and 'technology appraisal'. In spite

of these arguments and as previously suggested, concerns about sustainability in the

curriculum are also widespread. The next sections examine sustainability ideas, initiatives

and critiques of this pro-curriculum 'movement'.

2.4.2 Curriculum initiatives

Many innovations and schemes for integration of sustainability in curricula have been

developed, their designs and outcomes published in journals and edited collections. The

majority of these are at the level of the programme or department, examples of which can

be viewed in sources including Barlett and Chase (2013), Drayson et al (2013, 2014) and

Johnston (2013). These cover different disciplines, the initiatives usually bearing some

success by their own evaluations within the contexts of their applications. Authors such as

Reid and Petocz (2006) and Koger and Scott (2010) have suggested that such cases tend to

be associated with particular subject areas. In fact, an examination of more recent literature

demonstrates that most fields and disciplines now have at least some representation,

though some, such as sociology, do not feature strongly.

As established, there are different views as to how sustainability-based curriculum change

should best be undertaken, particularly at the strategic or institution level. Cortese (2003)

offered an early model, identifying four areas to work through: the context of learning

(human and environment interdependence, and values and ethics); the process of education

(active learning and real-world problem solving); making sustainability part of overall campus

operations; and partnerships with local communities. Podger and Mustakova-Possardt

(2010) advocate the aforementioned 'whole-person approach', covering identity, motivation

and higher order dispositions, necessitating institutions to work with community groups and

other sustainability experts. Rusinko's (2010) model provides a 'generic matrix' of options for

integrating sustainability which, she opines, can be used by university faculty to make

choices about how sustainability is included in curricula. The matrix is intended to be used at

course, programme, cross-disciplinary and cross-university levels, but it largely omits consideration of disciplinary differences - which others suggest need more attention. Winter and Cotton (2012b) note several 'sustainability pedagogies', these being 'tried and tested' approaches for teaching about sustainability in view of its debated nature. These focus on 'holistic learning experiences' and include case studies, debates, critical reading and writing, fieldwork and role plays and simulations.

Several authors have proposed an 'holistic' integration of sustainability in which 'curriculum' extends beyond the formal learning process. Hopkinson, Hughes and Layer (2008) advocate a three-part curriculum-change framework. The 'formal' curriculum refers to the student's actual sustainability learning experience; the 'informal' constitutes optional or voluntary activities; the 'campus' should provide an exemplar of pro-sustainability behaviours and values. The ideal is that each part should reinforce the other two. Similarly, Winter and Cotton (2012a) identify a 'hidden curriculum' lying between what is officially taught and what students actually learn, incorporating any 'unspoken' messages about sustainability conveyed through, for example, its policies, strategies or other communications. Students may deepen their knowledge of sustainability by gaining an understanding of this informal curriculum. Dawe (2012) also states that ESD should be aligned to a broader campus curriculum, and that conflicting messages will be sent if sustainability teaching does not mirror campus activities. De La Harpe and Thomas (2009) argue that there is no optimal approach for implementing ESD curriculum change, but instead propose several conditions that might aid its facilitation, which include developing a vision to steer the change process, ensuring the provision of formal and informal learning opportunities, sufficiently resourcing the changes, offering related staff development sessions; and modifying systems to enable those changes to be administered. Perrault and Clark (2017) agree that sustainability should be taught holistically and emphasise that teaching sustainability as a 'present-day orientation' needs to change, with greater focus on planning for future generations. They raise three further ideas: that sustainability initiatives need more specific branding; institutions should promote interdisciplinary collaboration; learning should be supported both inside and outside the classroom. Sterling (2015) applied this holistic approach in developing a 'whole institution approach' to education for sustainability (EfS) leadership, linking curriculum, campus and community initiatives.

Whilst different versions of this wider or holistic approach are well supported, other authors prefer to concentrate on possible benefits of pragmatic or piecemeal changes. Drawing on

examples of curriculum development that emerged from grass-roots initiatives at Monash University, Stubbs and Schapper (2011) found that whilst wholesale curriculum change might be preferable, smaller-scale changes may be more feasible and are still worthwhile. Similarly, Cotton et al (2009) applied 'The General Theory of Second Best' (Lipsey and Lancaster, 1956-7) to ESD, on the basis that an 'ideal state' for an educational change area such as sustainability, may not always be possible. In such cases, it might be better to aim for 'second best' solutions which might still: "provide a way of making progress, and stimulating processes of reflection and cultural transition" (p. 732).

Sustainability has also been considered in relation to specific aspects of the curriculum. Diamond and Irwin (2013) found that the under-developed area of sustainability e-learning tends to be used for transmissive delivery of coursework, yet could be more usefully deployed for active, student-centred teaching and learning. The authors add other examples such as sustainability skills development and confidence-building for applying skills in professional contexts. Stough et al (2017) examined assessment methods for sustainability teaching, suggesting that varied conceptions of sustainability complicate assessments. However, for Dawe (2012), this variation provides a pedagogical benefit. Dawe found that some lecturers regarded the disputed nature of sustainability to provide its own opportunity for using more discursive and thought-provoking teaching methods.

According to Wood et al (2016), if curriculum initiatives are to achieve lasting change, formal intervention is important. In a New Zealand based study about the working experiences of a set of sustainability staff 'champions' with responsibility for promoting sustainability in faculty contexts, the authors categorised different types of implementer experience. First, 'sustainability saviours' were confident in their work, yielding tangible change; second, 'sustainability nurturers' built successful sustainability-based links amongst staff and students, and had some influence on practice; finally, 'sustainability strugglers' reported experiences beset with challenges. Nevertheless, overall outcomes pointed to a strong belief in the need for interdisciplinarity to forward and deepen sustainability learning and understanding. Participants also felt that their roles enabled them to 'step up' implementation of new sustainability schemes. Thus, a focus on interdisciplinarity presents one possible route forward for sustainability teaching, a theme which is revisited below.

2.4.3 Barriers and debates

Curriculum change represents the most challenging aspect of the sustainability agenda (Sterling and Witham, 2008; Vaughter et al, 2013; Winter and Cotton, 2012a; Wood et al, 2016). Authors have identified various obstacles which include different understandings of sustainability (Reid and Petocz, 2006), its contested nature (Wals and Blewitt, 2010), the disciplinary focus of many academics' activities (Wals and Jickling, 2002), a perceived lack of relevance (Dawe et al, 2005; Witham, 2010), the existence of numerous curricula in most institutions (Chase, 2010), and a lack of available training (Wals and Blewitt, 2010). Still, in some of these areas, there is evidence of progress: for example, there is advice available in some institutions for those who wish to incorporate sustainability in their teaching, but the source of this advice may itself vary and many will be unaware of it. Where evaluated, there are also differences in how well sustainability teaching initiatives have been received. Whilst some have been successful (Johnston et al, 2013), others have yielded more mixed outcomes (Felgendreher and Löfgren, 2017).

Kopnina and Cherniak (2016) raise questions about how sustainability should be taught, drawing on the term 'relativistic pluralism' to illustrate different approaches being used. They argue that sustainability teaching often lacks consideration of key drivers of *un*sustainable behaviours, with more work needed on how we teach *for* sustainability. For Sterling and Witham (2008), the problem lies in:

> a culture gap and time lag between HE as currently placed in terms of purposes, policies and provision, and where, arguably, it needs to be if it is to make the significant contribution towards achieving a more sustainable society (p. 400).

Reid and Petocz (2006) report that a further barrier is that staff in different disciplines have different understandings of and therefore teach differently about sustainability. They viewed these varying perspectives to be problematic, on the basis that if attempts are to be made to develop sustainability in the curriculum, those teaching about it need more consistent understandings themselves. There are also varying understandings of the curriculum itself, influencing how staff approach curriculum change (Fraser, 2006; Fraser and Bosanquet, 2006). For Petocz and Dixon (2011), changes are needed for progressing sustainability in the curriculum. Drawing on earlier work by Barnett (2007) and writing in relation to the teaching of business degrees, they argue:

The traditional focus in university learning on epistemology – what a student comes to know – is not enough when considering the development of dispositions such as sustainability and ethics: the ontological dimension – who a student is and who they are becoming – is also needed (p. 24).

Here, the emphasis is placed on enacting particular dispositions in our professional and personal habits and activities. This applies particularly in disciplines such as business, where the subject focus (which often prioritises the importance of continued economic growth) often runs contrary to arguments presented by more recent advocates of sustainability (for whom economic growth needs to be constrained).

Nevertheless, some authors are more optimistic. Leal Filho (2000, 2011) suggests that certain concerns over sustainability in the curriculum are themselves based on misconceptions, questioning views of sustainability as being 'too abstract', as well as the argument that pro-sustainability change itself demands significant, continuous financial resourcing. Wals and Jickling (2002) add that vagueness in definition – a problem for many – provides its own opportunity, since it can be used as a starting point to engage learners: "Sustainability has many faces and features which greatly enhance its educational potential from a more emancipatory perspective" (p. 227). For others, centralised professional services in universities should have a greater role in implementing sustainability in the curriculum initiatives. Ryan and Tilbury (2013) argue that ESD initiatives should be developed in conjunction with quality assurance and quality enhancement systems. Thomas (2015) adds that curriculum change needs help from the 'top' for finance and resources, and from the 'bottom' for ground-level knowledge and expertise to interpret and apply the concepts, highlighting the role of educational development units for providing a route to support this. Likewise, Barth and Rieckmann (2012) advocate a greater role for educational developers to support ESD. Baughan (2015) explored the views of educational developers with respect to their own roles in sustainability in the curriculum, and concluded that many have the expertise to, and could be encouraged to, advise on these issues in their institutions if there was a demand for this.

2.4.4 Interdisciplinarity

One further route advocated for progressing sustainability in the curriculum is that of interdisciplinarity. This approach is given additional traction by demands from employers,

many of whom seek graduates with expertise not just in their subject field, but in other skills and competencies. The incorporation of some level of interdisciplinarity in higher education teaching may provide opportunities for students to be introduced to broader issues, potentially including complex global issues such as sustainability. Cortese (2003) was an early proponent, advocating that the alignment of learning and sustainability requires 'interdisciplinary systems thinking'. Barth et al (2007) agreed that interdisciplinary skills are vital for forward-looking ideas for influencing and promoting SD strategies. More recently, Weller (2016) argued that the SD agenda represents an important example of the benefits of interdisciplinary approaches. Drawing on earlier work by Jones et al (2010) she states:

> while it is possible to understand social and ecological systems from single disciplinary perspectives, a holistic and integrative approach will discover valuable interrelationships between different methodological and conceptual positions... Interdisciplinary rather than mono-disciplinary approaches to research and ESD are therefore more likely to yield successful solutions to the complex and fuzzy interdisciplinary challenges posed by sustainable development (p. 47).

Although the case for interdisciplinarity has been widely made, more guidance about how to implement interdisciplinarity for sustainability in institutional environments would surely be useful, whilst interdisciplinarity itself remains a disputed term. Of help here, Ferrer-Balas et al (2008) provide an example of a sustainability initiative drawing on 'ambassadors' for connecting disciplines and departments for pro-sustainability change. Ling Feng (2012) also documents benefits of an interdisciplinary approach, but acknowledges obstacles too – that institutional structures are not necessarily conducive to interdisciplinary courses, and that some students accustomed to and expecting single-discipline teaching may find it difficult to learn in this way (the same might be said of some staff). Similarly, Blake et al (2013) note that programmes using interdisciplinarity in sustainability may expose difficulties of 'fit' between their own cross-boundary approaches with established subject-oriented ways of working. To mitigate these risks, they suggest that relevant courses should make explicit links to 'employability skills' and 'soft skills' – adaptability, creativity and others. Their study highlights the value of interdisciplinarity in higher education, whilst recognising that there are complexities involved too.

As part of its Global Education 2030 Agenda, UNESCO (2017) developed a comprehensive series of Sustainable Development Goals (SDGs) and associated learning objectives. The seventeen SDGs include the elimination of poverty, zero hunger, good health and well-being, gender equality, affordable and clean energy, sustainable cities and communities,

responsible consumption and production, and climate action. They also include education (quality education and lifelong learning opportunities for all) which represents the central mechanism for achieving SDGs as a whole, but also one of the SDGs in its own right. UNESCO (2017) explained that their overall aim is that, by 2030, all learners will have developed knowledge and understanding to enable them to adopt sustainable development practices in all aspects of their lives and activities in relation the SDGs.

The associated learning objectives were developed as a guide to provide more detailed assistance to educational organisations (of any type or level) to develop ESD initiatives for meeting these SDGs. The learning objectives are broken down into two domains: generic competencies for addressing the SDGs as a whole, and specific objectives for addressing individual SDGs. As well as the learning objectives, suggested topics and examples of learning approaches and methods were provided. The learning objectives and linked examples thus provide a guide for educational professionals on the use of ESD in learning for the SDGs. Taken as a whole, the learning objectives, topics and activities are intended for use in teaching for all learners, of all ages, worldwide.

In addressing education and learning objectives for the aforementioned SDGs, the publication is compatible with other models and theories for promoting ESD, but also leaves space for particular approaches and methodologies to be adopted. It is broad-based in its scope, its contents aimed towards a large audience of governments, the private sector, educators and learners – reflecting the view of its authors that achievement of sustainability provides all citizens with responsibilities. It also provided (and continues to provide) a valuable informant to my understanding of sustainability in the curriculum and ESD. However, with its macro focus, it does not drill down to the disciplinary level, whereas my own work examined these issues from the perspectives of sociologists in higher education.

This section has discussed research, issues and debates in relation to sustainability in the curriculum. The next section considers sustainability in relation to *particular* disciplines.

2.5 Sustainability and disciplinary studies

Sustainability has been researched in relation to many disciplines and fields of study, several collections documenting how it has been infused in specific curricula (Barlett and Chase, 2013; Jones et al, 2010; Johnston, 2013). Subject areas represented include mathematics,

psychology, economics, geography, history, law, nursing, health science, travel and tourism, and catering. These studies demonstrate how sustainability can be applied in diverse ways, in individual disciplines, but do not always offer the interdisciplinary insights favoured by some authors, referred to above. Nevertheless, there is a place for disciplinary contributions as they may offer ideas and insights arising from one discipline that might be applied to others.

To provide some examples, Jones et al (2008) investigated staff and student views about opportunities for and challenges of embedding ESD in undergraduate geosciences degrees. Whilst the study revealed overall support for ESD, lecturers had different views about how best to embed in a way which did not compromise core subject content – an outcome common to studies undertaken within other subject areas too. Hopkinson and James (2010) focused on STEM (science, technology, engineering and mathematics) subjects, providing examples to support their view that there are practical ways of introducing sustainability into these disciplines, and within the 'mainstream' of curricula to provide the best possible opportunity for meaningful learning to take place. Petocz and Dixon (2011) studied interpretations of sustainability amongst business students (discussed in the previous section) and found that any attempt to include sustainability into the teaching of business needs to account for different student understandings of sustainability. Following on from this, Reid et al (2009) investigated how students from a business faculty viewed sustainability teaching. While some viewed the notion in limited ways, for example, 'keeping themselves going', others offered more encapsulating perspectives. Carew and Mitchell (2006) explored sustainability teaching amongst engineering students, using metaphors as an analytical device, on the basis that they can offer: "powerful teaching and learning tools which may help us to understand novel, complex or abstract concepts" (p. 217). The study led the authors to reject the notion of a 'uniform right way' to teach sustainability to engineering students and that other factors need to be taken into account.

Koger and Scott (2007, 2016) examined the role of psychology in sustainability education, advocating that psychology can make a critical contribution to understanding and discouraging *un*sustainable behaviours: "psychology is the essential discipline for understanding why individuals behave in unsustainable ways and for designing interventions that address behavioural change" (p. 11). They provide examples of how research in the psychology of learning, cognitive psychology, social psychology, and clinical and health psychology all have relevance for understanding and promoting sustainable behaviours. In

their later work (2016), they developed their case for including sustainability in psychology courses, discussing how pro-sustainability change could yield multiple benefits to individuals. Drawing on the 'diffusion of responsibility' model (Capstick, 2013), they explain how individuals are less likely to change if they cannot see evidence that others are doing so. To counteract this, if individuals are prompted about the effects of unsustainable or harmful actions to themselves, they are more likely to modify their behaviour, since making changes 'for the many' is also beneficial to themselves. Similar arguments have been made by authors including Scott et al (2016). In summary, Koger and Scott make a convincing case that individual disciplines, such as psychology, can offer insights into our understandings of unsustainable behaviours, and positive actions that might encourage change. But to develop our understanding of ways for integrating sustainability in learning and teaching more generally, we probably need to draw upon a combination of discipline-based *and* interdisciplinarity approaches: both may have some value for understanding and progressing sustainability in learning and teaching.

In spite of the paucity of interest in the relationship between sustainability and sociology, a special issue of the journal *Sustainability* did explore possible links. Within this, Islam (2017) argued that sociology can play an important role in educating about a broad spectrum of sustainability issues, such as environmental stewardship, social justice, global citizenship, and well-being. The author examined environmental sociology as a field of inquiry with its roots in both sociology and ecology. In the same issue, Longo et al (first published 2016) purported that considerations of sustainability need to be made beyond 'capitalist social relations', and that alternative environmental sociology perspectives, such as human ecology, may be more useful for the furtherance of sustainability in society. Islam and Yuhan (2017) concluded by offering ideas for promoting an environmental sociology of sustainability drawing on the various articles and arguments presented in this special issue. In suggesting that an environmental sociology (or equivalent) is 'ever-evolving', the authors provide some cause for optimism, but also show that there is rather more to be done.

2.6 Theoretical and conceptual approaches to sustainability

On initial review, sustainability does not appear to be a much-theorised area, many studies being practical, discipline-focused, or institution-based. For Fien (2002), sustainability is 'predominantly atheoretical', the problem lying in the descriptive nature of much sustainability research. He argues that most such research falls into one of four categories:

arguments for reform of curricula and practice; surveys of institution-based sustainability initiatives; narrative or experiential accounts about change initiatives; and, reports of sustainability-based benefits of individual initiatives. By contrast, other authors view sustainability as a theory in its own right, which makes its practical advancement the difficulty: "sustainability and sustainable approaches are seen as theoretical matters, part of the political discourse and hence a mere theoretical expression" (Leal Filho, 2011, p. 431). Whichever of these positions is taken, relatively few studies in the field draw upon a theoretical framework. Nevertheless, sustainability-based studies that do draw on theory were considered as part of my literature review, to inform the literature review itself, and to guide my decision about whether and how use of a theoretical tool might assist with the development of this work.

Examples of the use of theory in sustainability include Trowler et al's (2013) application of social practice theory and complex-adaptive systems theory in their investigation of an initiative for embedding sustainability in curricula at one university. They explain:

> with its focus on recurrent practices… and a stress on the significance of interactions between humans and artefacts, social practice theory may be a particularly appropriate lens for thinking through sustainability initiatives (p. 2).

Sechi et al (2018) examined cognitive learning processes and the environment, drawing on social capital theory, and specifically, a framework by Tsai and Ghoshal (1998) for exploring structural, relational and cognitive dimensions of social capital. Alkaher and Avissar (2018) assessed the impact of a sustainability-leadership development programme (SLDP) adopting community of practice theory to explore the programme's contribution. The authors found that the SLDP provided participants with opportunities to learn from and with other members, but that it had less impact on pro-sustainability behaviours of the broader staffing. Cotton et al (2009) applied the 'theory of the second best' (Lipsey and Lancaster, 1956-7) in their study about sustainability curriculum change, and Baughan (2015) used the same theory to inform his study of educational developer perspectives about sustainability policy and sustainability in the curriculum. Holden et al (2016) looked at the potential value of the capability approach for application to environmental issues, one that has been adopted elsewhere to evaluate aspects of human well-being. Although several attempts to apply the capability approach to sustainability have been documented, it has been suggested that these are narrow in scope, not sufficiently considering, for example, equity and justice

issues (Ballet et al, 2013). Still, as suggested above, this does depend on the view of sustainability that is taken.

Other authors have drawn upon or devised conceptual frameworks, intended to explain or inform sustainability practices or initiatives. Holdsworth and Thomas (2016) developed a framework for what an 'ideal' academic development programme for sustainability education might comprise (Sustainability Education Academic Development - SEAD Framework). This examines how such programmes can address educational change issues such as the incorporation of sustainability into higher education curricula. Stephens et al's (2008) conceptual paper discussed the role of higher education as a change agent for expediting progress towards sustainability in different cultures and contexts. The authors outline 'critical issues', including 'region-specific sustainability challenges' and the 'extent of democratic processes'. They conclude that higher education institutions should play a key part in facilitating society level responses to the myriad, present day sustainability challenges, and draw on 'known methods' to aid understanding of and responses to related threats and opportunities. More recently, Arias-Maldonado (2016) suggested the Anthropocene (a term considered earlier in this chapter) and, specifically, 'The Anthropocenic Turn' to provide a theory or 'vantage point' through which to view sustainability.

Whilst my review and reflection of theory and conceptual frameworks used in previous sustainability and related research enabled me to carefully consider the potential role and value of theory, it did not lead to a view that any particular theory provided a necessary tool that would enhance this project. In fact, I concluded that inclusion of 'further' (see below) theory might only serve to shift or distract from the focus of the project. Such a decision may add to existing arguments that sustainability is under-theorised, but my view was that this project did not need additional theoretical strengthening, and that there was no suitable theory to do so. However, depending on the view of phenomenography that is taken, theory was used at the research design phase. That is, whilst I refer to phenomenography as a research approach, it has been variously described as an approach, design and theory. For example, Tight (2016) identifies phenomenography as a research design, but acknowledges that it might also be defined as a theoretical framework, due to the assumption amongst most phenomenographers that: "for any given phenomenon of interest, there are only a limited number of ways of perceiving, understanding or experiencing it" (p. 320). Reid et al (2009) refer to it as a theoretical framework, on the basis that their use of

phenomenography foregrounded participants' own definitions of sustainability rather than adopting one from the literature or from the researcher perspective. Schroer et al (2015) also refer to phenomenography as both a theoretical and methodological approach.

I take the position that, in using phenomenography to inform my entire research design (formulating the research question; designing the staff and student interview schedules; for providing a specific and detailed guide for analysing qualitative data) phenomenography represents an important guiding framework for this study in its entirety. Nevertheless, it is not used here in conjunction with any other theory. I now briefly outline how phenomenography has contributed to previous studies on sustainability, before discussing its application to my own thesis in the next chapter.

2.7 Sustainability and phenomenography

2.7.1 Background

Phenomenography is a research approach used most commonly for researching higher education, its origins also lying in higher education. It focuses on understanding variation in experiences of a particular phenomenon amongst a sample population. These are captured in a finite number of qualitatively distinct categories of description (Marton, 1981).

Tight (2016) examines origins of, critiques about, and applications of phenomenography. In terms of applications, it has been used for researching areas such as learning and teaching (Shreeve et al, 2010), curriculum (Fraser, 2006), academic development (Åkerlind, 2007), study support (Hallett, 2010), academic practice (Baughan, 2013) and academic leadership (Ramsden et al, 2007) as well as participant experiences of individual disciplines and fields, including sociology (Ashwin et al, 2014) and mathematics (Reid et al, 2003). In addition, it has been adopted for studying sustainability in higher education. There is no substantial body of phenomenographic research on sustainability, but several studies point to qualitative differences in experiences of aspects of sustainability amongst specific participant groups. Marton and Booth (1997) explain that the way people experience, understand or conceptualise a situation accounts for how they respond to it, a point that might well be applied to sustainability.

2.7.2 Phenomenographic studies

Phenomenographic studies on sustainability include that of Reid and Petocz (2006), who examined academics' conceptions of sustainability and how this informed their own teaching of it. The authors suggest that the range of conceptions is problematic, and that shared understandings of sustainability are needed if it is to be successfully integrated into different curricula. Following this, Reid et al (2009) studied business faculty students' experiences of sustainability teaching. Again, whilst some gave narrow accounts, others were broader, the analysis yielding three conceptions: distance (where sustainability is about 'keeping something going', but there is little further engagement); resources (a focus on the resources needed to promote sustainability); and justice (a relational view, focusing on 'fairness' from one generation to subsequent generations). The most common conception was the first, narrowest conception, which the authors regard as problematic, suggesting a need to review how sustainability can be introduced in curricula in a way which encourages deeper engagement. Carew and Mitchell (2006) used phenomenography in conjunction with metaphors (the latter as a further research and analytical tool) to explore engineering academics' conceptions of sustainability. Here too, outcomes pointed to varied conceptions about strategies for curriculum inclusion. Thus, their recommendations were different from those offered by Reid and Petocz. Corney and Reid (2007) examined geography student teachers' experiences of ESD, using pro-formas and interviews. They wanted to understand student teachers' own interpretations of what they had learned about ESD as result of the programme, and sources that contributed to this learning. The resultant data were presented under two sets of categories, on subject matter and on pedagogy. In addition, the authors considered the diverse range of sources referred to by participants as contributing to their learning. They discussed implications of these outcomes for both teacher education and future ESD research.

Schroer et al (2015) studied an introductory sustainability course at the University of Iowa, the purpose of which was to tackle sustainability challenges using *service-learning* (an educational approach usually combining formal learning with related activity in the local community). Following each session, individual learners were asked to complete several reflective activities. By using a retrospective pre-test, in conjunction with phenomenographic analysis, the authors ascertained how learners developed their own interpretations of sustainability subsequent to undertaking the programme. Overall, outcomes suggested a successful educational intervention, with students subsequently involved in over 60

sustainability-focused events, such as community forums and advocacy groups. The authors concluded that through challenging students' thinking and demonstrating the need for society-level changes, the course contributed to students' becoming more 'action-oriented' and sustainable in their activities. The idea of linking sustainability education to community involvement has been raised by several authors (see section 3.4, above). Like interdisciplinarity, engagement with community represents another potential route forward for sustainability in the curriculum. Based on his own pilot for a larger study, Pherali (2011) produced a guide for those studying the environment and related fields, suggesting specific benefits of using phenomenography. As he points out, most previous studies about student attitudes of the environment have been survey-based. But Pherali argues for the importance of understanding conceptions of the environment as a phenomenon, to provide a richer appreciation of peoples' behaviours towards the environment. He presents a case for using phenomenography for sustainability - with the possible limitation that his example study is a pilot drawing on a single participant.

The distinctive focus of phenomenography is manifested most strongly at the analysis stage of a research project, when the researcher repeatedly and iteratively scrutinises their data, towards the formation of qualitatively distinct categories of description. In this way, some researchers have made a partial application of phenomenography in particular projects, using it as a data analysis tool. In these cases, it has not been used as an approach to inform an entire project (such as the design of the chosen data collection tool) but only or mainly in the analysis phase. Winter and Cotton (2012a) studied students' experiences of campus sustainability activities and initiatives (discussed above); they used phenomenographic data analysis, although relatively little is explained of the process. Kokkarinen and Cotgrave (2013) explored final year undergraduate built environment students' experiences of learning about sustainability literacy, through the use of reflective texts. Students were able to identify and express their attitudes towards and conceptions about sustainable construction. The authors also reported that student learning experiences, such as those reported in this study, should provide an important informant for designing educational interventions for promoting sustainability literacy skills. Finally, Kilinc and Aydin (2013) examined Turkish student science teachers' conceptions of sustainable development, exposing varied accounts in relation to society level issues such as the environment, technology and education.

To conclude this section, although there have been several phenomenographic studies on sustainability, the number remains limited, particularly in relation to its possible integration

into teaching, and in spite of the differences in understandings and perspectives about the topic. It needs to be borne in mind that phenomenography remains a relatively 'niche' research approach. Nevertheless, studies cited above suggest that phenomenography may lend itself well to studying sustainability, accounting for the clear evidence of variation that each provides. For my work, it provides the underlying research approach, a tool for understanding the results, and a part of the overall argument of the study.

2.8 Chapter conclusion

My thesis addresses the question *what variations exist in sociology academic staff and students in their accounts about and experiences of sustainability in higher education.* The above literature review is structured under several themes raised by the research question, including the role of sustainability in higher education and debates concerning sustainability and higher education curricula. I also discussed definitional issues, theory, and phenomenography, each in relation to sustainability.

The findings gained from the literature review played a significant role in informing the design of my own project, in several respects. First, an important part of the review involved determining which disciplines sustainability research has been applied or related to: the paucity of sociological perspectives confirmed to me that my original idea of undertaking research within this disciplinary area was worthy of taking forward. Second, the literature review showed that, although more student-based studies about sustainability have been undertaken during the last ten years, there remain relatively few of them, and very few that compare staff and student perspectives. This is why I elected to undertake a study which drew on both staff and student participants, with the expectation that it would add further variety (in conjunction with my use of phenomenography) and richness to the outcomes. Third, through undertaking the review, I was keen to learn about the extent and nature of previous phenomenographic research on sustainability, discovering that there was very little such work about sustainability and the environment. Whilst these previous studies have been valuable, this 'gap' provided further motivation to undertake a fuller phenomenographic project on sustainability and, hopefully, contribute to the literature methodologically, as well as through the sociological focus of the study. Finally, I was informed by several literature-based studies (cited earlier in this chapter), which suggested certain recurring weaknesses in sustainability research, for example, a common focus on single institutions. This guided my decision to undertake this project at three universities, as

opposed to one. Thus, the findings of the literature review played an important role in determining the focus and design of my own work.

Although interest in sustainability in higher education research, teaching and practice has much increased, the application of sustainability in curricula remains a contentious and challenging issue. There is no common view about whether and how it should be integrated in curricula, particularly amongst lecturers and other teaching staff, many of whom remain, perhaps understandably, protective of their discipline. Conversely, there are many individual examples of how sustainability *has* been applied in curricula in individual disciplines and institutions, offering ideas and innovations which may be of value in progressing education for sustainability. Yet few studies tap into sociological perspectives. On this basis, and with the related argument that sociological perspectives may offer some important new ideas about sustainability in higher education, I decided to undertake the project documented in this report. It is expected that the study will offer some useful insights about sustainability in higher education, and therefore make a contribution to our knowledge about the area. In addition, with more emphasis placed on the 'student experience', 'students as partners' and 'student-satisfaction', and to provide better parity of student and staff-based studies in this area, it is timely to draw on student perspectives. The study, therefore, considers sociology staff and student conceptions and experiences together. Finally, the use of phenomenography represents a further intended contribution of the work, based on my argument that such an approach offers an appropriate one for foregrounding differences in conceptions about sustainability, so enabling educators and university leaders to act upon these differences and develop better informed policies and practices. The next chapter further explains the research approach used, and details design and implementation of the study, as well as ethical procedures that were followed.

Chapter 3: Research Approach, Design and Quality

3.1 Introduction

In the previous chapters, I identified the focus of the project, situating its purpose in relation to earlier studies about sustainability in higher education. I presented an argument for the study and for using the phenomenographic approach, and discussed literature in relation to sustainability and phenomenography.

This chapter documents the methodology and methods used. The first two sections examine my adoption of a qualitative, phenomenographic approach. Sections following this discuss project design, the research sample and development of the interview plan. I then consider ethics, the pilot study, and implementation of the project. In the latter stages, limitations of the research design and several important quality and trustworthiness issues are considered, before the chapter is concluded.

3.2 Using qualitative research

This study followed a qualitative approach, which has its basis in understanding individual and collective perceptions and experiences of the world. Mason (2002) summarises key tenets of qualitative research, including its interpretivist stance (how the social world is understood and experienced), its methods of data generation (which account for the social context of the study), and its emphasis on providing understandings based on in-depth, nuanced data. According to Bryman (2008, p. 22): "qualitative research can be construed as a research strategy that usually emphasises words rather than quantification in the collection and analysis of data", the same author adding:

> quantitative and qualitative research represent different research strategies and… each carries with it striking differences in terms of the role of theory, epistemological issues, and ontological concerns. However, the distinction is not a hard-and-fast one: studies that have the broad characteristic of one research strategy may have a characteristic of the other (Bryman, 2008, p. 23).

Descombe (2003) explains that qualitative research is also marked out by its data collection and analysis techniques. This is because "Qualitative data, whether words or images, are the product of a process of interpretation… The data… are *produced* by the way they are

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interpreted and used by researchers" (p. 268).

I adopted the qualitative approach because my project involved the collection of detailed, interpretive information from sociologists. My research is based on the assumption that people interact with the social world, so to understand how knowledge and beliefs are constructed, the researcher needs to explore their experiences. My application of the qualitative paradigm was layered with the use of a further research approach, that being phenomenography. This was because of the focus of the project on understanding *variation* in *collective* experiences of the phenomenon, and *collective* meanings ascribed to the issues raised. The application of a qualitative, phenomenographic approach enabled me to foreground variation in participant understandings, meanings and experiences about sustainability.

3.3 Using phenomenography

Phenomenography is a qualitative research approach focused on understanding variation in experiences of an issue amongst a sample population and used for studying many higher education issues. Tight (2016, p. 319) views phenomenography as: "an innovative research design, which aims at identifying and interrogating the range of different ways in which people perceive or experience specific phenomena" (p. 319). It is: "underpinned by the constructivist principle that we construct meanings of phenomena from an array of social and personal influences… In short, we may not all see the same thing in the same way" (Cousin, 2009, p. 184). It is based on a non-dualistic ontology (Åkerlind, 2005a) and therefore does not involve comparison of subjective and 'real' worlds, since the individual and the world are understood as "an internal relation between them" (Marton and Booth, 1997, p. 13).

Phenomenography assumes that experiences can be presented in a restricted number of qualitatively distinct categories of description (Marton, 1981), the researcher seeking to understand the meanings of these categories and how they inter-relate (Entwistle, 1997). These are displayed in 'outcome spaces' and constituent 'categories of description'. Tight (2016, p. 320) elaborates: "phenomenographers operate with the underlying assumption that, for any given phenomenon of interest, there are only a limited number of ways of perceiving, understanding or experiencing it". Many phenomenographers also utilise

'bracketing' (or 'epoché', Ashworth and Lucas, 2000) in which the researcher seeks to 'bracket out' their prior knowledge of the phenomenon, to reduce bias.

I selected phenomenography for this project because I was interested in understanding how experiences of sustainability in higher education varied amongst sociology academic staff and students. With its focus on structuring difference, phenomenography is well suited to researching interpretations of sustainability, which, as suggested earlier, is also characterised by difference – in understandings and accounts in relation to higher education.

Earlier phenomenographic studies have been valuable in furthering our understanding about sustainability (Corney and Reid, 2007; Kilinc and Aydin, 2013; Pherali, 2011; Reid and Petocz, 2006), many of these undertaken within individual subject areas (Baughan, 2015; Carew and Mitchell, 2006; Reid et al, 2009). However, there were additional reasons for using phenomenography in this work. By gaining a better understanding of experiences that students and staff have of sustainability, we may be in a stronger position to make recommendations about what higher education institutions could do to enhance policy and pedagogy. Second, I previously undertook a study at my home institution based on four 30-minute interviews with staff about their views on sustainability: the results illustrated noticeable variation even amongst such a small sample. Thus, I undertook this work with the belief that additional but distinctive phenomenographic research about sustainability, within the discipline of sociology, would provide a valuable knowledge base for informing future sustainability initiatives and teaching.

3.4 Research method

Phenomenography can be undertaken in conjunction with various research methods, including focus groups, surveys, drawings, essays, or even historical documents (Stokes, 2011), but the most commonly chosen is the semi-structured interview. This enables the researcher to collect detailed, interpretive information, raise follow up questions, and request examples about experiences that participants introduce. These all represent key questioning strategies for gaining rich data about participants' experiences. Bowden (2000, p. 9) elaborates:

> The phenomenographic interview has a focus – the way in which interviewees understand
>
> the chosen concept – and this focus is maintained throughout the interview. Interviewees are

encouraged to express their qualitative understanding of the phenomena under

investigation. The researcher may ask interviewees to clarify what they have said.

My use of phenomenographic interviews was informed by literature on interviews (Cohen et al, 2007; Bryman, 2008) and phenomenographic interviews (Åkerlind, 2005b; Åkerlind, 2005c; Cousin, 2009; Entwistle, 1997). I developed two, broadly similar, interview plans, for student participants and staff participants. These comprised a list of key questions as well as optional, additional questions for probing further into experiences.

3.5 Research sample

Because phenomenography places focus on variation and qualitative difference, researchers usually attempt to design variation into their studies, through the sample base - utilising a broad-based sample to maximise opportunities for variation in later outcomes (Ashwin, 2005; Cousin, 2009; Trigwell, 2000) - and through questions posed in the data collection tool(s). In my study, I attempted to maximise variation through the selection of diverse sociology departments and through the recruitment of a range of participants within those departments, as well as in the questions I asked during interviews. I interviewed at three UK based universities, and recruited eight participants (four staff; four students) at each. This appeared to be an appropriate number in light of previous phenomenographic research, whilst, anyway, variation can be checked in a given study by a preliminary analysis of early transcripts.

3.5.1 Selection of departments

For the selection of sociology departments, I first consulted departmental websites and noted areas of research and curriculum focus for each. This led to a 'shortlisting' of 14 departments. In this shortlisting process, I removed several very specialised departments or those in which sociology formed a minor subject in a larger social science school or faculty. In addition, accounting for the fact that I was seeking to apply variation as part of my use of phenomenography, I wanted shortlisted departments to be as different from one another as possible, avoiding commonality or duplication. Deletions were also made due to my knowing certain staff through previous affiliations, as I was concerned that this could influence findings. Following this process, for each of the shortlisted departments, I noted: university name and location; contact information; any documented involvement in sustainability

research; teaching activity; and particular benefits that the department might afford for this study. This was helpful in enabling me to recognise that participating departments could be at universities in different regions of the country, thus providing geographical variation, and that invited departments should feature, to the best extent possible, distinct histories, research foci and curriculum structures. The shortlist was subsequently reduced to four departments, including one 'spare' in case of any dropout. Appropriate contacts were then approached, and the sample of three was confirmed shortly afterwards. Previously, I had considered an alternative sampling strategy which would involve selecting universities based on the *People and Planet University League* (People and Planet, 2019), this being a ranking of institutions according to scores awarded under pre-set sustainability-based criteria. However, it was quickly decided that this metric-based approach may create an artificial basis for selection. Further, some institutions dropped out of this ranking altogether, so this early idea was dropped.

Having devised a shortlist which incorporated an element of priority to give best chances of variation, I sent invitations to relevant heads of departments. My communication introduced my role as a PhD student and the purpose of my project; it offered follow up actions as to what would need to happen next if my invitation was accepted. I confirmed that the study had received ethical approval and acknowledged that it would need to satisfy ethics procedures at institutions at which it would later be undertaken.

My first approach was successful, with the Dean in the relevant school supporting and helping facilitate the project. However, attempts to gain access at two further departments took longer. The second department that accepted was both on the shortlist and recommended by a member of staff at the first institution. This featured an entirely different curriculum structure, was based in a different region, and is a 'post-92' institution. With some weeks elapsed, two further departments accepted invitations; although there was a temptation to accept both, the first was accepted and the latter was appointed as a 'reserve'. The sample strategy cannot be declared as scientific, and, indeed included an element of convenience, but the original objectives were fulfilled: the three departments featured distinct profiles, and teaching and research areas. One included minor curriculum content on the sociology of the environment; one included sustainability research as part of its profile; and one featured no explicit links to sustainability. Two of the universities were 'pre-1992' institutions, the other was 'post-1992'. The institutions were geographically distributed, being based in the north, south and west of England. The universities did not

include any at which I have been employed or the university at which this PhD is being undertaken (Lancaster). In order of recruitment, I gave the universities the pseudonyms of Civic, Coastal and County.

3.5.2 Selection of participants

Whilst I was able to select departments, recruitment of participants was more complex, requiring the help of staff in the respective institutions. Nevertheless, it remained important that variation could be achieved in the participant base, so from first contact, I drew attention to this need. I provided my contacts in each department with information about the phenomenographic nature of the study.

Although departmental contacts had a greater role in recruiting participants, slightly different procedures were used at each: first, procedures for recruitment varied amongst the three institutions; and, second, the recruitment of staff, as compared with students also varied within and amongst institutions. In the case of staff, I was given names and email addresses that I could contact within the relevant department, except in one case, in which I was given contact details of those who had already agreed to participate. In the case of students, at Civic and Coastal, undergraduate students were assigned to me by the lead contact. At County, the Dean sent an email to all eligible students containing my email address with students invited to contact me if they wanted to be involved. This led to slightly higher student recruitment, although one of these dropped out in advance and another was unable to attend on the day. As a consequence of this, the total participant count was exactly as intended, 24, with an equal number of staff and students, and equal distribution of staff and students at each university.

The sample included representation from male and female staff and students, although more staff were male and more students were female. There was strong variation in terms of professional experience amongst staff, whilst first, second and final year undergraduate students were represented, reading different sociology degrees. That all students are undergraduate was not intentional, as information provided to departments indicated that postgraduate students were also welcome.

3.5.3 Participant profiles

Variation in the sample was achieved by: undertaking the project at three sociology departments, with distinctive histories, research foci, and curriculum structures; recruiting staff with varied roles, levels of experience, and areas of expertise; recruiting first, second and final year undergraduate students. Most students were 22 years of age or under; two were mature students. Two of the staff (based at different universities from one another) had particular interest in sustainability. Participants originated from a number of countries. Staff comprised five female and seven male participants; students comprised ten females and two males. Tables 3.1 and 3.2 summarise these profiles.

University Pseudonym	Participant Pseudonym	Gender	Professional Role	Professional Experience
CIVIC	Fahim	M	Professor of Sociology	19 years
CIVIC	Austin	M	Professor of Sociology	26 years
CIVIC	Lauren	F	Lecturer in Sociology and Community Studies	10 years (approx.)
CIVIC	Aidan	M	Lecturer in Sociology	18 years
COASTAL	John	M	Principal Lecturer in Sociology	10 years
COASTAL	Anthony	M	Senior Lecturer in Sociology	12 years (approx.)
COASTAL	Ava	F	Lecturer in Sociology	4 years
COASTAL	Milo	M	Lecturer in Sociology	2 years
COUNTY	Poppy	F	Lecturer in Sociology	1 year
COUNTY	Scarlett	F	Senior Lecturer in Sociology of Environment	14 years (approx.)
COUNTY	Elizabeth	F	Professor of Sociology/ Head of School	12 years

University Pseudonym	Participant Pseudonym	Gender	Course	Year of Study
COUNTY	Daniel	M	Reader in sociology	16 years
Aggregates:		M7, F5		

Table 3.1: Staff profiles.

University Pseudonym	Participant Pseudonym	Gender	Course	Year of Study
CIVIC	Fay	F	Sociology	1
CIVIC	Ani	F	Sociology	1
CIVIC	Tim	M	Sociology	1
CIVIC	Valerie	F	Sociology	3
COASTAL	Amy	F	Sociology	2
COASTAL	Veronica	F	Sociology	2
COASTAL	Ella	F	Sociology	2
COASTAL	Den	M	Sociology and Media Studies	3
COUNTY	Alice	F	Criminology	1
COUNTY	Eve	F	Sociology	2
COUNTY	Ruby	F	Media Studies	2
COUNTY	Sylvia	F	Sociology, Culture and Media	3
Aggregates:		M2, F10	Sociology: 8 Joint/Other: 4	Year 1: 4 Year 2: 5 Year 3: 3.

Table 3.2: Student profiles.

3.6 Interview plan and pilot

Two interview plans were developed, for staff and student participants. Cutajar (2014) refers to using an interview *plan* as opposed to schedule, because it prompts more flexibility in questioning: this approach was applied here. The plans followed the same structure and included common questions, but there were also slight differences between the two. Åkerlind's (2005b) worked example of a phenomenographic interview provided a helpful aid.

At the top of each plan, I noted the research question as a check to ensure that questions raised were focused around the research question. Each plan was organised under three sections. For the staff plan, the first section raised questions about their roles as academics; early questions were intended to aid 'easing in', although they provided important data as well. Participants were asked how long they had been an academic for, how they perceived themselves as academics and what they were trying to achieve. They were then asked what the most important values for them as academics were, and why. In the second part, I shifted the focus to sustainability. Participants were invited to share their understandings of this term, and how they visualised sustainability. I asked how or where sustainability featured in their higher education experiences and whether they had drawn upon or adopted any aspect of their conception of sustainability in their roles. I asked participants to consider any relationship between professional values important to them that they had spoken about earlier, and their notion of sustainability. The largest part of the interview addressed sustainability in the curriculum, and their views and experiences about this. Interviews were rounded off with any closing questions; in a few cases I returned to a previous question. Participants were provided with the opportunity to raise any further comments or questions.

The student plan was also structured under three sections. The first raised questions about 'being a student', why they selected sociology as a degree, and whether they enjoyed studying it. Like staff, students were asked whether they held any significant values that were important to them in their role of being a student. Again, the second part of the interview shifted the focus to sustainability. Students were invited to describe how they visualised sustainability and whether their conception related to any of the broader values they had expressed. I asked what experiences of sustainability they had through being in higher education. In the last section, I raised questions about sustainability in the curriculum, asking each student whether they had learned about sustainability during their studies and whether they would like particular aspects of it to be featured in their learning. Interviews were rounded off with any closing questions and an opportunity for the participant to raise further points or questions of their own.

Having drafted the plans, I sought the opinion of my supervisor and two other published phenomenographic researchers (a staff member in the Department of Educational Research

at Lancaster, and a graduate of the programme). The feedback was positive but suggested the need for several revisions as follows:

- To make the plans more oblique about role and identity, on the basis that one or two questions could be difficult to understand. Alternative questions were suggested such as: 'How do you see yourself as an academic/student?'.
- That it was important to ask participants what they understood by the term sustainability, bearing in mind conceptions of sustainability in sociology were a central part of the research and that this might be a 'way into' the issue. A related question in the original plan ('What do you think of or picture when I mention sustainability?') elicited positive feedback.
- That some of the later questions were repetitive or similar to one another. Thus, such questions were marked as cues, used only if a participant did not understand or address a previous question.
- The interview plans were regarded as thorough, but I was reminded that depending on how verbose a participant was, I may not need to directly raise all questions.

With the amendments made, I organised two pilot interviews (one student; one staff member) to check how long they took and identify whether further enhancements could be made. On the basis of the pilots, it appeared that concerns and ambiguities had been removed at the previous review stage. The interviews were helpful, indicating that respondents might know more and have more experience of sustainability than I originally envisaged. It was observed that the interview shifted 'suddenly' from questions focused on role to those about sustainability, so a minor adjustment was made. Data showed examples of variation, giving me confidence in the study. These pilot data were not used for the eventual study.

3.7 Ethics

Ethical issues were accounted for throughout the project, with guidance taken from the British Educational Research Association *Ethical Guidelines for Educational Research* (BERA, 2011), equivalent guidelines by the Economic and Social Research Council (ESRC, 2010), Pring (2015) and work on quality considerations in phenomenography by Sin (2010). Ethical approval was applied for and obtained from Lancaster University before institutions or

individuals were approached. This included the completion of two self-assessment documents and a project information and ethics questionnaire, as well as developing a letter to be sent to external institutions for permission to recruit, a participant information sheet and consent form. The participant information sheet is provided in Appendix 1 and the consent form is provided in Appendix 2. Ethical approval was not needed at my employing institution, although the Research Office was informed.

In addition, ethical approval needed to be obtained at the three universities at which I hoped to interview. At Civic, where interviews would be undertaken first, I was asked to submit Lancaster forms, where the application was considered at the School Ethics Committee, and approved. For Coastal, documents were submitted with a covering letter from myself to the School Ethics Committee, and approved.

However, ethical approval for County was complex, delaying the undertaking of the final eight interviews. At this institution, I was required to complete a new set of ethical approval forms as an external researcher. Documentation was submitted, with advice also being given to me by the Research Office at Lancaster University throughout the process. In spite of this, four submissions had to be made before the project was approved. At one stage, an enquiry concerning insurance was so specific that staff at the Research Office at Lancaster were unable to provide a response, and the enquiry was therefore passed onto a further Lancaster staff member. Eventually, documents proving Employers' Liability Insurance, Professional Indemnity Insurance, and Public Liability Insurance were all transferred from Lancaster to County. At the end of this process, and having sought advice from numerous sources, I lodged a complaint with County University about their procedures for external researchers and the inconsistencies in advice that I had been provided with. It was acknowledged that my experience would be valuable for informing a forthcoming review at that university. Ethical approval was eventually provided by County University some months after the original application had been submitted. As part of this, an 'Academic Assessor' was appointed for my project.

At all three institutions, the 'Permission Request' letter was signed by the relevant senior member of staff, in advance of participant recruitment. I also ensured that participants would not be disadvantaged or compromised in any way, that they were fully informed about the research, and that they knew they could withdraw at any time. Ethical issues were

accounted for throughout the project, particularly because it involved working with external institutions and students; much was learned through the process.

3.8 Implementation and transcription

Prior to visiting each university, I devised a visit timetable and issued an information sheet and consent form to each interviewee. The information sheet detailed the purpose of the study, what participation involved, how to withdraw, anonymity and data protection, and who to contact in case of any concerns. It also provided brief, contextual background about sustainability.

Data collection was organised into three blocks of two days at each university. This format enabled me to transcribe and begin data analysis *between* phases of data collection, checking for variation at an early stage. Whilst no changes were made to the interview plan after interviews began, I did make minor refinements to my interviewing style as some students were concise in their responses. Interviews were undertaken with staff and students in a pre-assigned room within the relevant department. I arranged the room to enable interviewee and interviewer to talk to one another easily, avoiding a 'boardroom' arrangement. I checked that each participant had understood the information sheet and signed the consent form, and provided the opportunity to raise any further questions.

Following the preliminary questions, I invited participants to comment on their experiences of sustainability, and offer their views and accounts about specific aspects of sustainability in higher education. They were encouraged to provide examples to illustrate their points. As Shreeve (2010) notes, it was sometimes necessary to pose slightly different questions to individual participants to gain an overall understanding of the experience of the phenomenon. Most interviews took 25-45 minutes, some staff interviews taking longer, and one student interview being shorter. Interviews were recorded using a digital data recording device. On completion, each participant (including the two additional participants of the pilot interviews) was given a book token as a gesture of appreciation. Guidelines for the use of incentive payments were followed (Head, 2009; ESRC, 2010). Finally, participants were informed that they could contact me again if they wanted to raise any further points.

After transferring data files from the recording device to a more secure medium, I transcribed each interview myself with the aim of accurately recording all words spoken, as

opposed to achieving grammatical perfection (Shreeve, 2010) and noting every speech disfluency. This transcription period overlapped with the *preceding* interviewing phase - since I was transcribing one set of interviews ahead of my visit to the next university - and the *subsequent* data analysis phase - as I began data analysis during transcription. I transcribed all interviews myself because this allowed me to begin to understand the data and patterns within the data at this early stage, adding thoroughness and richness to the analysis process.

3.9 Comments and limitations

Phenomenography and phenomenographic interviews were used in this study to identify qualitative differences in participant accounts of sustainability. As many studies about sustainability are based in institutional contexts and as more are based on staff experiences, there was benefit to be gained from capturing student and staff experiences together, in a multi-institution work.

However, method and methodological aspects of the project raised certain challenges, and feature particular limitations. In terms of challenges, I was aware of the issue of researcher objectivity, there always being a danger of revealing my own assumptions or views. Sustainability in higher education is a value-laden area and those who research it often have an interest in supporting or progressing it in some way. I was careful to account for this possibility throughout the research process, particularly in view of my involvement in related activities at my own institution. Bracketing out my beliefs was important, although it must be questioned whether a 'total' bracketing is possible for any researcher. Second, the multi-institutional nature of the study meant that it was necessary to identify suitable participants at other universities, and I relied on decisions of colleagues within those universities to guide my recruitment, although the eventual sample clearly featured variation. Third, drawing on my own previous research (Baughan, 2015), I was aware of my interviewing style, as listening back to earlier recordings revealed that I could meander in questioning, so I was careful to be clear and concise. On this point, Shank (2002) provides advice about sharpening interview skills. Finally, whilst the multi-institutional nature of the study is viewed as beneficial, claims cannot be made about representivity; but nor phenomenographers do not attempt to make such claims. As I shall argue in the outcomes, the study shows considerable variation amongst sociologist interpretations and experiences of sustainability, and casts new perspectives on sustainability in higher education.

Suggested weaknesses of phenomenography also need to be recognised and have been raised by authors including Webb (1997), Cousin (2009), Sin (2010) and Tight (2016). One criticism is that the variation which phenomenography marks so strongly is usually documented in ordered categories, which may dilute the depiction of more nuanced and complex interpretations of a phenomenon (Webb, 1997). On this issue, Cousin (2009), drawing on work by Morris (2006), suggests it is preferable to avoid organising categories hierarchically, and instead acknowledge and depict messier, overlapping interpretations. Bracketing, as discussed above, may also pose a concern, the researcher surely in danger of being influenced by their own position in relation to the studied phenomenon. Cutajar (2014, p. 58) advises:

> Maybe in a less than perfect world, it is impossible to reveal the world exactly as experienced by others. But phenomenographers can nonetheless try their best to approach it explicitly acknowledging what is managed and what is mismanaged in trying to get as close as possible to the participants' interpretations.

Cousin (2009) explains the helpfulness of taking a reflexive approach here, identifying any variables that could influence findings. Tight (2016) opines that concerns derive from both outside and inside phenomenography itself, also drawing attention to the generalisability, reliability and trustworthiness issues (Collier-Reed, Ingerman and Berglund, 2009) which are examined later in this chapter. Further, phenomenography is subject to the limitations of qualitative approaches as a whole, including the contextual nature of this type of approach.

But, Åkerlind (2005a, p. 322) is less convinced by some of the critiques:

> Aggravated by the relative lack of published discussion of phenomenographic methodology, this has led to a situation in which critiques of the research approach may be founded on misunderstandings of the nature of phenomenography… and phenomenographic contributions to the research literature are often assessed by journal reviewers without a clear awareness of the unique methodological requirements of the approach.

In closing this section about the value and limitations of phenomenography, it is worth drawing attention to a further point made by the same author:

> Trying to understand how people can interpret the same events and situations so differently

(while commonly being highly confident that their interpretation is the only reasonable one) has been a life-long interest for me (Åkerlind, 2005c, p. 64).

Indeed, I suggest that key contributions from this study could not have been made if a different research approach had been chosen.

3.10 Quality and trustworthiness issues

As with all research approaches, the decision to commit to phenomenography raises questions and necessary checks concerning 'quality' where, in my interpretation, quality encapsulates a range of research and researcher issues. These include validity, reliability and trustworthiness, although the application of these markers to qualitative research is neither always straightforward nor agreed upon. In this section, I consider my own study – as a qualitative and phenomenographic work - in relation to quality issues, identify measures which I took to improve the quality and integrity of the work, and refer back to the reflexive approach I adopted.

3.10.1 Quality issues in qualitative research

In designing my project, I was guided by the work of Tracy (2010), who cites eight 'key markers' of quality in qualitative research. These are: (a) worthy topic; (b) rich rigour (which refers to, but is not limited to, the provision of rich descriptions and explanations, the researcher working with nuance and complexity); (c) sincerity; (d) credibility; (e) resonance; (f) significant contribution; (g) ethics; and (h) meaningful coherence. This conceptualisation is valuable because it provides guidelines for good practice in qualitative studies, although Tracy acknowledges that the primary impetus for developing her conceptualisation was pedagogical. She adds: "These markers… can help us engage in dialogue with power holders who might otherwise regard qualitative research as just a good story" (p. 849). In applying them to this project, some (for example, worthy topic and ethics) have been visited already, whilst others (significance of contribution) are taken up in the discussion. In addition, Sin (2010) provides a 'bridge' in examining how quality criteria for qualitative research can be applied to phenomenography. Criteria include validity, generalisability, reliability, and ethics, the author offering strategies for managing each of these. Sin recommends setting out a clear justification for using phenomenography, and provides advice about data collection, transcription and analysis. These points were also applied here, as documented in the

following section.

3.10.2 Quality issues in phenomenography

I used phenomenography for this study, aware that this raised both general and specific quality issues. These include validity, reliability and generalisability, or, bearing in mind the positivistic origins of these markers, their 'qualitative equivalents'. This account does not provide a comprehensive examination of *all* quality issues, but focuses on recurring themes in the literature about quality and phenomenography. Not included, but also essential, is the matter of research ethics, considered above. It should be noted that although authors including Collier-Reed et al (2009), Sin (2010) and Åkerlind (2005a, 2005c) advise about quality in phenomenography, it has been addressed in different ways, to different extents, in different studies; Tight (2016) highlights variation in practice amongst phenomenographers themselves in areas such as data analysis, whether analysis is undertaken individually or collaboratively, and types of validity checks that phenomenographers make. These debates and variations provide additional challenges for the novice researcher. Consequently, I tried to ensure that I considered the quality of my study openly, reflexively, and at all stages of my research.

3.10.3 Validity

Validity in phenomenography has also attracted diverging views, but Åkerlind (2005a, pp. 329-330) summarises the position as follows:

> Qualitative researchers are still traditionally expected to address issues of the validity and reliability of their research, even though these notions derive from a positivist approach... Consequently, these notions need to be reframed within the context of the ontological and epistemological assumptions of the research approach being used. Phenomenography has much in common with the assumptions underlying other qualitative research traditions, and thus draws on their practices, as well as having differences that necessitate its own set of practices.

In relation to Åkerlind's final point, various researchers have applied Kvale's (1996) distinction between communicative and pragmatic validity. The first refers to the extent to which "the research methods and final interpretation are regarded as appropriate by the relevant research community" (Åkerlind, 2005a, p. 330) and may necessitate disseminating

the outcomes for wider scrutiny (Collier-Reed et al, 2009; Kvale, 1996). The researcher needs to be able to argue for their research to appropriate research groups (including parties involved in the study) via, for example, conferences, seminars and peer-reviewed journals. Pragmatic validity is "the extent to which the research outcomes are seen as useful… to their intended audience[s]" (Åkerlind (2005a, p. 330), yielding new knowledge and insights (Åkerlind, 2005a; Marton and Booth, 1997). Cope (2004) suggests that this can be enhanced through the researcher explaining their background and understanding in relation to the phenomenon, justifying design of the interview guide, outlining their data analysis approach, and, again, presenting their outcomes for scrutiny.

I sought to incorporate each of these forms of validity into my project. Key aspects of my thesis have been presented at the European Conference for Educational Research (ECER) (Baughan, 2016c, 2016d) and at other conferences and seminars, my initial results were published in a book chapter (Baughan, 2017), and I documented my use of phenomenography in a published case study (Baughan, 2016b). I have also maintained communication with colleagues at each of the three universities where the study was undertaken. Nevertheless, phenomenographic researchers may make an additional claim for validity through practising bracketing (Morris, 2006); I documented my approach to bracketing earlier in this chapter, explaining my background to enable users to be informed about personal variables that might affect the outcomes.

3.10.4 Reliability

Reliability is the extent to which the findings of a study can be replicated. Kvale (1996) distinguishes between two types in qualitative research, both of which require additional researchers evaluating the potential impact of a single researcher perspective on the data. Dialogic reliability checks involve researchers reaching agreement about study outcomes through discussion, and coder reliability checks involve two researchers independently coding selected transcripts and comparing categorisations.

However, it might also be argued that reliability cannot be applied to qualitative research due to the individual nature of each research setting. To counteract this concern, Sandberg (1997) prefers to check for reliability of the interpretative process itself, researchers acknowledging and managing their own preconceptions. Ashworth and Lucas (2000) add that researchers must set their presuppositions aside so they can engage fully with

participants' lived experiences. The researcher should make their interpretive steps clear, presenting illustrative examples (Guba, 1981; Kvale, 1996). Checks can also be made for how researchers have analysed their own presuppositions to help mitigate the impact of any subjectivity. Again, reliability checks may be difficult in phenomenography due to the focus on variation of experience (Marton and Booth, 1997).

In spite of my recognition that it cannot be a fully scientific procedure, I once again worked hard to bracket out my presuppositions. I undertook a careful self-transcription of all interviews, noting non-verbal signals and hesitations to add to my capturing of experience. I obtained supervisory advice (in writing and during face-to-face tutorials) throughout the data analysis phase, which resulted in changes being made to my categories of description and outcome spaces. I applied an additional reliability check through the stage-by-stage account I have provided in the next chapter about data analysis, illustrating the interpretive steps taken.

3.10.5 Generalisability

Generalisability is the extent to which findings obtained from a given sample are representative of the population. There remains debate about whether generalisability need represent a criterion for commenting on qualitative research quality, authors such as Larsson (2009) stating that it is neither necessary nor useful. Sin (2010) opines that generalisability may be better considered in terms of transferability - the extent to which findings can be applied to other contexts. Conversely, Marton and Booth (1997) argue that results should be generalisable to comparable populations. In the case of this study, variation in approach and outcomes was achieved, and the findings point to complex and multi-faceted ways of experiencing sustainability in sociology. The study provides a rich picture of sociological perspectives about sustainability, but, with its deep roots in the qualitative tradition, positivistic-style claims of generalisability would be inappropriate.

At this point, an alternative perspective about generalisability may therefore be useful to consider. Stake and Trumbull (1982) developed the idea of naturalistic generalisation, as an alternative to formal or statistical generalisation, suggesting that it may align better with qualitative educational research, of which this study represents an example. In naturalistic generalisation, the decision to generalise is passed on to the reader, practitioner or user. The researcher's role becomes one of providing all necessary contextual information in order to

allow the reader to make an informed judgement about whether or not the research can reasonably be generalised to their own field. This provides a movement away from the research report instructing the reader of how generalisable the study concerned 'is', also relating to the points made above about generalisation through transferability (Sin, 2010). Naturalistic generalisation draws on the notion of resonance, in advocating that, on the basis of the study concerned, research accounts should have the potential to resonate with the reader's previous related experiences. By adopting this model, and through providing detailed background information for the reader, it would seem reasonable to suggest that my own study features some potential to be generalised to other contexts.

3.10.6 Objectivity, reflexivity and bracketing

Sin (2010, p. 310) examines three aspects of objectivity in qualitative research: (a) the engagement between researcher and participants during the study; (b) that the researcher is not independent of the phenomenon; and (c) that judgment by the researcher is required, especially in interpreting of data. She explains that objectivity can be "managed" by employing reflexivity to minimise researcher preconceptions. Cousin (2009) also explains the helpfulness of taking a reflexive approach, identifying any variables that could influence findings. The tools of reflexivity and bracketing were important components in this project. Ashworth and Lucas (2000) identify several areas for bracketing, and, although their advice is aimed primarily for studying student issues, it was used for this project, specifically in the following areas: guarding against importing earlier research findings; assuming any pre-given interpretations; presupposing personal knowledge and beliefs. The same authors provide guidelines for the conduct of phenomenographic research. These include: identifying the most appropriate means of obtaining an account; allowing maximum freedom for participants to describe and reflect upon their experience; avoiding basing questions on researcher presumptions about the phenomenon; and avoiding premature closure of analysis. In the end, the use of a reflexive phenomenography formed a key characteristic of my project, and I was guided by various sources, identified above, in my attempts to instil bracketing and reflexivity, and minimise the intrusion of my personal experience.

3.10.7 Trustworthiness

Certain authors have reframed some of the issues and terms discussed above, suggesting a preference for assessing overall 'trustworthiness' in qualitative studies. This view is linked

particularly with the work of Lincoln and Guba (1985), who describe trustworthiness in terms of credibility, transferability, dependability and conformability. Collier-Reed et al (2009) summarise trustworthiness as: "a means for a holistic *strengthening* of the research outcome and its impact" (p. 340). They add:

> trustworthiness in phenomenography is what makes the research have impact in terms of being able to effect change in the original research setting, the transformation of those participating in the research, as well as having the potential to contribute to a broader knowledge base (p. 353).

The authors distinguish between internal and external horizons, the first referring to trustworthiness within the individual project (the journey to the outcome space), with the external horizon encapsulating broader impacts. The authors also examine trustworthiness in different contexts (domains), these being 'the domain of the researcher', 'the domain of the collective' and 'the domain of the individual participant'. In view of the various quality checks I applied to my project, I did not micro-apply each of the aforementioned components of trustworthiness, but they were helpful in offering a further, overall 'quality lens' by which to consider my research. It was useful to be aware of debates about quality and this alternative depiction of the issues, but the actions I took to enhance quality incorporated key principles of trustworthiness.

To conclude, I have attempted to build quality into all aspects of my thesis. My investigations were surprisingly long and complex, but provided a valuable learning experience. Inevitably, this work features weaknesses and constraints, to be revisited in the discussion. However, by my being transparent and acknowledging the issues, it is hoped that external reviewers will agree that the project features sufficient robustness and integrity.

3.11 Summary

This chapter has addressed the research approach, design and implementation of the thesis. After explaining the rationale for using phenomenography, key components of design were explained, including details of the sample, construction of the interview plan, and piloting of the study. Ethical issues were examined and an account of the implementation was provided. Following this, challenges and limitations were discussed. In the last section, quality issues in phenomenography were considered in relation to the project, with an

explanation of how I attempted to incorporate quality and trustworthiness through all aspects of my research. The next chapter documents the data analysis phase.

Chapter 4: Data Analysis

4.1 Introduction

The specific processes and procedures of phenomenography manifest themselves most visibly during the data analysis stage. Indeed, in spite of the carefully executed procedures that I, like so many others, followed in designing my project, a researcher could, under certain circumstances, decide after data collection that their study was best represented phenomenographically. For this project, substantial time was dedicated to analysis, during which I was informed by the detailed (but themselves varied) guidelines available in phenomenography literature. The current chapter discusses phenomenographic data analysis in the context of my own study, documenting the approach I used and the phases I worked through to reduce my data set into two outcome spaces.

4.2 Approach and terminology

In this section, I summarise the overall approach I adopted for analysing the data set and define key terms and practices. The latter is attributable to phenomenography usually being associated with a particular data analysis approach, for which I was guided by sources spanning bespoke advice for the phenomenographer (Åkerlind, 2005b; Åkerlind, 2005c; Ashworth and Lucas, 2000; Marton and Booth, 1997; Richardson, 1999; Sin, 2010), example phenomenographic studies (Åkerlind, 2007; Ashwin et al 2014; Fraser, 2006; Shreeve, 2010; Stokes, 2011) and phenomenographic studies about sustainability (Corney and Reid, 2007; Loughland et al, 2002; Reid and Petocz, 2006).

Whilst it is possible to use qualitative data analysis software, I used a combination of word-processing and spread-sheet files in conjunction with manual techniques (tagging, colour-coding, labelling, sorting) for the analysis. My reading of phenomenography studies suggested more common use of manual methods for this approach amongst published researchers, and I wanted to use a process I could read about from the experience of other authors and was comfortable with. As an example of the analysis process, Appendix 3 provides a short excerpt from a much longer file I developed entitled *Analysis-Categories*, which was used to organise participant responses into first versions of categories. As the appendix shows, not all categories were retained in the way they were first listed in this file.

The decision to self-transcribe the interviews allowed me to begin an early, informal analysis, checking for variation during transcription itself. According to Åkerlind (2005c), self-transcription is a preferable option, since it enables greater familiarity with the data, sooner. This 'pre-analysis' was light-touch and involved sketching notes, ideas and illustrations for possible categories. Nevertheless, the overlapping of data collection, transcription and analysis activities has attracted debate amongst phenomenographers, with some (Bowden, 2000) opining that beginning analysis before data collection is complete may present a difficulty, as the researcher could be influenced by their analysis in undertaking subsequent interviews. Others (Prosser, 2000; Åkerlind, 2005c) have reported finding it helpful to begin analysis during interviews, calibrate interview guides if necessary, and then complete the research. In the case of this project, I began transcription and 'light touch' analysis before the final set of interviews was undertaken and view this to be a pragmatic decision, reducing the opportunities for problems to arise later.

Qualitative researchers are often keen to laud the detailed, iterative analysis processes they use, yet do not necessarily elaborate on what this means in practice. My own approach fits well with the following definition:

> Iterative refers to a systematic, repetitive, and recursive process in qualitative data analysis. An iterative approach involves a sequence of tasks carried out in exactly the same manner each time and executed multiple times (Bassett, 2010, p. 504).

It should be added that I repeated analysis stages many times to *improve* the quality of my work. Iteration involved: reading the data; marking and noting potentially important quotations; working amongst different computer files to list and sort quotations; using manual separation and categorisation techniques; developing, editing and grouping categories. As a further activity, I regularly returned to literature on phenomenography to check that processes I was following were appropriate, and, at moments of doubt – of which there were some – be reminded that these processes would lead to soundly generated outcomes.

Phenomenographers refer to their full data set as the 'pool of meaning' (Marton and Booth, 1997), the usual practice being to view the data as a single entity. Collier-Reed et al (2009, p. 349) elaborate: "The categories of description do not capture… [individuals'] ways of

experiencing the phenomenon, but rather the experience of the phenomenon by all those in the study". Indeed, the interest of phenomenography is in variation amongst the full range of participant accounts, as opposed to individual contributions or transcripts (Åkerlind, 2005b; Marton and Booth, 1997). This represents a crucial aspect of the approach, but whilst accepting this, I structured my earlier analysis into transcript clusters, as we need some way by which to organise our work: there is nothing wrong in retaining our transcripts separately as long as we remember that meanings and experiences from any single transcript may contribute to any number of categories. Åkerlind (2005a) also acknowledges that: "it is an obvious impossibility to hold all possible aspects of 20 or more interview transcripts in one's mind in an open way at one time" (p. 328).

Each category of description represents a given way that a phenomenon is experienced by the sample group, determined in relation to the other categories; one person may contribute to multiple categories and one category may be associated with multiple participants. Loughland et al (2002, pp. 190-191) explain:

> it is the structure of the variation across the group that emerges through individuals' descriptions of their experience. The categories, therefore, describe the range of different ways in which the particular group involved in the study… experiences the phenomenon.

Categories may be distinguished from conceptions, Sin (2010) adding that a conception is a way that a person understands something, so conceptions are represented in categories according to their similarities and differences. Quality and appropriateness of categories might also be considered in conjunction with Marton and Booth's (1997) three criteria, distilled by Sin (2010, p. 315):

> (a) There must be something distinctive about the conception in each category. (b) The categories are optimal and parsimonious. (c). The relation between the categories is clearly stated.

Once developed, categories are listed under one or more outcome space to illustrate the dimensions of variation (Cousin, 2009, Åkerlind, 2007), usually forming a nested hierarchy (Marton, 1981) in which later categories imply an awareness and understanding of earlier ones, in a pyramidal formation. However, whilst attractive, this model may not always work, thereby making alternative forms of presentation necessary, even if this is viewed as less desirable amongst phenomenography purists. In fact, one of the two outcome spaces

yielded from my research is presented in a more jagged format, as I shall explain and justify later.

Structural and referential features of phenomenography are also used to illustrate experiences of the phenomenon being researched. Marton and Booth (1997) explain that structural and referential aspects of an experience take place simultaneously and are dialectically intertwined. The structural aspect represents the structure of the experience, that is, the "combination of features discerned and focused on by the subject" (Marton and Pong, 2005, p. 336). The referential aspect is the meaning of an experience, or the label assigned to it. Åkerlind (2005c) adds that this focus on meaning and structure forms an important part of phenomenography, in which meaning (the referential aspect) is depicted in the categories of description, and structure is depicted through the explanations of the relationships between the categories. These characteristics all form a part of my own study, represented in the presentation of results.

Although not unique to phenomenography, bracketing is regarded as an essential practice (Walsh, 2000) and involves the researcher dislodging their experiences of the phenomenon concerned from the research process: in this case, sustainability in higher education. To achieve successful bracketing and, in so doing, add to the trustworthiness of a study (Cousin, 2009), analysis is often undertaken by more than one researcher. However, for an individual PhD project, this may be less feasible. Instead, I asked a supervisor and former cohort members to view my *in situ* analysis at appropriate junctures. Further, my version of the iterative approach meant that I returned to the data repeatedly, trying to do so with a fresh perspective each time, willing to renew my interpretations in a reflexive way (Alvesson and Sköldberg, 2000). My claim is that I have made all reasonable attempts to bracket out my own beliefs, but I cannot claim that I have totally extricated every personal experience from my findings, a view consistent with that of Ashworth and Lucas (2000). To help, I drew upon these authors' 'five presuppositions' for bracketing, which include points about avoidance of importing earlier research findings and personal knowledge.

4.3 The data analysis process

This section explains the sequence of processes I worked through in order to complete the data analysis task. The data comprised 24 interview transcripts and the analysis comprised four work phases. I documented all analysis activity in a diary, enabling me to work forwards,

backwards, and forwards again, through the process. Although analysis was primarily an individual activity, I received advice from supervisors, course colleagues, and through feedback at conferences. My work was undertaken with a focus on the phenomenon under examination as stated in the research question.

Table 4.1 summarises the four work phases.

Analysis Phase	Iterative Activities
PHASE 1: - Undertaken during transcription of interviews 1-16 and before interviews 17-24. - Finished during transcription, after all interviews completed.	- Reading of transcripts. - Noting of initial ideas, key words and phrases. - Checking for variation.
PHASE 2: - Undertaken following completion of transcription.	- Transcripts read (multiple times) and reviewed in three clusters. - Two (MS Word) files created to enable analysis to be undertaken. - Iterative process of reading transcripts, identifying key quotations, and developing ideas for categories. - Led to development of three outcome spaces and constituent categories.
PHASE 3: - Undertaken after completion of Phase 2.	- Second analysis of full data pool. - 'Spatial' approach, using transcript hard copies: cutting; marking; categorising. - Development of transcript summaries. - Modification of outcome spaces. - Editing and deletion of categories.
PHASE 4: - Undertaken after completion of Phase 3 and following feedback on analysis process.	- Reorganisation of data from three to two outcome spaces. - Editing and deletion of categories. - Tightened focus on qualitative difference. - Clearer accounts of structural and referential components of outcome spaces.

Table 4.1: Summary of the analysis process

4.3.1 Phase 1

Phase 1 involved first, informal reads of the transcripts. It was undertaken as I transcribed the interviews themselves and, in some cases, before the final set of interviews were completed. I noted initial ideas, key words and phrases, and identified early evidence of

variation in the data. I refer to this as a form of 'pre-analysis' in that it was light-touch and involved sketching ideas, based on reading all the material with an open mind (Åkerlind, 2005b). I consider this phase as formative and preparatory.

4.3.2 Phase 2

Phase 2 represented the start of formal data analysis, beginning after transcription of all interviews was finished. It involved intensive reading and review of each of the 24 transcripts, in three clusters (10 + 7 + 7). My approach was comparable to those who begin with an initial set of transcripts, bringing in the remainder afterwards (Åkerlind, 2005c; Prosser, 2000). Transcripts were not reviewed in order of the interviews being undertaken or split into staff and student categories, because the purpose of the research was to identify and examine *overall* variation. Instead, I initially focused on stronger transcripts, on the basis that it would be useful (and confidence-building) to identify variation and form categories as quickly as possible. Early transcripts may play a more central role in category formation, the researcher beginning with no data and building from that state. Weaker transcripts, often featuring shorter responses, were analysed later, leading to further development of the categories.

This phase was undertaken using two overarching computer files. The first file was entitled *Analysis-Quotations*. Within this, I placed all quotations from all transcripts which I thought to be of potential relevance. Simultaneously, I worked on a second file entitled *Analysis-Categories*, in which, using the transcripts, and quotations stored in the Analysis-Quotations file, I gradually started grouping material, all the while building, editing, combining and removing potential categories. As mentioned previously in this chapter, I include a short excerpt from an early version of the Analysis Categories file in Appendix 3, in which 'A1' and 'A2' provide examples of early 'developing' categories. Thus, concurrent tasks ranged from reviewing, cutting and pasting, to the more challenging work of considering structure, variation, and relationship formation. Categories were developed by examining the qualitative variation in the accounts and the logical relations between them. At this stage, I wanted all quotations of possible relevance to be included, on the basis that I knew I would remove material as the process evolved. In addition, I used different coloured annotations in the Analysis-Quotations file as a means of prioritising material. In many cases, I added short, colour-coded notes to accompany a given quote. This became a helpful routine which I

adhered to in subsequent phases too. However, I was left with an Analysis-Quotations file of some 42,000 words.

As this phase neared completion, I worked more closely through the Analysis-Categories file, further defining my provisional categories. In view of the patterns of variation within, I structured these categories under three outcome spaces: (a) *Sustainability and me*; (b) *Sustainability and my discipline,* and (c) *Sustainability in sociology teaching and curricula*, listed in Table 4.2 (in section 4.3.4). This, then, represented the first presentation of my data. Nevertheless, I remained aware of overlap amongst categories across the latter two outcome spaces, with the need for further phases of analysis apparent.

4.3.3 Phase 3

This involved a further review of the data set, albeit with a modified approach. This time, transcripts were not organised into clusters, but reviewed collectively as a full pool of meaning. Now, analysis involved working with existing outcome spaces and provisional categories, as developed in the previous phase. The work was undertaken alongside a further listening to the audio-recordings and additional re-reads of each original transcript: the former of these, especially, proved to be illuminating, giving me confidence in some previous analysis decisions, but providing new ideas too.

To achieve a breadth of approach, I reviewed the data in a different way, using the physical transcripts. This required marking, tagging, and cutting excerpts and moving them around, experimenting with the categories. Activities in this phase included 'cutting up' transcripts with scissors and grouping printed quotations under possible (draft) categories. In this way, I allowed categories to emerge, though I also grouped together quotations that appeared to be important but did not immediately fit into any given category. Then, I then worked all the categories, in their 'cut up' form in the aforementioned groups (some of the groups being quite large, others rather smaller) combining some groups and eliminating others, where they did not satisfy the characteristic of being a category. To help during this phase, quotations that I thought were particularly important were highlighted, and I also made annotations on quotations – marking ideas or issues that I felt needed to be further considered. All this work was undertaken manually and spatially, to refresh the analysis and help me reflect on the data. Once complete, I reverted to my computer-based approach to consider the changes made. On re-reading the transcripts, I identified additional quotations,

now deemed to be of value to the study. These excerpts were added to the Analysis-Quotations file, and amendments made to outcome spaces and categories in the Analysis-Categories file. Consequently, this re-analysis led to the addition, amendment and deletion of various categories. I worked hard to develop a more logically related set of categories (Åkerlind, 2005b).

In undertaking qualitative analysis, some researchers report finding it helpful to write individual transcript summaries; it is used widely in narrative inquiry (Savin-Baden, 2004). For this project, I wrote a short summary of each transcript, each focused on key issues and themes relevant to the research raised by the individual participant. This provided reassurance that key findings had not been overlooked, a point which will be revisited in the closing chapter. I provide two illustrative examples of these transcript summaries in Appendix 4. Following this, phase 3 provided crucial progress towards completion of analysis. The outputs featured clearer, more logically-related categories of description, explanations of categories, and illustrative quotations, but some duplication between outcome spaces (b) and (c) remained. Therefore, the work was sent to my supervisors for feedback.

4.3.4 Phase 4

Phase 4 followed the receipt of feedback from the supervisory team, as well as ideas received at the European Conference of Educational Research (ECER), where I presented about the sustainability and phenomenography components of the project in two separate papers (Baughan, 2016c, 2016d). According to Collier-Reed et al (2009), the presentation of interim categories at conferences and seminars provides opportunities for feedback and adds to the external credibility of the work. Following the conference, I was invited by Sage to write a methodology case study about the phenomenography-based paper I gave, and peer feedback about the draft version of this case study was also utilised. The tasks that formed this phase therefore involved addressing all the feedback and advice. It also enabled me to resolve the area of duplication in my findings, identified above. Changes were made following consultation with additional studies (Bradbeer et al, 2004; Van Rossum and Hamer, 2010) which each linked to issues I was trying to address.

First, one of my supervisors explained that certain category titles and descriptions were opaque and did not always draw sufficient attention to the variation which they were

actually about. Therefore, I made modifications to ensure that headings and descriptions focused on qualitative difference. Second, two examples were cited in which the variation between categories was not clear, one of these actually signalling *quantitative* variation. To alleviate this, I systematically checked the nature of difference amongst all categories, making two category deletions in the process. Third, and related to the previous point, it was suggested that the findings could be better delineated in two, as opposed to three, outcome spaces, with outcome space c (teaching and curricula) potentially being merged into outcome space b (discipline). This immediately meant that the aforementioned overlap of one category in outcome space b with another in outcome space c was eliminated. This is where the process of considering phenomenographic analysis as about *part-whole relationships* becomes useful, involving further iteration between focus on parts, wholes, and their inter-relationships (Åkerlind, 2005c); a useful analogy here is that of the faces on a cube in relation to the whole cube. I had envisioned both discipline and curriculum being represented as cubes (outcome spaces), yet because of the nature of the relationships, curriculum formed only certain sides of the cube, or categories within the discipline outcome space. This meant that certain data and certain categories were lost, but the focus of phenomenography on variation means that data not aligning with this approach is made redundant - perhaps to be used elsewhere. Finally, advice was given concerning how I could better depict structural and referential dimensions in presentation of the outcomes. I ensured that structural and referential dimensions were more clearly shown and checked the revised outcome spaces against Marton and Booth's (1997) three criteria. The structural and referential dimensions of the study are illustrated in the next chapter and the original and revised outcome space headings are listed below:

Original outcome spaces (phase 2):
a. Sustainability and me b. Sustainability and my discipline c. Sustainability in sociology teaching and curricula
Revised outcome spaces (phase 4):
a. Sustainability and me b. Sustainability and my discipline

Table 4.2: Development of outcome spaces during the analysis

The revised outcome spaces and categories were submitted for review, and it was advised that this presentation was appropriate. This provisional closure enabled writing up of the project to re-begin in earnest.

4.3.5 Completion

The analysis stage led to the development of two outcome spaces illustrating qualitative variation in sociologists' views and experiences of sustainability in higher education. The process was immersive and complex, and of a different level as compared with previous data analyses that I have undertaken. At certain times, I found myself questioning where my analysis might be heading, so numerous and specific were the individual tasks involved. At other times, I became deflected by competing activities, even though these activities were themselves intended to contribute to a different part of the same process: this aspect of research can be difficult to work to rigidly as it often requires long periods of intense mental focus, in isolation from the rest of the world.

It was worthwhile, even if only on completion of the overall task does the researcher realise this. The sense that analysis is complete arises in an almost instinctive way, when no better rendering or presentation of the data can be achieved. On reflection, the background reading I undertook, the phased approach that I used, the regular housekeeping of computer files and hard copies of the many documents involved, as well as, of course, feedback received from supervisors and course colleagues, as well as at conferences, all proved important and beneficial, steering the analysis towards its end-point. I maintained notes about all my key actions through the analysis to ensure that I was able to write up this part of the project accurately, and also for any future project I might take from this PhD research. My journey was neither straightforward, nor could it be described as a direct, point-to-point journey, such that at times I was 'in transit' for extended periods, but it was thorough and persistent and represented a learning experience in its own right.

4.4 Chapter conclusion

This chapter has documented the analysis stage of my PhD, explaining key terms and practices, the analysis approach I used, and the phases of work involved. The analysis led to the development of two outcome spaces, and these are presented, with their constituent categories of description, in the following chapter. The outcome spaces themselves

accommodate competing views of a further debate within phenomenography, because I allowed for the possibility of alternative or non-hierarchical relationships (Åkerlind, 2005c) to be depicted amongst categories if this best represented my findings. The first outcome space follows the nested hierarchy represented in much phenomenographic research. The latter is slightly 'messier', and one that might be regarded as more authentic by certain advocates (Bradbeer et al, 2004; Stokes, 2011) and certain critics (Webb, 1997) of phenomenography. However, each is organised under qualitatively distinct, logically-related categories, and each, in my view, provides the most accurate depiction of the data possible.

Chapter 5: Outcomes

5.1 Introduction

In the previous chapters, I introduced the project, discussed literature on sustainability in higher education, and considered phenomenography as a theory, research approach and data analysis tool. In the methodology chapter, I explained the design and implementation of the research, also addressing ethics and research quality issues. Following this, I documented the data analysis phase. This chapter offers an account of the outcomes of my study. The analysis phase led to the development of two outcome spaces, which will be presented with their constituent categories of description in sections 5.3 and 5.4. Appendix 5 provides two example excerpts from the interviews, one with a staff participant, the latter with a student participant.

5.2 Overview and approach

My review of published phenomenographic works, along with my own previous experience of using this approach, made me aware that authors present phenomenographic outcomes in different ways: some rely on description and quotations; others include more illustrative techniques, integrating tables, graphs and other visuals. I have aimed to present the data in a manner faithful to the participant accounts, utilising feedback that supervisors and colleagues provided on my preliminary categories and outcome spaces. Tables will be included to provide visual representations of the outcome spaces and their structural and referential components. The following advice was also useful:

> There are many decision points along the way in terms of how best to describe the data and interpretations. I aimed to achieve a description that provided a *faithful* representation of my interpretation, presented the data in as *understandable* a way as possible for the reader, and was as *persuasive* as possible in support of the interpretation I had made. (Åkerlind, 2005b, p. 124)

The results are presented in outcome spaces entitled *Sustainability and me* and *Sustainability and my discipline*. Although they are presented in a similar format and both incorporate qualitatively distinct but logically-related categories, in seeking to depict the findings as accurately as possible, their construction is different. The first is based on a

nested or inclusive hierarchy, but outcome space (2) is slightly less conventional, in that the relationship between two of the categories is not fully hierarchical. In addition, this outcome space includes a dominant category, so I have further streamlined the category concerned under several sub-themes. However, all categories represent the most accurate depiction of the data possible, in the interpretation of myself, as author of the project. Every category is illustrated with a series of quotations from the overall 'pool of meaning', that is, the full set of transcripts. On this, Entwistle (1997) says:

> categories of description… need to be presented with sufficient extracts to delimit the meaning of the category fully, and also to show, where appropriate, the contextual relationships which exist. The summary description of a category serves an important purpose in drawing attention to salient features which distinguish it from other categories, but the description isolated from the interview extracts cannot be fully understood by the reader. The meaning resides in the essence of the comments from which the category has been constituted (p. 132).

For each outcome space, I provide an introductory overview, identify the categories in tabulated form, explain the key characteristics of each category, and provide a range of illustrative quotations. The outcomes are based on overall variation across the interview transcripts (Marton and Booth 1997) as opposed to depicting individual differences. Therefore, each quotation is intended to provide a sense about or lens on the category within which it resides. As Marton and Booth (1997) add, an individual category is best understood as a 'way of experiencing' something.

5.3 Outcome Space 1: 'Sustainability and me'

5.3.1 Presentation of outcome space A

The first outcome space is about the relationship between sustainability and the person. It presents accounts about sustainability, based on participants' understandings of sustainability and of how they enact and apply sustainability in their everyday practices. Four qualitatively distinct but logically-related categories of description were derived from the data, ranging from simple to complex, and representing the variation in perspectives and experiences amongst the 24 sociologists. The categories are summarised in Table 5.1.

'SUSTAINABILITY AND ME'
A1. Sustainability is about managing in higher education
A2. Sustainability is about looking after the environment
A3. Sustainability is about things I do for the environment
A4. Sustainability is about my identity and lifestyle

Table 5.1: Outcome Space A – Sustainability and me

5.3.2 Category descriptions and quotations

A1: Sustainability is about managing in higher education

In the first category, sustainability is about managing in higher education, specifically financial management at the organisational or institutional level. It concerns budgetary, cost saving and resource issues, including the human resource – recruitment, retention, restructuring and redundancy. Sustainability is also associated with actions to achieve desired financial management and fiscal aims, such as reducing resources or budgets. In this category, sustainability is driven by organisational needs. Participants often elaborated on their explanations using terms such as 'neo-liberalism', 'control mechanisms', or 'management tool'. It may also be used by management to provide justification for certain actions, such as cost-cutting or making redundancies on the basis of 'maintaining sustainability' of the organisation itself.

Example quotations:

I think a lot of what is passing for sustainability is really about the struggle for intellectual control over universities. Not on ideological lines... I think it is more in particular the growth of managerial power. [Aidan; staff]

When you walk round campus there are quite a few posters trying to encourage environmental behaviour in some respects, particularly with regard to recycling, but also switching lights off and switching appliances off and that kind of thing. But those practices that actually probably, really support the university with the broader agenda of saving money whereas something like air travel which might be much more in tension with the university's other objectives, I think, I would say are ignored. [Elizabeth; staff]

The language of sustainability is one of the things that's been used in the recent proposals to restructure the University. So in the talk that we were given… when they announced that they were going to be cutting jobs, there was kind of a repeated refrain… which I wrote down because I thought the rhetorical structure of it was really interesting, [it] was 'It's just not

sustainable'. And so the Dean who gave the talk just kept coming back to this 'It's just not sustainable' and so there's a kind of financial sustainability… [Poppy; staff]

I find it almost annoying in a, I suppose ecological libertarian type of way, things like, going into a lecture theatre and not being able to control the lights in the lecture theatre because they've all being governed by some kind of sensor… or not being able to open the windows because, basically, some kind of sustainability agenda, or the institution has decided this is the best possible way to keep the optimum temperature of this room, and that type of disabling of the individual. [Milo; staff]

This use of sustainability for management purposes was often seen as a mechanism to increase the responsibility of the individual:

It's painful to think about, and people are frightened about it, so it's much easier to not think in those macro-terms. But I think some of that individualising, it fits very well with the kind of neo-liberal ideology of, well, it's all your fault. [Poppy; staff]

When we go to print something, there's a little box comes each time saying how much your printing is costing. And the thing I hate about that is that sense of, it's using a sustainability agenda… in a completely wrong way, where basically you think it's just covering up the institution not wanting to pay up costs… [Milo; staff]

The language used in sustainability-related documents and proposals was also emphasised:

The way that the language of sustainability is used as part of efficiency savings and managerialism I find really problematic, because it's hard to argue against the idea that you are unsustainable. It's a very final kind of language. Also, I find the very individualised kind of rhetoric around sustainability, about switching your lights off - you know, when you've got the Koch brothers just like financing massive problematic political campaigns about climate change, whether you switch your light on or off, ultimately, I do think that individual change is important, but I think that that kind of moralistic language about individuals has been a hindrance to the environmental movement. [Poppy; staff]

Finally, sustainability might be used to convey a positive presentation and image of the institution:

I think that this is fundamentally about green-washing and the accrual of various certificates. [John; staff]

Category A1, then, is associated with sustainability in higher education as a management tool.

A2: Sustainability is about looking after the environment

Sustainability is regarded as a contemporary societal issue, and is about looking after the wider natural environment. It is about taking measures to safeguard the environment, including recycling, reducing carbon emissions, managing energy consumption, reducing use of natural resources, and responsible food sourcing. Whilst sustainability in this category is about pro-environment or 'greening' behaviours, some accounts also referred to other issues such as ecology, social justice and poverty reduction, these being linked to the environment or viewed as part of the environment by participants. Sustainability is broad-based in this category, but remains externalised in relation to the person. The qualitative difference between category A1 (Sustainability is about managing in higher education) and category A2 (Sustainability is about looking after the environment) is that whilst in A1 sustainability is about management within the organisation - maintaining costs and the long-term viability of the organisation - it has no link to the environment or broader social issues. The movement from A1 to A2 represents a qualitative change along the structural dimension, in which sustainability is understood to involve looking after and preserving the wider environment.

Example quotations:

> I think immediately it's an environmental side for me. It's recycling and, sort of, the environmental, protecting the world… I think the immediate impression is more, is an environmental base or side of it. [Eve; student]

> It seems to me that it's often met in a very, a relative, fundamentally important of course, but nevertheless narrow framework which is to do with the sustainability of the natural environment as a resource for human living, well-being, economic productivity, you know, renewable energies and safe clean drinking water supplies under context of population growth and all those other sorts of things. [Fahim; staff]

> I would be more inclined to go towards the social justice kind of sustainability, purely because I think although environmental concerns are somewhat important, I think that, for some people there are [related] concerns that come before that… not everyone has the time and energy to put all of their interests to sustaining environment and thinking of things in that sense. [Veronica; student]

> I think it's, you know, human life, I think is something that should be valued. It doesn't matter what kind of life it is, I think human life should be valued. But we would have no human life if there was no environment, so we have to consider both. [Veronica; student]

In addition, participants referred to specific examples or actions connected with this account of sustainability. For example, Ruby spoke about environmental activities at both the level of the campus and in society more generally:

> If you donate clothes, more people will be wearing second-hand clothes rather than purchasing new ones. That wouldn't have a direct effect on the production of new clothes but would again reduce the, maybe reduce it in the long-term time… I believe the more you do these projects like donating clothes or exchanging stuff, it reinforces the idea behind it. And at the end of the day it may get to the producers, that they may start thinking about those as well… I see a lot of projects as well that actually reinforce this idea of like, let's do better for the planet. [Ruby; student]

> I guess in that sort of, environmental definition of sustainability that I'm aware of various kind of environmental initiatives around, you know, using resources sustainably, you know, the move away from using paper, signs up about electricity and that kind of thing. [Poppy; staff]

This category focuses on sustainability and society, introducing environmental issues and certain other societal level issues and challenges, such as ecology and social justice.

A3: Sustainability is about things I do for the environment

In this category, participants *relate* to sustainability, in that they are involved in or enact environmental and sustainable behaviours in one or more ways in their personal or professional lives. Sustainability is part of the person, and is about contributing to, safeguarding or improving the environment. It involves a wide range of activities such as recycling, making 'green' transport choices, and accounting for environmental issues in day-to-day consumption of goods and services. It might also include activities relating to social justice, ethics and food sourcing. Participants undertake choices which they understand to be maintaining and helping the environment, perceiving a responsibility to 'do their bit'. Actual actions vary greatly from one person to another but they share the fact that they are understood to be 'pro-sustainable'. The qualitative difference between A2 (Sustainability is about looking after the environment) and A3 (Sustainability is about things I do for the

environment) is represented by a movement along the referential dimension. Whereas in A2, the focus is on the organisational role in looking after the environment, in A3 it is about what the individual does. The qualitative change in this category occurs through an active contribution towards sustainability.

Example quotations:

> We're very strict with our recycling, we've got one girl who's very on it, and she'll check what you're putting in. [Ella; student]

> I cycle to work every day, we don't own a car as a couple. We're pretty kind of ecological, and, you know, not just in a sanctimonious way, but we believe in those kinds of principles. [Milo; staff]

> I always try my best to sustain the environment with recycling and walking to places rather than getting the bus or car… I'm always the one in our house that's putting everything in our recycling bin and taking it out, and saying let's walk instead of getting the bus. [Fay; student]

> I am vegetarian, I do try and live my life in quite an environmentally friendly way. [Elizabeth; staff]

> I'm big on recycling. I don't understand why you wouldn't. But maybe that's just my parents making me do it as a kid, and now I do it. I turn all the lights off and there's little reminders from the sustainability team at university… [Sylvia; student]

Others attempted to practise certain sustainable behaviours and actions in their lives as a whole, providing examples of how they did so:

> I think generally I am fairly green, so, for instance, I used to have a car and I sold it last year… I think it's a really good idea to promote things like train travel and cycling, and I think the university has a scheme where they give you a loan to buy a bike. [Ava; staff]

Participants also provided more detailed excerpts about the importance of sustainability to aspects of their lives:

> I think if you look at the definition… it's the sort of the preserving, you know, having it for future generations, acting as we act now so that we have the same for future generations, and I think socially that's important as well… I volunteered in London giving out food to the homeless, so that's a major thing on my mind at the moment... One of the people we met

was, had been raised on the streets and had always been homeless, because her mum was homeless and I think it's important not to have that and not to have people who are always in poverty and actually have enough resources and have a stable world in which we have enough resources… [Eve; student]

Before I came to uni… I wouldn't really think to myself about dropping a little bit of paper on the floor, or a wrapper on the ground... but I've noticed as I've come to uni that I'm much more, pick that up. I find myself picking up people's rubbish and going, did you drop something? [Amy; student]

There are clothes donation boxes around campus, so you put them in bags and they are picked up regularly. There are a lot of student societies not directly [about] environment and sustainability but go green or do more, like volunteering societies do a lot of environment-related projects, as well as picking up the rubbish round neighbourhoods. [Ruby; student]

In this account, participants moved beyond offering an account of what sustainability was, and discussed what sustainability was *to them*, applying it to their own actions.

A4: Sustainability is about my identity and lifestyle

In this category, the relationship between the person and sustainability moves from one which is relational to one which is central or integral. This category is associated with a deep affiliation to sustainability, which forms a part of personal or professional identity, and shapes actions, behaviours, and perspectives. It represents an underlying philosophy and code for living. It forms a key pillar of identity. This makes it the most encapsulating of categories. The qualitative difference between category A3 (Sustainability is about things I do for the environment) and A4 (Sustainability is about my identity and lifestyle) is marked along the structural dimension. It is represented in a movement from sustainability as taking specific, pro-environment actions, to one in which it forms an overall and underlying aspect of identity.

Example quotations:

The kind of way I would ideally like to live and the kind of society I would like to live in, definitely sustainability would be right at the heart of it. [Scarlett; staff]

I mean this is probably more aligned with my role just as a citizen... I guess that's it probably is part of my academic value system but it's probably more just at that level, in terms of what I do, the day to day practice... [Anthony; staff]

I've actually done that [spoken] to a local, and they've looked at me, like, what are you doing? And I'm like, you just dropped a sandwich wrapper on the floor, there's a bin there... On the social aspect as well, the club I'm in... we produce rubbish. At the end of it we sweep and pick up the rubbish... [Amy; student]

I think it's like the vital age now. When you're younger and get told about it at school it just kind of goes over your head because you are living at home and it's your parent's responsibility. Whereas now we live on our own and own our own houses so if they teach us about it now it's probably more likely to drill into our brains. [Ella; student]

In terms of the environment outside, it plays a big part in what you can do in university especially, so it is important to look after and sustain the environment that you're in, especially the one, like outside, external to self. [Valerie; student]

Amy provided various examples of how aspects of sustainability had become a part of her identity, such as her involvement in events including day-long, organised 'beach-cleans'. Sustainability had become a mission. Likewise, Ella viewed sustainability and pro-environment behaviours to be a central part of her lifestyle, opining that this might be a gendered area too:

All the girls I know... find it easier to think about this stuff. All the boys are just, they don't care about like, things like mess and stuff, and obviously when they do clean up it's, like, in the bin... Well it's even when I go through my old work and I think, like, yesterday I went through my old drawers of my first-year work and I just saw all the paper and thought, don't need that [recycled]. So I think it is gender. [Ella; student]

Of the four categories, this was the rarest, but also represents the most complete account.

5.3.3 Inter-category relationships

This sub-section further explores the nature of relationships amongst the four categories in outcome space 1. These categories form a nested hierarchy (or hierarchy of inclusiveness), each subsuming previous categories (Bradbeer et al, 2004), the first (A1) being the simplest and the last (A4) being the richest. Participant accounts might be represented in one

category or multiple categories, as may be expected to occur in phenomenography, with its interest in *collective* experience. For example, some participants had more than one conception of sustainability and featured in more than one category.

As the categories progress from relatively simple to more complex, the nature of the relationship between the person and sustainability changes. This change enables a distinction to be made between structural and referential dimensions of the outcome space. To elaborate, and as illustrated in Table 5.2, in categories A1 and A2, sustainability is externalised in relation to the self, regarded as an institutional issue, and the movement from A1 to A2 is therefore structural. The qualitative shift from A2 to A3 involves the introduction of a relationship between sustainability and the person (category A3 providing an account of sustainability based on 'things I do for the environment') and is therefore mapped as a change along the referential axis. Finally, the qualitative change from category A3 to A4 is structural as, in this final category, sustainability has an integral connection with the person. Table 5.2 therefore shows how categories shift structurally, referentially, and structurally again, for this outcome space. This mapping is comparable to that used by Stokes (2011), who distinguishes between static and dynamic categories, as well as Loughland et al (2002) in their reporting of student conceptions of the environment as having either an object or relational focus.

'SUSTAINABILITY AND ME'		
	Referential	
Structural	Higher Education	Me
External	A1	
Relational	A2	A3
Integral		A4

Table 5.2: Outcome Space A - Structural and Referential Dimensions

The next section presents additional findings in a second outcome space, *Sustainability and my discipline*.

5.4 Outcome Space 2: 'Sustainability and my discipline'

5.4.1 Presentation of outcome space B

This outcome space documents participant accounts about the relationship between sustainability and sociology, and the role and relevance of sustainability to sociology. This

includes sustainability as related to sociology learning, teaching and research, and any other aspects of the relationship that participants chose to talk about. The outcome space depicts five related but qualitatively distinct categories of description, summarised in Table 5.3.

'SUSTAINABILITY AND MY DISCIPLINE'
B1. Sustainability is unconnected to sociology
B2. Sustainability is connected to institutions
B3. Sustainability is connected to sociology
B4. Sustainability is something that we engage with in sociology
B5. Sustainability is integral to sociology

Table 5.3: Outcome Space B – Sustainability and my discipline

5.4.2 Category descriptions and quotations

B1: Sustainability is unconnected to sociology

Sustainability and sociology are understood as being independent of one another. Sustainability is not part of sociology or of specific sociological relevance. Sustainability was treated as an external term and not explicitly linked to sociology or other disciplines or to the higher education sector in general. Consequently, there is no discipline-based expectation for sociology to address sustainability. At times, sociologists may draw on sustainability in some capacity but cited no unique or particular link. Participants pointed to a disconnect between sociology and sustainability, and especially sociology and the teaching of sustainability.

Example quotations:

> If you integrate it [sustainability], then you are imposing something onto the curriculum which means other things have to come out, and I guess, practically speaking you've got to take people with you as well, and I suspect that it would come to be regarded, even by people who are relatively sympathetic to the goals of sustainability… as tokenistic nonsense to satisfy bureaucrats. [Daniel; staff]

> It just comes across in the same category of lectures as having a lecture on employability. And it's like, it's just those things that they try and drill into you. [Ella; student]

> I'm very cynical of infusing, because I think that these things, they just become notions on a piece of paper that are basically, you know, it's kind of like infusing things like employability

and things like that. [Milo; staff]

As the above quotations show, comparisons were made between sustainability and employability, on the basis that, like employability, sustainability would be regarded as a curriculum 'add on'.

> If you make it something that is compulsory for students to get, students will… say this doesn't have anything to do with my degree, why do I have to take it? So there will be a huge reaction for institutions to face. [Ruby; student]

In this category, then, participants pointed to separation between sociology and sustainability.

B2: Sustainability is connected to institutions

In this category, sustainability is related to and the responsibility of higher education and higher education institutions. It has a connection to higher education as a sectorial and institutional issue. Sustainability *is* relevant and important, thereby needing institutional involvement through, for example, appropriate policy, practices and initiatives. Further, institutional roles of this type have implications for sociology in the same way that they may do for other departments and disciplines: for example, sustainability-based policies might include curriculum-based requirements of or incentives for departments and disciplines. Accordingly, a common argument was for the institution to do more to progress sustainability, both practically and academically. In sum, in this category, sustainability is primarily seen to be an institutional entity and responsibility: 'the university should play its part'. The qualitative difference between category B1 (Sustainability is unconnected to sociology) and category B2 (Sustainability is connected to institutions) is that, whilst in B1 sustainability is a 'stand-alone' and is not considered to have any discipline-based relevance to sociology teaching or research, a qualitative, structural shift to B2 marks the arrival of a broader connection between sustainability and higher education as a whole.

Example quotations:

> I think universities have more power than they may think they do in terms of how students' lives are structured, because when we're in primary school, I remember when recycling was first introduced, all of us were so excited about recycling. And then we got to secondary school and another policy was implemented and we got so excited about that as well. So when we come to university they could also implement policies to do with sustainability…

and I'm sure university students would also get excited about it… we would feel a connection to our uni so we would want to do it. [Valerie; student]

Sustainability should be about investing in kind of, local parks, or investing in studies which look at what people do, who own allotments, things like that. Actually doing something cultural and local which basically engages with sustainability. [Milo; staff]

Once we've acknowledged that that is a problem, then it's beholden upon all actors, particularly institutional actors which consume huge amounts of resources, to be responsible in some sense, take responsibility for their own practices and wider consequences they have and their impact on the collective good for future generations. In that sense, universities as consumers of resources of various kinds using limited resources or renewable resources have a duty to address those things. [Fahim; staff]

When people talk about sustainability in this context, it has now become part of the whole strategic plan, one of the key pillars of what the university is supposed to be doing. [Fahim; staff]

That sense of, kind of, increasing the local identity of an institution… green areas, and doing things which engage with the local community. [Milo; staff]

Some added that whilst sustainability should be an organisation-wide issue, this applies to any organisation:

All organisations should have some kind of commitment to sustainability because it's… everybody's issue and everybody's problem. I think, probably, universities as big employers, as big users of resources, should be paying attention to that. But equally I think that everybody should, you know, within a household unit… But I suppose that in the real world there are other pressures. So, for example, the whole international agenda. [Elizabeth; staff]

Other responses suggested that the sector had already progressed in sustainability:

In terms of social justice, I mean, certainly at this institution, it prides itself on its commitment to social justice... I think this… university is very, very committed there and I see that as valuable and important. [Austin; staff]

But most felt that more needed to be done:

What would increase my sense of citizenship to the university would be an open discussion about exactly what sustainability is, because that's simply what we don't have. In this

university or, I gather, in many others, there is discussion and debate among those people who are supposed to be the most intellectually able… [yet] educated people are actually denied the opportunity to discuss strategic concepts like sustainability, what does it mean and how can we best achieve it? Instead, these things are reduced to tick box exercises. [Aidan; staff]

I really think that they should play a part. The energy efficiency thing did remind me, there are certain buildings in the university that the lights don't turn off and they're on 24 hours, and I don't think that's right… I think there is a big responsibility to be sustainable, one for the footprint and, you know, the general impact they make, but also the fact that it's an educational institution and you are teaching people and through that teaching, it's kind of an example… So I think there is a big impact of how you start your university life to how it continues. So if you get used to recycling, it just becomes a natural thing. It becomes unthinkable to put cardboard in the rubbish… [Eve; student]

The university is concerned about money above everything else and, I mean I'm very cynical about the management at the university and I would take almost everything they proclaim to be doing with a huge pinch of salt, so, you know, inevitably there's much more that they could be doing, I'd like them to be fantastic, I'd like work somewhere that was as green as it could be. [Scarlett; staff]

Whilst in different ways and through different emphases, participants adopting this account experience the link between sustainability and sociology as one that takes place or should take place through the institution.

B3: Sustainability is connected to sociology

In this category, sustainability has a discipline-based connection with sociology itself. Sustainability was described as a potentially relevant area of research for sociology staff and students, and also regarded as an area that could or should be made available as part of sociology curricula. Not all sociologists research, teach or study sustainability, but they did identify links between sustainability and their discipline. Thus, sustainability is sociological. The link is not necessarily static or binding, with some interested to understand and explore sustainability issues further, but a discipline-based connection is present. Participants described sustainability-based experiences or activities that they undertook or could undertake. Accounts therefore move from external to relational, on the basis that sustainability is something that connects to sociology. The qualitative difference between category B2 (Sustainability is connected to institutions) and B3 (Sustainability is connected to

sociology) is that in B2, sustainability is discussed in terms of connections with the sector or institution whilst in B3, via a movement along the referential axis, the connection moves from institution-based to discipline-based.

Example quotations:

> One of the jobs of sociology broadly is to critique the dominant narratives... I think we've partly become the dominant narrative through things like the third way and stuff, and so to be able to find a space which possibly provides a counter-narrative to marketisation and to consumption, to all of these other neo-liberal dominant themes, dominant discourses would be great. [Lauren; staff]

> I guess that's probably part of my academic value system but it's probably more just at that level, in terms of what I do, the day to day practice… And it's probably difficult to exactly disentangle the two because the reason I've become a sociologist is probably because that fits in more broadly with my world-view… certainly, it's part of my academic habitus. [Anthony; staff]

> It's on the radar of the critical side of the discipline. It's one of the things that sociologists and other critical scholars are drawing attention to, I guess the perils of relentless growth and endless consumption. [Anthony; staff]

It was also indicated that sociology could help profile-raise or progress sustainability:

> I have found the sort of discourse that has come about from environmental activism… a willingness to talk about capitalism not being sustainable, as a positive step. So I guess I feel a bit hopeful about that in some ways. And I think sociology brings a lens on that, you know in terms of talking about capitalism and the relationship between neo-liberalism, capitalism, climate change and sustainability. [Poppy; staff]

Others were more generalised in their replies, but implied a relationship between sociology and sustainability:

> I think, it just touches everything… like you want to see society in a way and it just teaches me how to look at it… it's so interesting in a way where I can learn about anything… [Ani; student]

> I think there's a certain aspect of it that gives you, like wider social issues, and makes you more responsible to deal with those social issues because you know about them and you are

actually being taught them, so it gives you more of a responsibility to actually go out and tackle that. [Eve; student]

I think sociologists, the kind of people who are attracted to sociology as a discipline, are generally the kind of people who probably think that it is quite important to... think about sustainability. At an individual level I would say that there's a very high level of vegetarians in [this] department and I think quite a few of us are vegetarians for environmental reasons... So probably it's a discipline where generally you do care about society and you're prepared to take personal action to some extent to support that. And equally I know some of my colleagues take the train rather than fly wherever possible, which, you know, again, I think at the individual level, a lot of sociologists who think about these issues and adjust their lifestyles to try and accommodate them. But again I think, you know, still there are quite a lot of people who fly... just at the individual level, people who go into sociology are perhaps much more likely to be sympathetic to sustainability arguments... [Elizabeth; staff]

Overall, participants aligned to this category suggested a relationship between sociology and sustainability. However, there were not necessarily clear parameters with respect to the nature of that relationship.

B4: Sustainability is something that we engage with in sociology

Participants that adopted this category moved beyond identifying connections, and were themselves actively engaged in sustainability in their work or study. Most commonly, this was expressed through the teaching and learning process, for example, through teaching or being a student on a module or programme that addressed sustainability. In this way, sustainability was discussed in relation to the sociology curriculum, viewed as a relevant area of sociology pedagogy which should be made available in sociology curricula. Less frequently, engagement occurred through researching the sociology of the environment or researching other sustainability-related issues. Sociological engagement in sustainability was identified in further contexts too, including professional activity such as membership of committees or associations. The qualitative difference between B3 (Sustainability is connected to sociology) and B4 (Sustainability is something that we engage with in sociology) represents a structural shift. B3 marks a connection between sustainability and sociology, but in B4 participants are active in this connection, primarily through their teaching and learning, but also through other areas of work.

Example quotations:

> As a curriculum it has to be in it because, like individuals are going to be raised to live in the society and they have to know more about sustainability and how they can actually go on. [Ruby; student]

> There's a developing field of the sociology of the environment … One of my colleagues offers a module on consumer society and we look at how the making and buying of all these goods is actually depleting the environment. [Ava; staff]

> A sociology that deals with contemporary issues worth its salt in a three-year curriculum should, would, I imagine have to contain material at some stage of it that deals with environmental issues, issues of the sustainability of economic growth, that deals with consumption, consumer society, those kinds of issues. [Anthony; staff]

> There is a place for teaching about sustainability… a number of modules I've taught over the years have been around environment or environmentalism or development, and they've had elements of trying to address issues of sustainability, address issues of how things change, how things can change. In fact I think that one of the only practical differences I've ever made is that a student that came back to me 6 months later said I've still got that water bottle, I haven't bought a bottle of water since we did your module. And I thought, right, I've done something with my career, because we'd talked about plastic and the amount of plastic we see. [Lauren; staff]

Whilst engagement most commonly occurred through learning and teaching, different, often competing, views were expressed as to *how* sociology should address sustainability in its teaching. This is important since it reflects the outcomes of previously-published studies also suggesting different views and understandings about sustainability in the curriculum (considered in the literature review and revisited in the discussion chapter of this thesis). Therefore, and whilst maintaining its qualitative distinction from other categories, this one can be depicted using additional sub-themes. The first four of these each provides a specific way in which sociology might engage with sustainability through the learning and teaching process, whilst the fifth collects together those conceptions that do not fit into any of the earlier four. The sub-themes provide distinct ideas about how sociology should engage in sustainability through teaching and learning, but collectively, combined with the other examples of engagement identified above (research, study and professional activity), form a coherent category. The mapping of this category is illustrated in Table 5.4.

CATEGORY B4	
Sustainability is something that we engage with in sociology	
Sub theme:	
(a)	Unelaborated view
(b)	Specific area of curriculum
(c)	Value or attribute
(d)	Micro links
(e)	Other conceptions

Table 5.4: Category B4 and its sub-themes

(a) Unelaborated view:

Participants related sociology to sustainability through learning and teaching, but did not further elaborate on how sustainability might be taught or how it could feature in curricula:

> It seems interesting on a larger scale to find out about it [sustainability] more. I think it would be beneficial. [Valerie; student]

> Sustainability should be taught. I mean this is one world. Everybody lives in one world. What's the point in destroying it? [Alice; student]

> The idea sounds really good to have seminars about sustainability… but it has to be an optional thing to go to… I really agree that as a curriculum it has to be in it. [Ruby; student]

(b) Specific area of curriculum:

Participants indicated that sustainability should be an explicit part of the curriculum, for example, by way of its own module, or included as part of another module. Some already had experience of teaching sustainability, often in the context of environmental issues:

> It's a great idea, having an entire module on sustainability where we could discuss what this core concept actually means with students, and encourage them to discuss it in imaginative and innovative ways. [Aidan; staff]

> We're looking at trying to understand aspects of everyday consumption sociologically, but then I'm calling it 'and its consequences', so I'm trying to think, get them to think critically about the kind of individual consequences of the ways in which we consume. But also, you know, global consequences in terms of social inequality, but also in terms of environmental consequences. [Scarlett; staff]

(c) Value or attribute:

Sustainability was discussed as a value or attribute as opposed to an explicit subject area,

sometimes in relation to other sociological issues. Participants discussed the inclusion of sustainability as a value in different ways and offered varied ideas:

> We should encourage students to think and reflect, reason and debate, about if sustainability is a value that we should embracing, if so, what should it mean, what are its implications, not just for us but for others who may not enjoy our advantage. [Fahim; staff]

> It seems to me that what we're for is to encourage critical thinking… so, sustainability should that then be part of the agenda... Why is sustainability a problem? What are the problems about sustainability? Who's producing these problems? [Austin; staff]

> I think you do have to shock students, because people avoid the things they are not comfortable with. So, we are talking about factory farming and we were talking about some of the realities of meat production which I think does shock and upset them because we don't like to think about it… that kind of critical honesty, the critical attention to the everyday and the taken for granted which comes with that. [Lauren; staff]

(d) Micro links:

This conception suggests sustainability links to specific aspects of sociology, as opposed to the discipline as a whole; the teaching of sustainability depends, therefore, on which parts of sociology students choose to focus upon or the focus areas of the department that they undertake their studies within:

> I'm interested in food, so this is a particular thing that I focus on, but in terms of food provision, there's been changes to how some of the stuff is sourced. [John; staff]

> Well-being and sustainability are intrinsically linked… there is a link because I'm often teaching about and writing about making the world a better place, not just peoples' individual conceptions of their own feelings but also their relationship with the environment… I think our environments have a lot to answer for in terms of how we feel about our lives. [Ava; staff]

> One of the things that I teach students in relation to food is about green-washing and packaging and the nature of the claims that are made. There's probably a little story in your bottle of water about how it ran down a particular mountain and has been doing so for a certain amount of time… getting students to think about that and critique it. [John; staff]

There's a project about, for example, veganism and that's going on at the moment in our department and actually lots of that is about sustainability and in essence our relationship with animals... I think that ideas of sustainability or those core notions of sustainability are entrenched in what most of us think about in terms of, as sociologists... [Milo; staff]

(e) Other conceptions:

Whilst most conceptions of sociology and the teaching of sustainability fell into one of the above four sub-themes, participants raised other ideas too. For example, some students thought that *they* might be better placed to lead or contribute to sustainability teaching:

I would volunteer to help because it would be a real experience in doing something. Instead of going to lectures about sustainability, now we are actually doing it. [Den; student]

Others felt that it was included in certain sociology curricula already:

It is probably there... The environment is there if you teach about consumption, consumerism, capitalism and its consequences... it certainly isn't a discipline where it would need to be crow-barred in. [John; staff]

Sustainability is kind of embedded in sociology because... a lot of people may know about sustainability without knowing it. I think that applies to my course a lot, like people will talk about that stuff. [Veronica; student]

Whilst favourable about the relationship, participants raised concerns about the broader background and nature of the 'sustainability discourse':

Some people would say the environmental discourses are white western discourse amongst the privileged... If we were to do a sociology of the environment... then it would involve all of those debates and arguments and so, you know, that would be of value I'm sure in very many ways, but whether it specifically forwards the sustainability agenda in terms of suddenly having all of these sort of converts who are coming out the other end who are like absolute evangelists for the environment - I don't think that's what would happen. [Daniel; staff]

Who are we to decide that sustainability is a fundamental value that overrides other potential values. To put a counter-argument here, one argument would be that the drive towards sustainability and the whole discourse of sustainability in countries like ours is a hypocritical self-indulgence of prosperous, post-material societies... We've monopolised the global resources, we created all the problems in the first place. So what, we're telling people in developing countries who are suffering from profound resource-want that they cannot do

what we did, industrialise and so on and so forth, exploit natural resources, because it's bad

for the natural environment, and you know well, because we screwed up the environment

[laughs] from three centuries of industrialisation which made us rich and you poor! [Fahim;

staff]

Finally, it was suggested that teaching of sustainability could be linked to other areas or sociological topics:

There's definitely a place for it. And also a place to link up the different parts of sociology, to take a sort of sociological lens on sustainability that isn't necessarily just about individuals changing their behaviour, but about the kind of social contexts of creating a sustainable society. There are quite firm boundaries often around disciplines and sustainability probably lends itself to quite an inter-disciplinary focus. [Poppy; staff]

It is recognised that there are different ways in which the data in this category could be presented; indeed, I considered separating the category into two, curriculum-based categories but was not convinced that there was true qualitative distinction between them. Therefore, the use of sub-themes was viewed to be the most appropriate option for presenting the data. Collectively, these themes, as well as other areas (research; professional activity) cohere to provide the *Sustainability is connected to sociology* category.

B5: Sustainability is integral to sociology

In this category, sustainability is a cornerstone of sociology and an essential part of the sociological endeavour. Participants described sustainability as forming a central focus for sociological research and teaching. The societal focus of both sociology and sustainability means that the former has a key role in exploring, understanding, and developing the latter. Participants also referred to sustainability as representing an important part of their professional role and identity, of their *being* a sociology staff or student member. Participants with an interest in, or already teaching or learning about the sociology of the environment or related areas, are well represented. Also, some participants with more limited experiences of sustainability adopted this account. The qualitative difference between category B4 (Sustainability is something that we engage with in sociology) and category B5 (Sustainability is integral to sociology) occurs through a structural shift, from one in which sustainability is something that sociologists engage with, to one in which sustainability is integral to sociology. The shift occurs in that sustainability expands from

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being an activity or topic to be engaged in, to being an underlying and fundamental part of sociology and sociological practice.

Example quotations:

> Sociology is like, actually, studying human behaviour and seeing how people think about their future even though it's not their personal future, but seeing how they think about future generations and how they are concerned about it; [sustainability] is a huge part of sociology. [Ruby; student]

> I see that as part of my professional responsibility to try and, it certainly wasn't treated that way, it was treated with derisory attempt by the people that I addressed it to. But to me that was part of my professional function to do this. [Aidan; staff]

> If you looked at my CV, I mean you'll see the word sustainability is all over it, you know, I am somebody known in that area... all of my research really, over 20 years has been in this... [Scarlett; staff]

> ...sustainability surely is about a combination of social reproduction and social adaption, two of the things that are at the very bedrock of sociological theory. How does society reproduce itself? How does society adapt to technological change, to transformations in the external global environment... Now, those things take on a different, are differently scaled, differently scoped, but they're still pertinent questions for us to answer. [Aidan; staff]

> I've got a PhD student now who's working with me and with someone... who's interested particularly in environmental education or education for sustainability but looking at secondary schools, so her observation is that there's quite a lot of stuff at primary level, all that kind of green school badge and stuff... I think we should be centres for learning and research and teaching and that they should come to study, if they come to study sociology, that's what we should be teaching them. [Scarlett; staff]

> Having a society that is sustainable is one of the big social issues. So I think that engaging with that theoretically and through research is a most important thing. [Poppy; staff]

It was also opined that all students should be introduced to sustainability as part of their learning:

> I don't know if it's because I'm doing sociology. I'm a little bit more kind of engaged with what's happening in the world, but like for someone who's doing photography or history,

they might not be so engaged in like social life, things that are happening to society, like I learn about that, but I think everyone should be. [Amy; student]

In sum, accounts in this category point to an integral relationship between sociology and sustainability: sustainability forms a 'bedrock' issue.

5.4.3 Inter-category relationships

In a similar format to that used for the first outcome space, I now explain the nature of the relationships amongst the five categories. In outcome space 1, categories formed a nested hierarchy, each subsuming previous categories. In outcome space 2, categories retain qualitative independence from one another, but the hierarchy only begins from B2 – in other words, this outcome space does not form a fully-inclusive hierarchy. This is, though, a reasonable scenario commented upon elsewhere by authors including Stokes (2011, p. 30): "Although the idea of a nice, neat hierarchy of conceptions might be appealing to many… 'real' data (particularly of the qualitative kind) are seldom at all tidy". However, it is important to explain how each category *does* evolve from previous ones.

In category B1, sustainability and sociology are distinct from one another, ahead of the shift to B2, in which a relationship is cited, indirectly and via the institution. However, B2 does not subsume B1: the data shows that it is more accurate to consider it simply as qualitatively different. Next, the change from B2 to B3 is referential, as category B3 introduces a relationship between sustainability and sociology, sustainability being regarded as connecting to sociology. It subsumes B2, but again, not B1. The move from B3 to B4 is structural, since the qualitative shift concerns what the nature of that relationship is, and B4 subsumes categories B3 and B2. Finally, the qualitative shift to B5 is also structural, since the shift concerns the nature of relationship to one that is integral, sustainability now regarded as a central part of the discipline of sociology. Category B5 subsumes categories B4, B3 and B2. As a result, we see that B1 is qualitatively related to and distinct from, but not subsumed by, the other four categories. Further, this outcome space features a dominant category, B4, which explains the decision to organise it under sub-themes. This scenario is comparable to that found by Bradbeer et al (2004) in their study about student accounts of geography. Of the five categories their study yielded, two predominated and two others were infrequent.

Table 5.5 shows how categories for outcome space 2 shift qualitatively, referentially and structurally.

'SUSTAINABILITY AND MY DISCIPLINE'		
	Referential	
Structural	**Higher education**	**Discipline**
Unrelated	B1	
Connected	B2	B3
Engaged		B4
Integral		B5

Table 5.5: Outcome Space B - Structural and Referential Dimensions

5.5 Chapter conclusion

Chapter 5 has so far presented the results of the study in two outcome spaces. The focus of the analysis was on the collective experience of the 24 participant sociologists. In accordance with the phenomenographic approach, categories evolve and show more complex relations between person, sociology and sustainability, as the respective outcome space progresses. Categories in outcome space 1 are hierarchically inclusive, whilst those in outcome 2 follow a more irregular nature, but both are intended to provide an authentic representation of what the data revealed and are fully supportable by the data. Nevertheless, I acknowledge advice by Marton and Booth (1997) (also discussed by Ashwin et al, 2014), that a given outcome space should be understood as representing a particular relationship between the researcher and their data: in the case of this project, different or additional researchers might have produced different outcome spaces from those I constituted through my analysis. Therefore, the next chapter offers a discussion of the data, the outcomes more generally, and my study as a whole. I will reflect upon and critique the study, and develop the overall argument of my work. I will suggest that sociological perspectives provide important insights into challenges and debates associated with sustainability and its future positioning and progression in the higher education sector.

Chapter 6: Discussion

6.1 Introduction

In the previous chapter, I presented the findings of the project in two outcome spaces: *Sustainability and me* (sociologists' accounts about and relationship to sustainability) and *Sustainability and my discipline* (their conceptions of the relationship between sustainability and sociology). The outcome spaces were developed through a phenomenographic analysis of the 24 interview transcripts, and as such offer my own interpretation of the findings. The outcome spaces should not be considered fully independent of one another since each represents a depiction of sociologists' conceptions and experiences of sustainability.

As part of the process of developing and planning the discussion, I re-read and took further notes from each of the interview transcripts which formed the data-set. This represented an additional (self-imposed) quality check: having not reviewed the original transcripts for several months, I searched for any points or quotations that I might have omitted or deleted during the original data analysis process, and which might strengthen or lead me to adjust categories I had developed. In the event, I found a number of points which were used to strengthen and better exemplify several of the categories.

The outcomes are now further discussed against earlier literature and the research questions. Initial comments on each of the outcome spaces are made in sections 6.2 and 6.3. In section 6.4, and in a temporary deviation from the phenomenographic approach, I draw attention to some differences between staff and student results. In section 6.5, I examine the findings more holistically and consider implications of the qualitative differences amongst the categories, using this to develop an argument for the overall contribution to knowledge made by the study. This section is structured under a set of numbered points which collectively seek to show how the outcomes develop our understanding of the issues beyond that offered in previous literature and, therefore, make a contribution to the field. The subsequent conclusion (in the next chapter) will comment on the strengths and weaknesses of the study, draw out some implications and recommendations, and offer final comments in relation to the research questions.

6.2 Outcome Space 1: 'Sustainability and me'

6.2.1 Outline of Outcome Space 1

The first outcome space documents the relationship between sustainability and the person and presents accounts based upon participants' understandings of sustainability and of how they enact and apply sustainability in their everyday practices. The four constituent categories show variation with respect to how sociologists position themselves in relation to sustainability. Categories progress from relatively simple (sustainability as externalised, and only within a higher education context) to broad-based (in which accounts refer to an integral relationship between person and sustainability, and offer more complex views of sustainability itself). This relationship changes and deepens through a movement along either the structural or referential dimension for each of the categories.

Categories A1 and A2 present accounts in which sustainability is understood as external to the person. In A1, accounts refer to sustainability as a management tool, or an ideology based on management control. Sustainability is not associated with environmental or social functions but has a distinct, managerial function within higher education. By contrast, A2 *does* place sustainability in an environmental framework, a view already represented in previous literature. For example, it coheres with the three-pillar model (Lozano, 2008; Sheth et al, 2011; United Nations/WCED, 1987) cited in the literature review. In this category, sustainability moves beyond higher education and is viewed as an environment-based, societal issue, but one which is still externalised in relation to the person. Nevertheless, this represents a shift from a local view (university) to a global view (society). A3 is a threshold category, representing the first referential movement along the outcome space - a shift in relationship between person and sustainability from one which is external to one which is relational. This is because A3 views sustainability as about *things I do for the environment*, sociologists identifying a link between themselves (subject) and sustainability (object). In A3, sustainability is viewed in relation to self and self-contribution and understood as what the person does. This is an 'involvement' category, based on responsibility, actions, personal decisions, volunteering and other 'doing'. Finally, movement from category A3 to A4 provides another referential change, sustainability now representing an integral part of the person, a true joining of subject and object. In A4, sustainability retains this involvement and doing, but is a core part of the person and their personal identity.

6.2.2 Key themes arising from Outcome Space 1

Having summarised the outcome space, this section draws out three themes that can be extrapolated from it.

*1. Relationalit*y: The categories demonstrate variability in conceptions of what sustainability means and covers. That they do so corroborates previous research, because other studies also point to this variability in understandings – often identifying this as a problem for progressing sustainability. However, distinctive in *this* work is a more relational emphasis: in two of the categories, sociologists *relate* to sustainability in some way, this being attributable to their own (sustainability-related) activities, their lifestyles, or to their sense of identity. This 'relationality' is either missing from or less prevalent in many other studies about how researched groups understand sustainability, exceptions to this being in other phenomenographic studies about sustainability and the environment (Loughland et al, 2002; Winter and Cotton, 2012a). It might be suggested that sociologists appear to be more in touch with sustainability, albeit different versions of it, than staff and students in some other disciplines (Wals and Jickling, 2002). However, the categories do provide points of comparison with outcomes yielded in phenomenographic studies by authors including Loughland et al (2002), who applied the terms 'object focus' and 'relational focus' to young peoples' conceptions of environment, these conceptions varying from those that consider environment as some type of object (such as a place that contains living things and people) to more integrated conceptions (such as, people are part of the environment and are responsible for it, and people and the environment are in a mutually sustaining relationship) citing a relationship between people and environment. Categories also broadly correlate with the 'static' and 'dynamic' classifications used in work by Stokes (2011) on conceptions of geoscience.

2. 'Bad' sustainability: In the literature review, I explained how sustainability has diverse definitions and examined some of these (Perrault and Clark, 2017; Blake at al, 2013; Holden et al, 2016). I also considered how proponents of sustainability view it to be a fundamental issue, aimed towards protecting the world, human and other inhabitants, and future generations. However, qualitative changes mapped along the categories in the first outcome space indicate that sociologists view sustainability in their own and different ways. At one side of this continuum, category A1 marks a dis-connect towards sustainability in which participants were *actively negative*, regarding it as a management tool for the justification of unwanted actions. Misuses of sustainability were suggested, including as an instrument to

justify neo-liberal policy, as justification for cost-cutting within the sector, and as a method of deflecting responsibilities from the institution to the individual. For example, according to Elizabeth, sustainability might be used for "the broader agenda of saving money". This represents an interpretation of sustainability different from most previous accounts in the published literature, and maybe of concern to its proponents. Caradonna (2016) explains how myriad definitions of sustainability present the opportunity for misuses in practice, through the growing prevalence of green-washing – the "use and abuse of sustainability language or imagery to mask conventional, destructive practices" (p. 248). University initiatives, policies and teaching may, then, need to do more to recognise the breadth of interpretations about sustainability, or, alternatively, place more emphasis on its positive features. Also in the literature review, I drew on a widely adopted definition of sustainability which has its basis in the Brundtland Report (United Nations/WCED, 1987) and presents it as an intersection of economic, social, and environmental issues. Sociologists in my study applied wider interpretations. For example, sociologists' accounts discussed sustainability in terms of areas as diverse as mental health, happiness and well-being, views which extend beyond 'classic' or familiar definitions, and are more in alignment with recent interpretations, such as that of Caradonna (2016) who prefers to view sustainability as a movement or philosophy.

3. Sociological involvement: This study suggests sociologists adopting Categories 3 and 4 have a perception of 'belonging' to sustainability, one which is less represented in many discipline-based studies (Dawe et al, 2005; Reid and Petocz, 2006; Wals and Jickling, 2002; Witham, 2010). The reasons for this appear to lie, in part, in the focus of sociology on societal issues, phenomena and challenges, sustainability being an example of a contemporary societal issue. This may have implications or create ideas for sociology - research and teaching could do more to address sustainability, reflecting the greater interest in it amongst members of its own community. These conceptions – sharing the view that there is a connection between the discipline of sociology and the field of sustainability which might be further tapped into to the potential benefit of both – will be further explored in this chapter.

6.3 Outcome Space 2: 'Sustainability and my discipline'

6.3.1 Outline of Outcome Space 2

Outcome space 2 documents participant accounts about the relationship between sustainability and sociology, and the role of sustainability in sociology learning, teaching, research and any other links that participants chose to talk about. It depicts five related but qualitatively different categories of description. In this outcome space, categories retain qualitative independence from one another and become broader as they evolve, but the relationship between B1 and B2 is separate as opposed to inclusive.

In category B1, sociologists view sociology and sustainability to be distinct from one another, this account extending into discussions about sociology teaching and curricula. In fact, here, the inclusion of sustainability into the sociology curriculum would imply that some 'real' sociology might need to be removed as a result. Sustainability was compared to initiatives such as employability, included across all curricula at certain universities, and interpreted as a mere (usually undesirable) 'add-on'. This external-based account is present in spite of sociological arguments (Passerini, 1998) that sustainability does have a logical link to sociology. Next, B2 cites a relationship between sociology and sustainability at institutional level. This represents a shift along the structural axis, but, as explained above, whilst B2 is a broader category, it does not subsume B1. It is worth reiterating here that this type of 'non-inclusive' movement can occur in phenomenographic research, Bradbeer et al's (2004) analysis of student interpretations of geography being one such example. In my study, B2 depicts sustainability and sociology as connected, but sustainability actions, initiatives and teaching are regarded as forming part of institutional policy and strategy. This account supports others (Perrault and Clark, 2017; Sterling, 2015) who argue that pro-sustainability change should be led 'from the top' through institution-wide schemes. The transition to B3 is along the referential axis: participants assume a relationship with sustainability, though this may not be formal or defined and often derives from a particular area of professional interest. The move from B3 to B4 is structural, as the qualitative shift concerns the nature or type of that relationship, in which sustainability is regarded as a relevant part of sociology learning and teaching. B4 itself is sub-structured under five themes, and these themes will each be revisited below. Finally, the qualitative shift to B5 is structural, since the shift concerns the nature of relationship to one that is integral and in which sustainability is a central part of sociology. In this account, sociology has a key role in addressing sustainability

due to inherent connections between the two and it is therefore also the most inclusive category.

In sum, for outcome space 2, the latter three categories cite a relationship between sociology and sustainability. The findings appear to corroborate previous research which advocates furthering the relationship between sociology and sustainability (Passerini, 1998) but also offer some specific and novel ideas for doing so. Nevertheless, there is variation among the accounts of the type and nature of this relationship, the next section providing the opportunity to scrutinise this further.

6.3.2 Key themes arising from Outcome Space 2

1. Most sociologists signal a relationship or connection between sustainability and their discipline: Several studies about the relevance of sustainability in individual disciplines point to a perceived lack of connection between sustainability and the discipline concerned (for example, Petocz and Dixon, 2011). In such cases, sustainability in the curriculum is often considered an 'add on', similar to areas such as employability, internationalisation, or personal development planning, potentially compromising the 'real' curriculum. These views exist in spite of the publication of collections and case studies (such as Jones et al, 2010) documenting examples of how sustainability has been incorporated in many disciplinary contexts through the teaching and learning process. However, most sociologists acknowledged that there is a connection between sustainability and sociology, such that they are open to exploring sustainability in the curriculum. There is nevertheless variability with respect to sociologists' views about *how* this sustainability-sociology relationship can best 'work' when applied to teaching and curricula contexts, ranging from 'nothing' (unrelated) to 'everything' (integral) - but in four of the five categories presented in Outcome Space 2, some form of link is advocated. Specifically, one category (B1) signals no relationship, one (B2) signals an indirect relationship (via the institution), and the remaining three signal a relationship, but of qualitatively different types. The view that there is some form of relationship appears to be more widely held amongst sociologists as compared with those reporting on the relationship between sustainability and many other disciplines. Thus, this study supports calls from within sociology that it should engage more deeply with sustainability, but offers its own reasons for doing so. Earlier studies also indicate that there are certain other disciplines which also feature identified links with sustainability as a result of their own focus areas: in the literature review, I considered the work of Koger and Scott

(2007, 2010, 2016) who advocate roles for psychology in sustainability education. As a result of the outcomes of this study, we could add sociology to that list. Sociology, as with other 'connected' disciplines, could act as a lead for guiding teaching of sustainability in higher education and might provide examples of teaching about sustainability in a disciplinary context that could help inform future, related policy.

2. Sustainability in the sociology curriculum (a): In B1, sustainability is considered an imposition on the discipline and its curricula, suggesting that more needs to be done to demonstrate the relevance and value of studying sustainability to more sociologists – if, that is, we want to take up calls to bring sustainability into sociology. It might be that a more convincing case could be made by proponents of sustainability, including sociologists already interested in a sociology of sustainability. Where sociologists in my study expressed reservations about sustainability in the curriculum, these often reflected those expressed by staff in other disciplines, including the contested nature of sustainability itself (Wals and Blewitt, 2010) or a perceived lack of relevance to the discipline (Dawe et al, 2005; Witham, 2010). In any discussion of curriculum, we might also be reminded of the work of Fraser and Bosanquet (2006) who found curriculum is interpreted differently amongst academics in terms of what it means and covers, and that this may bear effects for curriculum change and development.

3. The institutional role: Some sociologists reported that responsibility for advancing sustainability in higher education should be institution-based: higher education institutions should, like any other organisation, bear responsibility for promoting sustainability and acting sustainably. Participants gave examples of which sections or services of institutions would be best placed to lead or advise, citing senior management, educational development units, estates services (where sustainability is often managed in institutions) and others. This broadly supports previous studies such as those by Ryan and Tilbury (2013) (ESD initiatives should be developed through the institution, in conjunction with quality assurance and quality enhancement systems), Barth and Rieckmann (2012) (who emphasise a role for educational developers to support ESD) and Thomas (2015) (sustainability curriculum change needs to be supported from the 'top' for resources, and from the 'bottom' for knowledge and expertise). But in addition, outcomes in my study indicated that institution-wide initiatives should involve more than 'being greener'; they might include, for example, engaging staff and students critically in relation to their disciplines or promoting sustainability through reaching out to local communities.

4. Sustainability in the sociology curriculum (b): Category B3 depicts a perceived connection in which sustainability is viewed as a relevant area of sociology research and teaching. The basis of this account lay in the view that pro-sustainability approaches provide an alternative model to consider and present, as compared with the familiar models and life-choices of marketisation and consumption which form a central function of day-to-day life for many. Similarly, participants suggested that sustainability was relevant to sociology as it needs to be subject to sociological analysis and critique itself. For example, Daniel opined that any future sociology of sustainability would need to address a number of debates about sustainability itself, including investigating and discussing the foundations of the sustainability movement. He suggested here that some early environmental discourses were "white, western and privileged", and that implications of this should be considered. The work of Kopnina and Cherniak (2016) has some relevance here: these authors advocate a sustainable development 'beyond humans' and towards an 'inclusive pluralism', based on education 'for nature' at large. Thus, this view posits a connection between sustainability and sociology but not one in which sustainability is unequivocally supported or promoted, but instead, one in which it is assessed and debated.

5. Sustainability in the sociology curriculum (c): Participants were supportive of sociology addressing sustainability as part of its curricula but had different ideas about how this should happen. These differences were, in turn, linked to their views about what sustainability means or encapsulates, as depicted in the first outcome space. Consequently, category 4 incorporates a range of curriculum views in its sub-themes. Theme (a) presents a 'simple view' that favours inclusion, but without ideas as to how. The remaining themes each elaborated in different, sometimes conflicting ways. In theme (b), sustainability is viewed as a subject to teach - a specific and explicit area of the curriculum. Thus, it would be placed, for example, in a bespoke module, topic within a module, or through other explicitly identified teaching. It might also be incorporated in subsequent assessment tasks. In theme (c), sustainability is characterised as a value or attribute which learners should analyse and reflect on. It is not an autonomous or tangible topic and may not be referred to, but rather forms a lens through which to consider other topics. Theme (d) adds the novel idea of making optional 'micro-links' in which sustainability could be linked to specific aspects of sociology as opposed to representing it as its own topic within the discipline: examples given included consumption, food sourcing and well-being. Finally, theme (e) brings together other ideas, including the suggestion of an active learning approach, teaching by providing learners

with actual practice in authentic scenarios. Overall, these themes form part of the account that sustainability represents an area for teaching in sociology, but also reflect a microcosm of the larger debate concerning how this is best achieved. Nevertheless, the different ideas that sociologists offer provide some additional ways forward for those involved in developing ESD strategies, which are different than those proposed by other authors such as Stibbe (2009). Similarly, Cotton et al (2009) note several challenges for ESD, including identifying the most suitable methods for environmental and social content in teaching: the above outcomes give some ideas in relation to these challenges. More recently, Winter and Cotton (2012b) identified sustainability pedagogies to guide the teaching of sustainability, including case studies, debates, critical reading and writing, fieldwork and role plays. My outcomes support some of these suggestions, offering some new ideas too.

It may now be useful to compare these findings with some others which have identified strategies for integrating sustainability into university curricula. These were examined in the literature review, with results varying from whole-institution approaches (Hopkinson et al, 2008; Sterling, 2015) to the addressing of smaller-scale aspects of the curriculum (Stubbs and Schapper, 2011; Diamond and Irwin, 2013; Stough et al, 2017). Outcomes of this study are compatible with some of these ideas, but add new ideas for integration as well. For example, the values-based approach that many sociologists emphasised (theme c), addresses, in part, concerns raised by Petocz and Dixon (2011) who opine that sustainability teaching needs to transfer away from merely *what* a student comes to know and place more emphasis on values that a student considers or takes on, and who the student is becoming. On this issue, participants in my study such as Fahim posed an additional warning, against using normative or preaching approaches (proselytism) which: "promulgate or disseminate or proselytize for a particular value orientation". Further, although participants were supportive of sociology addressing sustainability through its teaching, that there are different ideas about how to do this presents both a challenge and an opportunity. For example, theme (d) suggests a number of bespoke options, adding further evidence towards the view that there is no agreed best practice for teaching sustainability, and theme (e) depicts participants raising concerns about the background and nature of the sustainability discourse itself - that sustainability needs to be treated in a critical manner like any other sociological topic. Elizabeth pointed out contradictions in efforts towards sustainability in the curriculum in that, on the one hand, universities are trying to promote good, *individually* based pro-sustainability behaviour, but on the other, certain academic practices are seen as important (such as academics flying to conferences or events). Finally, a common conception

threading through the findings was that sustainability in higher education needs to be less individualistic and more socially or group based. Although many parties involved in higher education subscribe to principles of sustainability, more *collective* approaches are needed. This points sociology towards a more 'social sustainability', a perspective introduced in the literature review and revisited below. Pulling these points together, it is worth restating that, as discussed in the literature review, there are multiple views and models for including sustainability in the curriculum. When sociologists are asked for their views, they reflect this diversity, but add even further to it by providing both familiar and additional perspectives.

6. Sustainability and the sociological community: In the last category (B5), sustainability is regarded as a "huge part of sociology" and "part of the professional responsibility" of sociologists. In this account, it is viewed as an important focus for sociology curricula but also as an important part of the discipline at large. In view of these outcomes, and arguments presented in published studies within sociology (Passerini, 1998; Smith et al, 2004; Islam, 2017), a case could be made for interested sociologists and proponents of sustainability to work more closely together. Sociology could contribute to sustainability-related debates, and towards a renewed sociology of sustainability.

6.4 Deviating from phenomenography: an initial comparison of staff and student findings

In undertaking phenomenographic research, our interest lies in the collective variation in experiences of the phenomenon under investigation amongst the full set of participants. In the case of this study, phenomenography would therefore not normally be associated with a comparison of staff and student outcomes, yet there may be some benefits in drawing out some comparative points. Indeed, by including this section, I am accounting for calls from authors such as Tilbury (2015) that student perspectives need to be better represented in sustainability research. The following points are based on observations that I made during my analysis of the outcomes, as well as the transcript summary documents I developed (referred to in the research approach chapter and which summarised each individual interview). The latter were useful here, drawing attention to certain differences in staff and student perspectives. However, neither one nor the other provides a full comparative analysis. Consequently, the project could be developed further through a fuller comparison of staff and student findings. Initial points to be made at this stage are as follows:

- In general, staff responses represent a larger proportion of the overall data-set (total number of words), as compared with their student counterparts. Staff simply said more than students, tending to offer more focused and detailed responses. In some cases, though by no means in all, students were prompted, or more follow-up questions were needed.

- Previous research has suggested that students adopt relatively limited views about sustainability, often with a narrow focus on the environment and/or maintenance ('keeping things going'). However, students in my study also offered broader accounts and experiences of sustainability relating to social justice, poverty reduction and well-being. In fact, whilst often briefly stated, student conceptions were broader-based than those collected in some earlier student-based studies, including recent ones, such as Perrault and Clark (2017). This suggests that sociology students might have fuller conceptions of sustainability which, in turn, may indicate that students who study sociology have an interest in social and societal issues including sustainability.

- Interdisciplinary studies have suggested that many students are interested in seeing sustainability issues progressed in their institutions and in their curricula (Drayson et al, 2013; Jones et al, 2010). My study supported this, offering some examples too. But more particularly, sociology students in this study want more opportunities for their own involvement in sustainability *in general* at their universities – not just through the curriculum. Den provided an example of this in expressing a keenness to volunteer for some kind of sustainability-oriented activity to undertake at university. Den did not just want to learn about sustainability, but he wanted to put his learning into action and be involved in sustainability as part of his higher education experience. These conceptions of sustainability are different from those found in work by authors including Reid et al (2009) who examined business students' understandings. They too found that conceptions were varied, ranging from sustainability being discussed in the context of daily life experiences to approaching sustainability by focusing on resources. These differences imply that conceptions and views about sustainability might also be discipline-specific. However, we need more student and discipline-focused studies on sustainability to be able to make substantive claims about this.

Having offered some comparisons of staff and student findings, the next section assesses the original contribution to knowledge made by my thesis.

6.5 Original contribution to knowledge offered by the thesis

This section claims contributions to knowledge made by this study. The following points draw on the outcomes (presented in the previous chapter) and the discursive themes (in the sections above).

1. *Sustainability as a management tool or ideology*: This view was depicted particularly in category A1 and offers a negative interpretation of sustainability. Whilst authors such as Caradonna (2016) have written about misuses of sustainability (such as green-washing) a conception of this type is new to academic research on sustainability. Participants defined sustainability as a management tool, placing responsibility on individual employees whilst justifying organisational actions or policies. This emphasis differentiated it from other conceptions but it was conspicuous in sociologists' accounts, partly because of how different it is from what advocates of sustainability would wish it to be understood as or for. It suggests that there is misuse of sustainability and that, therefore, there is work to be done to demonstrate the positive and favourable intentions of sustainability engagement and teaching. However, it also points to a deeper understanding of sustainability and the debates that it raises amongst members of the sociological community. Finally, it provides an example in which sociology might intervene, in this case to illuminate the value of collective or societal actions for promoting sustainability. The issues referred to here were also explored and commented on in section 6.2.2, above.

2. *Sociologists' identities*: Staff and student sociologists expressed a 'belonging' to sustainability, as an issue or practice representing part of their professional or personal identities. In my extensive reading of discipline-based literature about sustainability in higher education, I have not seen associations of this type made before. The link cited in this study provides evidence of a perceived connection between discipline and field. This was prevalent in categories A3 and A4, and, most strongly in category A5, in which sociologists viewed sustainability to be central to their identities - leading to a commitment-based relationship. This view is represented by, for example, Milo, a staff member at Coastal University, who suggested that 'core notions' of sustainability formed part of his sociological thinking, and that sustainability should form part of the sociological endeavour. Again, the reasons for this appear to lie, in part at least, in the focus of sociology on societal issues, phenomena and challenges.

3. Sociologists support institutional and educational interventions to promote sustainability:
Outcomes indicated that although many sociology staff and students favour promotion of
and education about sustainability within the discipline, some also viewed it to be an
institutional issue. In the same way that institutions cascade sustainability down to faculty,
departmental or individual levels, sociologists wish to see it passed back up again as a
centrally-administered issue. This points to disagreement about how sustainability work
should be organised. Lying in between these views was the argument that more central or
professional services within universities could have a role in organising or promoting
sustainability – not just estates offices but, for example, senior management teams and
educational development units - arguments for extending the role of educational
development to address sustainability have been made before in published research (Barth
and Rieckmann, 2012; Baughan, 2015; Thomas, 2015). In addition, various novel ideas have
been offered for infusing sustainability through the activities of institutions in a way which
draws on the different areas of expertise of particular staff groups, the 'top down/bottom
up' hybrid model put forward by Brinkhurst et al (2011) providing one such example. Overall,
sociologists tell us that sustainability-based change is a collective endeavour, recognising
that they may also have a distinct role in contributing to this change. However, many
sociologists argued that whilst they can play a particular role in promoting and educating,
these pro-sustainability actions need to draw from other areas of institutions too.

4. Sociology, social sustainability and culture: Social sustainability links sustainability with
culture, and examines how sustainability is entwined with social, economic and political
issues. Several studies have examined the idea of a social sustainability (Stren and Polese,
2000; Woodcraft et al, 2011; Woodcraft, 2012), but this term, or the idea of a social or
cultural aspect in sustainability, was referred to regularly in my own results. Participants
referred to a social or cultural sustainability, or a need to address 'the social side' of
sustainability. Eve said: "Socially… [sustainability] is important… welfare and actually having
enough". Milo spoke of the need for: "a more cultural sense of sustainability and
sustainability as produced by a more cultural narrative than a very instrumental, top-down
narrative". He also described social sustainability as being about studying how people
engage in their local communities in ways that link to or promote sustainability and what can
be learned from this: examples included activities such as community groups, gardening,
greening activity, and allotments. Fahim and Daniel both viewed sustainability as tied in with
issues such as national culture, wealth and industrialisation. Sustainability was viewed as a

much easier aim for wealthy countries where society had met its basic resource needs, and already "monopolised… global resources [and] created all the problems" (Fahim). Industrialising countries might have other priorities in their aspirations to eliminate poverty and generate prosperity. Sociology, he argued, would need to examine these aspects of the sustainability debate. Other participants discussed social sustainability in connection with issues including human health, well-being and happiness. Correspondingly, there was concern associated with sustainability being only an individual pursuit or responsibility, Poppy arguing for sociological perspectives on sustainability that did not only focus on individual issues but debated the social contexts of creating a sustainable society. In different ways, many sociologists gravitated towards the social aspects of sustainability in their responses: sociology can help us move beyond an individual focus to a more social or cultural interest. As the above examples and quotations show, there was no unitary explanation of social sustainability in my study, yet it was a persistent theme. Therefore, based on these outcomes, I would suggest that sociologists have a (thus far relatively untapped) future role to play in developing understandings of social sustainability. This is an area for possible progress amongst both sociologists and sustainability advocates. These perspectives indicate that sociologists place a social emphasis on sustainability, a view that has not been offered before in, for example, previous works examining sustainability and sociology cited in earlier chapters (for example, Soron, 2010). In other words, a contribution to the literature made by this study is that it suggests that sustainability should be considered not just at the individual level but at the social level, incorporating areas such as community and culture.

5. *Community, locality and well-being*: This theme follows on from the previous one in that, as well as referring to social sustainability, sociologists expressed the view that sustainability should be about community and locality. Higher education institutions should promote local sustainability through reaching out to their communities and forming links with schools, colleges and social clubs. Universities should have an 'authentic community-based role' as part of their missions. Others considered sustainability in conjunction with well-being, Ava referring to an 'intrinsic link' between the two. This view supports the work of Podger and Mustakova-Possardt (2010) who, as part of their view of a 'whole-person approach' to sustainability in higher education, emphasised the importance of institutions working with community groups and other sustainability experts. Sociologists in my study provided examples of how this might happen. In the literature review, I also referred to the work of Emanuel and Adams (2011) who compared student perceptions of sustainability at two US

based universities, identifying differences in their willingness to participate in sustainability activities. Student commitment was greater at the institution in the community that promoted sustainable practices, views seemingly reflecting the state of sustainable practices in which their campus is located. Again, this is an issue for which more research would be useful, but the conclusions suggest that local communities and institutions *both* have a role to play in promoting sustainability amongst students. Therefore, universities and local communities need to be working together to promote sustainability. My work corroborated these claims with some examples of *how* progress might be made in this respect, comments by Milo, Ava and Fay (all quoted in the outcomes chapter) each providing examples.

There are also links between the outcomes of my study and the UNESCO (2017) SDGs, discussed in the literature review. SDG 11 emphasises the value of sustainable cities and communities ("Make cities and human settlements inclusive, safe, resilient and sustainable", p. 6). In the document, several of the holistic learning objectives advocate actions in community contexts, whilst under SDG 11, fifteen specific learning objectives are presented for work towards the realisation of sustainable communities. Some of these, notably the socio-economic objectives, are consistent with findings in my own study (for example, "The learner is able to connect with and help community groups locally and online in developing a sustainable future vision of their community", p. 32). Examples of suggested topics for teaching under SDG 11 are also consistent with responses made by sociologists in my study, such as "Develop and run a (youth) action project on sustainable cities and communities" (p. 33). Sociologists in my study also emphasised the value of community initiatives. These links are encouraging to note, even if UNESCO learning objectives, in applying to all educational levels and disciplines, are rather broader than outcomes gained from my own research.

6. The view that there is a relationship between sustainability and discipline is widely held amongst sociologists: Participant sociologists suggested the existence of an authentic connection between sustainability and sociology and, therefore, that there is a contribution their discipline could make towards the progression of sustainability. This compares with studies in other disciplines where connections between discipline and sustainability were rather less cited or left implicit. It is proposed here, then, that sociology is a connecting discipline, like others such as psychology, economics and geography, but for its own reasons. There were varying ideas amongst sociologists about what and how important the aforementioned connection is, with some viewing sustainability to represent an integral part of their discipline – a view not identified in previous literature. This connectedness between

field and discipline is visible, in varied ways, in categories B3 (Sustainability is something that we do in sociology), B4 (Sustainability is something that we learn and teach in sociology) and B5 (Sustainability is integral to sociology).

7. Innovative ideas for integration of sustainability in the curriculum: The outcomes include specific ideas for integration of sustainability into curricula. Collectively, these ideas, addressed above, may be worth consideration for those involved in ESD initiatives, especially ESD in sociology and other social science curricula, since they derive from sociology teachers and learners. Participants also advocated linking sustainability teaching in sociology to related topics such as environment, consumerism and social justice, on the basis that these 'fit in naturally' with the existing curriculum. However, in addition to specific techniques, several broader-based strategies were proposed. These included profile-raising sustainability sessions or courses to coincide with institutional sustainability events, the latter being hosted by many universities. On this, Sylvia opined: "If you tied [teaching] in with something like 'Go Green' week, then people would probably already have seen all the posters around campus… then if your department was doing a talk on one of the days in the week, then I guess you'd be more likely to go along". In fact, this suggestion is compatible with holistic curriculum strategies of the type discussed by Hopkinson et al (2008), De La Harpe and Thomas (2009), and Perrault and Clark (2017). One participant identified student gap years as a further route to learn about sustainability, in an overseas context or linked to internationalisation or exchange opportunities. On this, Amy said: "You hear of people doing a gap year and going to build houses or teach in Ethiopia or somewhere like that, a less economically developed country… most people have learned about sustainability and what needs to be done in order to have a more sustainable world". Finally, there was the view, actually a concern, mentioned multiple times, that sustainability should not be taught "like employability" - in a way such that it encroaches on learning and teaching time and in which students cannot see the link to their own discipline. Thus, like the engineers reported in work by Carew and Mitchell (2006), sociologists have their own ideas about how sustainability can be most helpfully incorporated into the curriculum. The ideas reported under this point contribute to the literature in that they provide 'in-discipline' (sociological) views about strategies for incorporating sustainability in higher education curricula. The study makes a new contribution to literature in its focus on sociology staff and student views about and ideas for this area.

8. Sustainability as part of the student experience: The student experience in higher

education was raised or alluded to multiple times, even though it was not directly asked about in any interviews. Participants, mainly students, referred to sustainability through their experiences on the physical campus. Here, sustainability involved looking after and enjoying the campus and its green spaces. Students linked a pleasant, well maintained campus to a positive student experience. Fay, Tim and Valerie all commented on the importance of their experience of the campus in their accounts, Valerie explaining "They do take pride in keeping the environment around the university clean and stuff… it's nice the way they've got all the names on the buildings". In a separate strand, students commented that they would welcome more sustainability-conscious and 'greener' sociology departments as a way to develop their experience of the discipline. One student correlated a sustainability-conscious sociology department with improved well-being. As mentioned in section 6.4, sociology students in this study want more opportunities for their own involvement in sustainability *in general* at their universities: they want a fuller, more participatory student experience of sustainability – this points to broader desired student involvement than that found in earlier student-based studies such as Kagawa (2007) and Drayson et al (2013, 2014). Where staff participants commented on the student experience, this tended to be negative, relating to metrics such as KPIs (key performance indicators) and student surveys. Aidan gave a more positive view, arguing that sustainability on campus should form part of measuring the student experience and that this, exceptionally, represented a positive aspect to the surveying of students. The linkage made by student participants between sustainability and the student experience (such that their sustainability experience forms a part of their student experience) represents a further contribution to literature made by this study. As a consequence of this finding, it might be suggested that universities seeking to enhance student experiences could place greater emphasis on their sustainability efforts.

9. Sustainability of self: This theme, one that has not been an outcome of previous research, arose through participants characterising sustainability in relation to themselves: their values, aspirations and actions. Tim viewed it in relation to his own academic attainment, expecting to 'sustain' marks within certain bands throughout his studies. This was a key priority during his university journey. Similarly, Valerie discussed sustainability in relation to her own work ethics, 'sustaining' her efforts in order to complete her studies. Sustainability was also described by students in terms of other attributes that they needed to maintain during their studies in order to complete successfully, these including "individual determination", "personal spirituality" and "growth as a person". Valerie referred to: "Being

focused, staying determined, having a strong work ethic, I think that needs sustainability in order for it to flourish". In sum, student accounts often linked to their own individual attributes and aspirations. Previous student-based sustainability studies have tended to focus on the breadth of student understandings of what sustainability means and their views about sustainability in their institutions and curricula (Drayson et al, 2013, 2014) as opposed to sustainability in relation to themselves at an individual level.

10. Barriers: Literature informs us that on the one hand, sustainability can and has been infused into diverse higher education curricula (Barlett and Chase, 2013; Cotton et al, 2012; Johnston, 2013; Jones et al, 2010) but that there are also barriers associated with attempts to integrate sustainability into curricula (Chase 2010; Reid and Petocz, 2006). Further, it has been advocated that an interdisciplinarity model may provide one route for teaching (Cortese, 2003; Weller, 2016; Ling Feng, 2012). My study adds further perspectives about potential barriers to integrating sustainability - in sociology curricula, specifically. Ruby argued that "It would be risky [to include sustainability in the curriculum] …it will be quite difficult to get students to agree on a sociology module that is named sustainability". More pointedly, as established, a barrier referred to by several staff and students was that the inclusion of sustainability in sociology curricula might be perceived as an unwanted 'extra'. This comparison with employability was raised several times, Ella stating: "It just comes across in the same category of lectures as having a lecture on employability… it's just those things that they try and drill into you". Making a similar link, Daniel raised the concern that sustainability in the curriculum might be perceived as "tokenistic nonsense". In sum, although there were fewer of them, sociologists identify their own barriers and concerns in relation to sustainability – yet most of these seem to derive from previous, negative associations with *other* added topics, employability being by far the most commonly-cited example. Outcomes of my study contribute to the literature in suggesting that sustainability may be perceived as an undesirable curriculum 'add on', as opposed to a relevant and significant topic that needs to be considered carefully and independently of other issues with respect to its possible inclusion in learning and teaching. It seems that the way to address these barriers is to demonstrate that sustainability is not being added in a tokenistic way and ensure that it is in a manner that authentically links to the discipline.

11. Contribution to phenomenography: My study extends and enriches existing phenomenographic studies on sustainability in higher education and our understanding of the variation in staff and student perspectives about sustainability. It provides a first project

which applies phenomenography to sustainability in a sociological context. It is suggested that this is important and overdue, accounting for the connections which appear to exist between sustainability and sociology.

6.6 Chapter conclusion

This chapter has provided further comment on the findings of the study. After discussing each of the two outcome spaces, I drew attention to several differences between staff and student results. In section 6.5, I considered the findings more holistically and put forward, by way of a series of themes, contributions to knowledge made by the study. Whilst the outcomes show certain consistencies with earlier sustainability-based projects, I have attempted to focus on some of the distinct perspectives that my thesis offers, and which it is hoped add to our understanding of sustainability in higher education. Aspects of the design of the study have made this easier: I have collected both staff and student perspectives since many studies focus on one or the other, and have used the phenomenographic research approach, used previously for only a minority of sustainability studies. Most important, however, was the focus of a project in an under-researched area - within the disciplinary framework of sociology. These characteristics of the project have enabled me to gather new perspectives and ideas. The study reveals variation amongst sociologists in their accounts, yet a general view, expressed in diverse ways, that sociology has a role to play in developing sustainability in higher education, and that sustainability is a field relevant to sociology.

As a result, it is argued that sociological perspectives provide valuable insights into challenges and debates associated with sustainability and can play a guiding role in offering ideas for its progression. Whilst providing immediate ideas for sustainability in sociology itself, the outcomes also present broader lessons which might be applied to other disciplines and areas of higher education activity. Finally, though its limitations need to be acknowledged, phenomenography offers particular benefits for studying sustainability with the potential to cast further light on areas of ambiguity. This could contribute to better engagement with the phenomenon, as well as help shape future guidance for staff about how to address sustainability in their teaching and in other areas of their departmental or institutional activities. The next chapter, the conclusion, notes strengths and weaknesses of the work, draws out some implications and recommendations, and presents some closing comments in relation to the original research questions.

Chapter 7: Conclusion

7.1 Introduction

This project examined the relationship between sociology and sustainability in higher education from the perspectives of sociologists, on the basis that the ways in which sociologists understand, experience and engage with sustainability has featured relatively little in previous research. Twenty-four staff and student sociologists at three UK-based universities were interviewed using the phenomenographic approach. The results were organised under two outcome spaces, *Sustainability and me* and *Sustainability and my discipline*, collectively revealing clear variation in sociologists' perspectives in relation to sustainability and personal and professional identity, and in relation to sustainability and the discipline of sociology. Consequently, it is argued that sociological perspectives provide important and distinct insights into challenges and debates associated with sustainability and can play a guiding role in offering ideas for the progression of pro-sustainability initiatives in higher education institutions. Having discussed the outcomes, this conclusion chapter completes the thesis, and is organised under the following sections. First, I reconsider the original research questions and offer additional points and suggestions about these questions. Second, I revisit the contribution to knowledge made by the study. In section 7.4, I examine some implications of the research. After that, in section 7.5, I provide some reflective points about the research process and comment on my experience of undertaking the project. In section 7.6, I offer some ideas and acknowledge limitations of the study. Finally, I present closing points, reflections and questions in the final paragraphs of the thesis, section 7.7.

7.2 Revisiting the research questions

The purpose of this project was to address the following research questions:

Central research question: **What variations exist in sociology academic staff and students in their accounts about and experiences of sustainability in higher education?**

Subsidiary question 1: **What do sociology staff and students understand by sustainability?**

Subsidiary question 2: **Should sustainability be included in higher education curricula?**

The study was undertaken by way of 24 interviews with staff and student sociologists at three different universities.

Central research question: The research has revealed the existence of considerable variation in sociologists' accounts about and experiences of sustainability in three higher education institutions. The data provides a rich variety of views, perspectives, ideas and personal and professional experiences. This variation is structured and depicted under two outcome spaces, each comprising a series of categories. In the case of outcome space (1), sustainability is presented in relation to the person, categories ranging from the narrowest ('Sustainability is about sustaining and protecting in higher education) to the broadest and most inclusive ('Sustainability is about my identity and lifestyle'). Within this outcome space, we are able to observe a wide range of interpretations of what sustainability is and means to sociologists: whilst this variation in understandings was already acknowledged in previous literature, the introduction of sociological perspectives serves to broaden it further, with some shift from it being viewed as an individual aim or pursuit, towards a greater emphasis on sustainability in society and as a societal responsibility. This emphasis may go some way to explaining one of the conceptions of sustainability presented in the study, that of it being 'about managing and controlling in higher education' as both distinctive and negative as compared with accounts offered in previous published work. In outcome space (2) (Sustainability and my discipline), by way of five categories, a range of perspectives were proffered about the relationship between field (sustainability) and discipline (sociology), ranging from 'different' to 'integral', although some form of relationship is suggested in four of the five categories. Myriad connections between sustainability and sociology are suggested, these including specific ideas about how sustainability might be infused in curricula. Overall, my choice to use phenomenography to undertake the study arose, in part at least, because of my expectation that sociologists would offer their own ideas about sustainability, and this is confirmed by the outcomes. That they offer some new ideas and focus areas is important as some of these might be taken forward and used to strengthen efforts for progressing sustainability.

Subsidiary research question 1: This question is addressed through Outcome Space 1. As established in the literature review, definitions of sustainability vary and have been a source of debate. Caradonna (2016) explains how varied understandings of sustainability concern not just what it means but what it is – a concept, a set of practices, a theory, or perhaps most accurately given its history, a movement. Sociologists continued this trend in offering

different accounts of sustainability ranging from narrow, higher education based (local) conceptions, to broader-based accounts, embracing sustainability as both a societal and international challenge. Whilst some sociologists gave externalised accounts, most in some way related to it, many defining sustainability in terms of particular activities or practices they undertake. Staff accounts tended to be more detailed and elaborated than student accounts, but staff and student accounts featured areas less commonly referred to in discussions of sustainability, including health, well-being, community, and social sustainability. Many saw sustainability as a route for *society* to take forward; something that society needs to develop, work on, or improve. In sum, sociologists' responses to this issue were varied, similar to accounts and discussions of sustainability discussed in many other publications. Yet sociologists offered alternative ways of explaining sustainability as well: a societal responsibility for which action is needed.

Subsidiary research question 2: This question was addressed predominantly through findings presented in Outcome Space 2. Participants expressed a variety of ideas about sustainability in the curriculum, mainly in the context of sociology (and sometimes other social science-based disciplines). These accounts encompass what sustainability could be taught in curricula (examples of actual content that could or should be taught) and how this may be taught (as an explicit topic or a value or attribute, and teaching approaches that could be adopted). In the case of the former, areas reflecting the different conceptions sociologists offered about what sustainability is and means – including areas as diverse as environment, poverty reduction, clothing and textiles, and community – clearly informed curriculum views and ideas. A further area which was raised was that of social sustainability, a recognised branch of sustainability, but one that sociologists referred to more in their accounts than is visible in previous research. With respect to teaching approaches and methods, participants' ideas were most strongly represented in category 4. Here, a further difference in accounts is noted: that some sociologists view sustainability as a topic or focus area to be explicitly taught about, whilst others regard it as a value or attribute, more suitable for infusion in the teaching of other topics or as a lens to consider sociological topics through. Finally, several accounts suggest that sustainability should be taught critically and analysed in relation to different societies and, possibly, as a product of wealthier societies. Overall, sociologists are largely in favour of sustainability in the curriculum, especially in sociology curricula. Still, there was no dominant view but rather a collection of views, with a corresponding background theme that sustainability itself should not be understood as a 'given' or an issue

to teach didactically, but itself requires analysis and debate as part of its representation in the curriculum.

7.3 Revisiting the original contribution to knowledge made by the study

This study features a number of distinctive characteristics, these being its focus on sociological accounts of sustainability, its eliciting of both staff and student accounts, and its use of the phenomenographic approach for researching sustainability. In the previous chapter, I discussed the knowledge contribution made by the study. These claims can be synthesised as follows: *sustainability being understood as an individualistic management tool or ideology; sociologists' self-perceptions of their professional and personal identities in relation to sustainability; the views of sociologists in supporting institutional and educational interventions to promote sustainability; sociologists' ideas about a social and cultural sustainability; sociologists' ideas about a link between sustainability, community and well-being; sociologists' positive accounts about links between sustainability and their own discipline; specific ideas offered about integrating sustainability in curricula; sustainability as part of the student experience; the view that there is a sustainability of self; the existence of additional barriers to integrating sustainability in curricula; the contribution made to phenomenography through the undertaking of the study (a first project which applies phenomenography to sustainability in a sociological context).*

Drawing together the above points, the contribution of the project lies primarily through its interest in sustainability, sociology and staff and student accounts, using phenomenography. This aided the generation of some original and valuable findings. Further, many studies focus on a single-institution, whereas this one drew on experiences from three different and different types of institution. Finally, the study deployed a 'whole sustainability approach': I wanted the respondents to set the focus in terms of what aspects of sustainability they talked about and how this related to their disciplinary involvement in sociology. The combination of these aspects enabled it to yield several knowledge-generating outcomes.

In this light, the study also sought to address advice and concerns expressed by other authors in their analyses of 'the state of play' in sustainability research. Cotton et al (2007) and Vaughter et al (2013) both report that one limitation is that studies have often been at individual institutions. I hope that by broadening the scope of this study to three institutions, I have achieved an aim of being able to produce richer outcomes and recommendations.

Whilst these institutions are all UK-based, the participants involved were diverse, drawing on, for example, a mix of ages, nationalities and cultures. Barth and Rieckmann (2015) examined research trends in ESD and found that detail about data collection was provided in less than half of articles. In this study, great attention has been paid to carefully document the research process, and towards the end of this chapter, I further comment on this. Third, Felgendreher and Löfgren (2017) criticised the research on ESD itself, as one: "dominated by descriptive, conceptual and exploratory research. Most of the articles use case studies and conceptual writing as main research methods" (p. 1). I believe this work moves away from such a trend and, similarly, enables the development of new discussions about the progression of sustainability. Thus, I hope I have also contributed to the field by accounting for critiques of previous research.

To sum up, the study contributes to new knowledge in several domains:

- I have developed the literature about sustainability in higher education and sustainability in higher education curricula.
- I have examined sustainability through a sociological lens, undertaking research accounting for staff and student sociologists' accounts.
- I have broadened understandings of what sustainability is and might include with a stronger focus on the societal domain.
- I have added to the limited phenomenographic literature which focuses on variations of understandings of and views about aspects of sustainability. I first used phenomenography in Part 1 of my doctoral studies in a study about an educational change initiative which I later published (Baughan, 2013). Also, as part of my PhD studies, I researched sustainability for the first time, in work that has led to a series of publications and conference presentations (Baughan 2015, 2016a, 2016c, 2017) coming to understand how, in spite of being such a fundamental issue in broader society, it is so debated and divisive in higher education. It made sense to me to combine the two and adopt phenomenography within an under-researched disciplinary context to study sustainability, and, hopefully, generate some new ideas for the sector to take forward.

7.4 Implications

That sociologists offered such a range of perspectives and ideas about the meaning and parameters of sustainability, as well as how it could be addressed in higher education teaching, presents both challenges and opportunities. It is a challenge as it adds to existing views that there are multiple interpretations of what sustainability should 'be' and 'do' with the complexities that follow from this, yet sociologists also offered genuine ways forward – including perspectives about the progression of sustainability in higher education institutions and in these institutions' educational offerings. On this basis, and in view of the relative interest amongst sociologists in sustainability, sociology curricula might provide a good place to innovate in teaching, which may have relevance or offer lessons to inform teaching of sustainability in other disciplines. It is not being suggested that sociologists are compelled to introduce sustainability in their curricula: instead, that we enable (or encourage) them to decide if and how sustainability could be incorporated in a way which fits with their existing curricula and then let us know how they did it and what benefits, if any, it produced. In this context, it should be remembered that for many, sustainability is about the protection and improvement of the environment for future generations, but sociologists raised additional society-based issues, including poverty reduction, social justice, community, happiness and well-being, animal welfare, and gender – connections and opportunities are therefore multiple. Further, sociologists in this study described relational links between sustainability, their discipline and themselves. These points build a case that sociology can offer potential routes forward for sustainability; that sociologists could help the universities in which they are situated develop sustainability initiatives and teaching, and thereby contribute to the betterment of society at large.

Nevertheless, sociologists are not the only institutional actors who can make contributions. It was recognised that in many institutions, good work is already happening often via the activities of bespoke centres, in estates departments, or via initiatives and innovations. Sociologists also advocated a need for senior management to take much more responsibility for promoting sustainability, as well as noting potential roles of other professional services, such as quality assurance, libraries, and, in particular, educational development centres. In light of the outcomes, it might be argued that every institution needs a statement of what sustainability 'is' for that institution (some already do), or that there is a need for a new national policy. There has been difficulty in the latter at least in parts of the UK, however, as national policy and guidelines about sustainable development by the former HEFCE appear

to have generated little confidence or enthusiasm, subject also to criticism beginning with that by Knight (2005). Conversely, educational developers could engage more closely in sustainability, presenting advice about what it is and outlining options for developing and teaching about it. In doing so, they could also account for student views and feedback – which, we know from the existing studies, is relatively pro-sustainability. Still, educational development support needs to link to senior management support and teaching and learning policies, whilst in many institutions, these staff are currently finding themselves investing much of their work in helping departments improve, or at least damage-limit, their submissions for the new subject-level TEF (Teaching Excellence Framework). This is a pity, because many educational development staff report a willingness to involve themselves in sustainability initiatives (Baughan, 2015), this arguably providing a rather more meaningful enhancement activity than the largely unwanted TEF.

7.5 Comments on the research process and experience

In this section, I make some comments about specific aspects of the research process and my own experience of designing and implementing the project.

7.5.1 Research process

The outcomes of the study were finalised after a substantial analysis period, which took me several months to undertake. During this analysis, and with the support and suggestions of my two supervisors, both the outcome spaces and the categories within the outcome spaces were drafted and modified through a number of versions. For example, in the first draft, I produced three outcome spaces which were later merged into two. Categories were refined over a longer period: some categories were taken out or combined with others and some were not sufficiently qualitatively distinct, or the difference between two categories was quantitative as opposed to qualitative. In phenomenography, there is also an expectation that results are parsimonious and thereby organised in the smallest feasible number of categories. Further, I acknowledge an important point made by Marton and Booth (1997) – that outcome spaces should be understood as representing a relationship between the researcher and the data collected and analysed by that researcher. Thus, alternative outcome spaces and categories might have been developed if a different researcher or additional researchers had undertaken this study.

Having completed the research, and therefore my second phenomenographic project, I would argue that there are benefits to be gained from using this approach for researching sustainability. These include: its depicting of different interpretations of sustainability (which many sustainability-based studies appear to miss); its emphasis on actual, diverse sustainability experiences; its tapping into reasons for why participants hold the conceptions they do; and its foregrounding of accounts about disputes and dilemmas in sustainability. Thus, scholars interested in better understanding or promoting sustainability might consider adopting phenomenography since the latter's focus on difference can enable us to better understand varied perspectives and identify ways to respond to these. Of course, there are also challenges in using phenomenography in sustainability research, which largely reflect challenges involved in, and criticisms levied towards, phenomenography in general. Several authors have identified weaknesses including Cousin (2009), Sin (2010) and Tight (2016). In spite of its limitations, phenomenography can provide a revealing approach for addressing debates and road-blocks in sustainability and in other issues too.

7.5.2 Research experience

The design and undertaking of the research was a rich and rewarding part of the study which brought the project to life and gave me confidence in my ability to complete this PhD. However, there were also periods of concern and uncertainty, which warrant some comment.

First, the research process raised a significant obstacle which affected the research journey. Implementation was extended by the delayed start of interviews at County University, the ethical approval process for this institution taking several months to work through. Following my initial application for ethical approval from County, delays were caused by the additional detail required by that institution's Research Office, and the time taken for their office to respond to my sending of this information. On one occasion, even the equivalent office at Lancaster was unable to furnish County with the information that they required. In the end, a senior member of staff at County wrote and apologised adding that the experience would inform a review of their own procedures, but also noteworthy to myself were the entirely different procedures each institution had in place for providing ethical approval for the project. Happily, in the end, participants at County added considerably to the quality of the research.

Second, transcription and analysis were lengthy stages of the project, and I am aware that I could have saved time by drawing on the services of a professional transcriber. On reflection, I believe that the benefits of my approach outweighed the costs. As I transcribed, mental categorisations of the outcomes started to build and I noted down my initial interpretations. Transcription enabled me gain a growing sense of the meaning of the data I had collected. Indeed, although transcription and analysis may be regarded as distinct phases, in cases in which the researcher undertakes both, there is genuine overlap between the two such that transcription became the first part of analysis. Nevertheless, data analysis was psychologically testing, since until completion, it was not clear to me when such completion would come. It was at this period of the PhD that I started to maintain a diary, noting what I was doing, my perceived direction of travel, and where frustrations lay. This approach proved to be helpful and enabled me to understand my own efforts and where blockages were arising. In the end, I would maintain a short diary for my writing of the literature review, outcomes and discussions chapters too, and I intend to use excerpts of this diary after the PhD is done, as a teaching, mentoring or supervision tool, in the hope that it may be helpful to others.

As described earlier in the thesis and also during the analysis section, I borrowed a technique more commonly associated with narrative inquiry research. After completing transcription of the interviews, I summarised key points made by each interviewee in 24 transcript summaries which aimed to capture the main messages and stories as told by each person. Later, as data analysis drew to a close, I re-read each of these summaries as an additional check that no relevant accounts or perspectives had been omitted from my findings. I was also interested to establish whether each individual participant had been represented, though amendments were not made on this basis, since phenomenography focuses on the collective experience of the studied phenomenon. Nevertheless, some of the transcripts did have characteristics of storied accounts of their experiences of sustainability in their institutions and it was useful for me to be able to see that all qualitatively different accounts of sustainability were represented in my outcomes. Thus, my use of this narrative inquiry technique provided a check on the quality of my phenomenographic analysis.

Finally, it became evident that many participants became interested in the study and enjoyed the interview process: this was pointed out following completion of interviews on a number of occasions. For example, at the end of the interviews (after data recording had stopped and the official interview had ended), some staff and students made enquiries

about my interest in sustainability and, in the case of certain students, for advice about undertaking research. Naturally, offers have been made to maintain contact with participants so that they can be advised of the final outcomes. A follow-up seminar is planned in at least one of the institutions. Overall, the feedback was gratifying since it indicated that participants had enjoyed being involved in the project, and that in some cases, the project had 'sparked an interest' in sustainability for the participant.

7.6 Limitations and future directions

Inevitably, the study has its limitations. First, the findings present a snapshot of participant views at a specific period of time as opposed to measuring accounts over a period of time. Interview questions did, however, encourage participants to reflect upon their exposure to and experience of sustainability during their higher education career, whether that be as a student or member of staff. Second, it would be remiss not to acknowledge points made by Ashwin et al (2014, p. 320) on phenomenography and sociology, concerning:

> the potentially partial nature of the outcome spaces produced in phenomenographic studies and the need for a number of such studies in particular discipline areas before we can have confidence about the stability of variation that is produced in relation to particular disciplines. This is particularly the case in disciplines such as sociology, which have many different versions in different institutional and cultural settings (p. 230).

Thus, the study could have been strengthened through the inclusion of additional, and therefore a more diverse set of institutions, but the scope of the PhD did not make this possible. In addition, the study is not expected to be replicable (Marton, 1981; Marton and Booth, 1997) and a comparable study undertaken by another researcher in, for example, three alternative sociology settings would almost certainly yield some different results. Having said this, the outcomes expose new areas of interest for possible future research and using phenomenography is, in any case, about what Marton (1986) describes as a process of discovery. On this, I would opine strongly that this study has made discoveries which should be of relevance to educationalists, sociologists and 'sustainists'. Overall, my work is also characterised by the broader strengths and limitations of phenomenography that were examined earlier in this thesis. Finally with respect to limitations, I was curious about why several participants referred to the possible role of educational and academic development staff taking a greater role in progressing sustainability in their institutions. It might be the

case that some respondents, knowing that I, the author, work in educational development, were inadvertently influenced by this in their replies.

For the future? As an approach which foregrounds variation, there is potential for phenomenography to cast further light on areas of ambiguity and debate in sustainability, in different disciplines and amongst different staff and student groups. Optimistically speaking, further research could help move the field towards a 'phenomenography of sustainability' in which sustainability could become a more established area of phenomenography research, since phenomenography provides one approach by which we might be able to understand different assumptions and perspectives about sustainability. Future research might also address the relationship between sustainability and theory. Like most studies about sustainability, this one does not engage deeply with theory. Conversely, phenomenography can be regarded as a theory in its views about, for example, presenting logically-related, finite, categories. There is also sustainability itself, which, presented in the work of Caradonna (2016), can be regarded as a theory or a way of interpreting the world, a position also suggested by Leal Filho (2011). Nevertheless, the relationship between sustainability and theory or sustainability as theory is one which would be interesting to explore further.

Caradonna (2016) documents ten challenges and directions for sustainability and the sustainability movement. These include mapping a shared sustainability-vision, moving past neoclassical economics and the growth obsession, better harmonising the needs of rich and poor and developed and developing, tackling green-washing and the 'denial industry', and pooling public support. The outcomes of my study lend support to several of these, for example, profile-raising the misleading nature of green-washing. Others, such as the pressing need to attend to climate change issues, lie outside the scope of this study. Though not asked about nor raised in this study, the Anthropocene is also attracting growing interest in social science (Bonneuil and Fressoz, 2017). With its emphasis on human agency as an environmentally disrupting force, it may provide an additional tool for informing the teaching and researching of sustainability. This is because it links the actions of people – both individuals and groups – to the environment. It is an area that I would like to take forward in my own future studies, and indeed have started to (Baughan, 2018).

Returning to issues directly connected to the outcomes, sustainability should involve engaging staff and students critically, in relation to their everyday activities, linking also to their local communities. My study suggests that many people subscribe to the ideas of

sustainability but that at present, it is overly negative and individualistic. What is needed are ways to think about how we can talk about it more positively and in a way that makes sense to more people. In sociology itself, staff and students could look at the sustainability movement, examining the issues from the perspectives of major sociological paradigms, with recommendations made as a result of this. To begin the discussion, we might start off by borrowing a term from sociology itself, that of 'collective effervescence' coined by Durkheim in his work on religion (see, for example, Shilling and Mellor, 1998). This occurs when a community or society fuses together to communicate, share and participate in the same actions. It serves to generate a collective effervescence which galvanises individuals and unifies the group towards a particular and clear aim. It is accepted that sustainability needs to be examined critically in sociology, but we may ultimately come to realise that aspects of it necessitate unified approaches and collective actions – and soon.

7.7 Closing comments

> Growing concerns about climate-change pollutants, the widening gap between the rich and the poor, resource shortages, and the world's gamut of ecological problems have placed new pressures on sustainists. Creating a sustainable society that thrives within its biophysical links is no longer seen as a distant and utopian objective; it's now an urgent matter that, if neglected or mismanaged, will bring devastating consequences for the planet and the human economy that lives off it (Caradonna, 2016, p. 233).

To conclude, my project tells us that sociologists have important messages to offer about sustainability. Certainly, some of their points and concerns echo those which have emanated from other studies, but many of their views are new and distinctive. This is where I claim originality in my study. Debates - and publications about debates - pertaining to sustainability in higher education, are not new. However, the exploration of sociologists' perspectives about those debates is new, and it is perhaps surprising that they are new, as, prior to undertaking this study, I would have expected there to have been more previous work undertaken on sociological perspectives about commonly highlighted issues in sustainability. I would further opine that the use of phenomenography has helped me expose what some of these sociological perspectives are.

That sociologists offer new ideas about sustainability is, I believe, partly attributable to a natural connection between their discipline and this field. Whilst, for example, economics offers one set of accounts about sustainability, and psychology provides another - individual

and behavioural based - sociology can cast light on societal, social and cultural aspects. This is why it is concluded that sociology can further contribute to the understanding of, teaching about, and research into sustainability, and that the field of sustainability, with all its on-going protagonists, doubters and debates, about escalating real-world challenges to be seen and heard in the media on any day, can also inform contemporary sociology.

At a personal level, notwithstanding the delays and dilemmas I have encountered and inadvertently contributed to during my extended stay as a Part 2 student on the Doctoral Programme in Educational Research here at Lancaster, motivation and interest in this topic were always present. I complete the project in the hope that my work provides a small but worthwhile contribution to higher education research and to sustainability. This focus was the right choice for my Part 2 thesis because I work in higher education and, whether it be a theory, topic, issue or movement, believe that sustainability is of vital importance to us all, no matter which society we each are born, live and die within.

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Appendix 1: Participant Information Sheet

Variations in sociology staff and student accounts of sustainability
Information about the project

Name of Researcher: Patrick Baughan
Address: c/o Department of Educational Research, County South, Lancaster University, LA1 4YD.
Tel: + 44 (0)7780 661015
Email: p.baughan@city.ac.uk
Supervisor*:* Professor Malcolm Tight, Department of Educational Research, County South, Lancaster University, LA1 4YD. Tel: +44 (0)1524 594239 Email: m.tight@lancaster.ac.uk
Date: December 2014.

Dear [participant name_____]

I would like to invite you to take part in my thesis research in the Department of Educational Research at the University of Lancaster. This document explains why the research is being done and what it involves for you.
Please read the following information and feel free to ask me if you would like more information.

This document includes:
- Information about the purpose of the study
- information about what participation means and how to withdraw if you wish to
- details of what notes, recordings and other sources of information may be used as 'data' in the study for the group and with you as an individual
- information about how this data will be secured and stored
- information about how any quotes will be used and how you will be involved in checking, agreeing and consenting to their use
- how the information will be used in the thesis and for other purposes such as conference presentations or publication
- additional background information about sustainability.

1. The purpose of the study: This research is for my thesis, which forms the last part of my PhD in Educational Research, in the Department of Educational Research at Lancaster University. The purpose of the project is to investigate perceptions about, and experiences of sustainability, amongst staff and students at three different UK based universities. Specifically, the study seeks to explore variations in sociology staff and student accounts about and experiences of sustainability. I have chosen to investigate sustainability issues as these are becoming more prevalent in higher education, as demonstrated in various areas of policy, practice and research. Please note that you do not need specific experiences of or knowledge about sustainability in order to participate, although further background about sustainability is provided below. Please feel free to email me before the interview or speak to me at the beginning of the interview if you have any other questions.

2. Incentive payment: As a gesture of appreciation, all participants will be given a book token at the end of the interview. The value of this will be £15 and will be the same for all participants of the study.

3. What participation involves and how to withdraw if you no longer wish to participate:

Why have I been invited? I am inviting you to participate as you work in or you are a [student / staff member – <u>delete as appropriate</u>] in the disciplinary area that my project focuses on, and I believe that your views and perspectives would be valuable for this study. Once again, you do not need to have a detailed knowledge about / experience of sustainability in order to take part.

Do I have to take part? No, your participation is entirely voluntary. If you do not wish to take part, then please let me know. If you do not wish to be recorded, please indicate this. Every effort will then be taken to ensure that your data/voice is removed from recordings by editing out where possible or excluding such data from any transcription. You can withdraw at any time during the study and there is no obligation on you to continue or penalty for withdrawing. Your related data (recordings, notes) can be destroyed and all reference removed prior to any publication of the outputs of the study.

What would taking part involve for me? If you agree to take part, I will arrange with you a convenient time and place to interview you. Interviews will take approximately 35 minutes to undertake and may take less time. We will hold interviews in your department or in an alternative public place. If it becomes difficult to arrange a face-to-face interview, it might be possible to use Skype software. During the interview, I will ask about your views and experiences of various sustainability and related issues.

4. What will I have to do? In order for me to go ahead with the interview, please can you sign the consent form, which is included with this letter. This needs to be signed and returned to me before or at the interview. The interview will take place on [date] in [location] at [institution]. Prior to this, should you have any questions or concerns, please do not hesitate to contact me.

5. Protecting your data and identity

What will happen to the data? - 'Data' here means the researcher's notes, survey results, audio recordings and any email exchanges we may have had. The data may be kept for one year after the successful completion of the PhD *Viva* as per Lancaster University requirements, after which personal data will be destroyed. Audio recordings will be transferred on my personal laptop and deleted from portable media. Identifiable data (including recordings of your and other participants' voices) on my personal laptop will be encrypted. With devices such as portable recorders where this is not possible, identifiable data will be deleted as quickly as possible. In the mean time I will ensure the portable device will be kept safely until the data is deleted. You can request to view the field notes or listen to the audio at the end of the interview and any parts you are unhappy with will be deleted, or disregarded from the data. Data may be used in the reporting of the research (in the thesis and then potentially in any papers or conference presentations). Please note that if your data is used, it will not identify you in any way or means, unless you otherwise indicate your express permission to do so. You have the right to request this data is destroyed at any time until 31 August 2015. After this date, however, I cannot guarantee that all data can be destroyed as it will by then be included in the analysed results of the whole study. You also have full protection via the UK Data Protection Act. The completion of this study is estimated to be by March 2016 although data collection will be complete by April 2015.

How will my identity be protected? - A pseudonym will be given to protect your identity in the research report and any identifying information about you will be removed from the report.

Who to contact for further information or with any concerns - If you would like further information on this project, the programme within which the research is being conducted or have any concerns about the project, participation or my conduct as a researcher, please contact: Professor Paul Ashwin, Department of Educational Research, County South, D32, Lancaster University, Lancaster, LA1 4YD. Tel: +44 (0)1524 594443
Email: P.Ashwin@Lancaster.ac.uk

Thank you for reading this information sheet.

Patrick Baughan, PhD Researcher, Department of Educational Research, Lancaster University.

Sustainability: a brief, contextual background
(Patrick Baughan, November 2014)

The purpose of this section is to provide you and other participants with a brief, contextual background about sustainability. Participants will have varying knowledge about and experience of sustainability, some having little or no experience - so please do not be concerned if you fall into this latter category.

Sustainability as a topic, or collection of topics, has attracted a growing level of interest both in higher education and in society at large in recent years. It now represents a more prevalent area in higher education, thanks in part to a number of 'drivers', such as the increased expectation that universities should have a role in profile-raising such issues, along with Higher Education Funding Council (HEFCE) policies and requirements. There are dedicated journals on sustainability, and an annual 'Green League Table' of universities.

My own interest lies in sustainability in higher education and sustainability in the curriculum, issues already explored by authors such as Cortese (2003), Koger & Scott (2010) and Leal Filho (2011). Yet defining what sustainability *is* and *means* has posed a significant problem. Still, sustainability as applied to higher education might reasonably be interpreted as an umbrella term that includes activities including environmental management, energy, travel, recycling, university estates, carbon reductions, food policy, and sustainability in the curriculum. To help introduce participants to my own study on sustainability, I have provided a small number of published definitions below. However, other people have different interpretations and understandings of sustainability.

Sustainability and related terms

> [Sustainability is about] development that meets the needs of the present without compromising the ability of future generations to meet their own needs (United Nations / WCED, 1987)

> We use sustainable development… to refer to a broad range of environmental, social, economic and equity concerns, at both an inter- and intra-generational level. ESD [Education for Sustainable Development] is used… to describe the incorporation of sustainable development into teaching (Cotton, Bailey, Warren & Bissell, 2009)

> It is concerned with transformative education and development to create global citizens who are stewards of sustainability (Sterling, 2001)

> Sustainability efforts are defined broadly to include changes in campus operations, financial and administrative planning and/or policy, and/or academic curricula and research that facilitate positive environmental changes (Brinkhurst, Rose, Maurice & Ackerman, 2011)

> Sustainability is a concept, a goal, and a strategy. The concept speaks to the reconciliation of social justice, ecological integrity and the well-being of all living systems on the planet. The goal is to create an ecologically and socially just world within the means of nature without compromising future generations. Sustainability also refers to the process or strategy of moving towards a sustainable future (Moore, 2005).

Also common are the terms *Education for Sustainable Development* (ESD), which refers to finding and using opportunities to include environmental, economic and social content and debates within the various disciplines, and *sustainable development*, often used interchangeably with the term of sustainability.

The purpose of my own project is to investigate perceptions about and experiences of sustainability amongst sociology staff and sociology students at three different UK based universities. Further details are provided in the main section of the information sheet, above. I hope that this document has been helpful in providing you with a brief background about sustainability in higher education, and, therefore, an idea of the context of my project.

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Appendix 2: Consent Form

Reproduced on next page.

Department of Educational Research
County South, Lancaster University, LA1 4YD, UK
Tel: +44 (0) 1524 592685

Consent Form

Variations in sociology staff and student accounts of sustainability.

Name of Researcher: Patrick Baughan

		Please tick
1.	I confirm that I have read and understand the information sheet dated December 2014 for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	
2.	I understand that my participation in this research study is voluntary. If for any reason I wish to withdraw during the period of this study, I am free to do so. I understand that my contributions will be part of the data collected for this study and my anonymity will ensured. I give consent for all my interview data to be included and/or quoted in this study.	
3.	I consent to the interview being recorded, using a digital recording device.	
4.	I understand that the information I provide will be used for a PhD research project and may be published. I understand that I have the right to review and comment on the information provided before the final submission.	
5.	I agree to take part in the above study.	

Name of Participant:

Signature

Date

Appendix 3: Excerpt from *Analysis-Categories* data analysis file

A1. Sustainability is about sustaining and protecting higher education – 12 instances:

- This conception provides a contained account of sustainability as about something within higher education.
- Sustainability is about sustaining, protecting, or 'keeping things going' in higher education, or within a particular higher education context.
- There are a number of different ways in which sustainability is considered in this way, for example, through values, finances, or sustaining student numbers, but all within higher education.
- At times, participants adopting this conception did include environmental issues.
- This conception is well represented by students and staff.

Elizabeth: I've felt that part of my role is protect what I believe are really important things that we are doing, that the University is doing from, erm, I suppose from challenges kind of externally, from British society, British government, but also perhaps more locally from kind of senior management. So although it's been quite important for me to think about ways in which we can change things to make what we do better, I've also felt that part of my job is to protect kind of my School, my department from, erm, unhelpful forces for change.

Elizabeth: I think there's lots of value in universities that we need to protect as much as we can, erm, and I think a lot of people come into academia for very kind of good reasons and are generally, you know, they often come into academia for values that the sector seems to be kind of trying to drive out, so kinds of, collaboration, commitment to non-monetary pursuits, that kind of thing. And I do think that it's really important that those kind of values are protected and sustained.

Elizabeth: I suppose if you say sustainability in higher education, maybe I would, erm, think that you are talking about something more broadly, so perhaps the sustainability of the higher education endeavour and what you see is important within higher education, so perhaps the teaching-research things that I was talking about.

Fay: …they keep everything open, like they have the 24 hour centre obviously so it can sustain the students at the uni. So the students always have a place to do their work so they can sustain the effort that they put in. And there's always security guards on campus and there's the police.

Fay: Making sure the campus stays nice and pleasant and that it stays functioning. And making sure everything stays up to date and making sure it stays within health and safety regulations.

Den: I think the first thing that comes to mind would be about the financial sustainability for them. And also maybe about how to keep on improving the quality of their education.

Anthony: One [explanation of sustainability] would be everything about it in terms of university, one would be in terms of what the university is doing for its, in terms its ecological footprint I suppose, perhaps. On a small scale, we're not allowed to have bins in our offices [laughs a lot]… The University's often a fairly kind of good place for, to pioneer some, albeit modest kind of environmental practices, I suppose, because you've got a fairly captive audience who are often sympathetic to such practices and changes.

Tim: I think universities should set an example for sustainability, cause part of education is showing examples. So I would say that a university would be a good example to show good sustainability.

Ani: If I still think of sustainability as something being upheld and like being maintained, then I would say how we did the library today so people, like, and it's getting better so people later on, like, so the library later will be much better for people who are going to be using it.

[Truncated]

A2. Sustainability is about sustaining, managing and controlling in higher education- 14 instances:
- This conception also provides a contained account of sustainability in higher education, but is broader based.
- As with the previous conception, sustainability is about sustaining or protecting, but it adds a more critical discourse.
- In this conception, sustainability may also be a tool or device used to save money, justify savings, or out-source services.
- Participants adopting this conception were also more critical in their accounts, relating sustainability to terms (and practices) including 'neo-liberal discourse', 'control mechanism', 'management tool' or 'behaviour modification'.
- In addition, this conception assumes that sustainability is an activity for which responsibility is placed on the individual.
- This is a well-represented conception and mainly staff-based.

Aidan: I think what a lot of what is passing for sustainability is really about the struggle for intellectual control over universities.

Poppy: Actually the first thing that came into my head when you were talking was the fact that the language of sustainability is one of the things that's been used in the recent proposals to restructure the University. So in the talk that we were given, however many weeks ago it was when they announced that they were going to be cutting jobs, there was kind of a repeated refrain in the talk which I wrote down because I thought the rhetorical structure of it was really interesting, [it] was 'It's just not sustainable'. And so the Dean who gave the talk just kept coming back to this 'It's just not sustainable'

Poppy: The way that the language of sustainability is used as part of efficiency savings and managerialism, I find really problematic, because it's hard to argue against the idea that you are unsustainable. It's a very final kind of language. Erm, and also I find the very individualized kind of rhetoric around sustainability, about switching your lights off. You know, when you've got the Koch brothers just like financing massive problematic political campaigns about climate change, whether you switch your light on or off ultimately, like, I do think that individual change is important, but I think that that kind of moralistic language about individuals has been a bit of a hindrance to the environmental movement, because, yeah, I think it's very difficult to talk about, like impending "climageddon" [laughs] 'cause it's depressing [laughs a lot].

Poppy: It's painful to think about, and people are frightened about it, so it's much easier to not think in those macro-terms. But I think some of that kind of individualising, it sort of fits very well with the kind of neo-liberal ideology of well it's all your fault.

Poppy: I find some of that individualised stuff around sustainability being about, as long as you take your bottles to the bottle bank and as long as you switch the lights off, then there's nothing else we need to do, which, like that isn't going to stop the impending climageddon [laughs] unless there's a massive system change. And so, yeah, I find that a bit frustrating. And I guess sociology can come in there. [also in B3]

Elizabeth: When you walk round campus there are quite a few posters trying to encourage environmental behaviour in some respects, particularly with regard to recycling, but also switching lights off and switching appliances off and that kind of thing. But those practices that actually probably, you know really support the University with the broader agenda of saving money whereas something like, you know, air travel which might be much more in tension with the University's other objectives, I think, I would say are ignored.

Lauren: We get email updates about various sustainability things but in practice, very little. So, for example, since they privatized all the coffee shops, you know, without consultation. As far as I'm aware they just disappeared over the summer two or three years ago. You now can't get cups. You have to have plastic cutlery… So there are policies and there is a sustainability agenda and all the rest of it and the privatization drive seems to contradict that in several ways.

Ava: The first thing that comes to mind is that last year or the year before, they changed the whole bin system here… And it's actually caused more trouble than good really because we have two types of bins in the buildings. So there's bins that you find in corridors which are for paper, or actually for anything but not food waste, and then in the kitchens we have special bins for food waste. Now what happens, for example, I spilt some coffee on my desk this morning, and I had to wipe it up with a tissue, did that go in the food waste bin or the non-food waste bin? You know, they're not mutually exclusive and I think people just get annoyed, and it also means that we can't, we still have bins in our offices, but we have to empty them ourselves into these bins in the corridor. Whereas previously the cleaners would empty them for us, which I don't mind because the nearest bin is quite close but it is quite annoying sometimes.

Austin: Good intentions sabotaged by a harnessing to very temporary, fleeting business and government agendas, if I'm being honest about it.

[Truncated].

Appendix 4: Excerpts from *Transcript Summaries* data analysis file

Ava

This is a rich transcript, in terms of the diverse and multi-layered points and experiences provided. Ava is a lecturer in sociology, with an inter-disciplinary background, but she appears to have located her 'home' in sociology. She has a strong interest in the social world as demonstrated in her teaching, research and (as she puts it) activism. She has a particular interest in inequality and social justice issues. She displayed wide-ranging ideas about sustainability and her conception of it was probably one of the strongest. She described it in two dimensions: one on the level of sustaining and the environment; the latter about the economic notion of sustainability. Many of her comments about sustainability in higher education linked to this second view, of how universities work in terms of and use arguments of financial sustainability to justify certain actions. Indeed, Ava was knowledgeable and observant on financial sustainability. Similarly, she offered many points on issues involved in sustainability in the curriculum, seeing it is something that might be implicitly included through critical discussions and a more 'bottom-up' approach, as opposed to being 'lumped in' – an approach which she, like others, feel would be harmful. She also commented on the value of further research into sustainability. Her suggestions about sustainability in the curriculum through criticality and discussion link closely to ideas expressed by John (Coastal University). Later in the interview, she pointed out that academics should have some agency in how sustainability in the curriculum is handled. These points were made due to fears of sustainability otherwise simply becoming part of the managerial discourse about which she aired some further points in the closing stages...

Anthony

Anthony is a Senior Lecturer, with eight years of experience at Coastal University. He had a good knowledge of the sociology department and curriculum at Coastal. His primary research and teaching interest was in the sociology of culture, and he saw his identity as spanning research, teaching, and the relationship between the two. He saw his work as a vocation and worked at home when he could. He spoke about the constraints and challenges on universities now and the threats that this may bear on traditional disciplines such as sociology. For Anthony, teaching was about introducing students to a range of issues and values and giving them an opportunity to make sense of their world. He then spoke about sociology as having its own principles, its own traditions, and its own course of research as 'precious'. Only a little later in the interview did we get onto sustainability, on which some excellent points were made, which followed on from the themes raised above. In the first instance, sustainability was interpreted to be relatively 'woolly', an almost 'nothing' concept (and with possible left wing tendencies!), but he subsequently added two further explanations, which were sustainability in higher education and sustainability in terms of resources and environment. Gradually, the interview shifted in a way which merged Anthony's warm comments about sociology with his views about sustainability, such that he seemed positive to links between the two. In this late section, some particularly relevant comments were made. Anthony explained how sociology units at Coastal draw on environmental issues and described sustainability as being on the critical side of the discipline. Sustainability should never be imposed but could feature as a contemporary area for discussion and debate – issues such as relentless growth and consumption, for example, warrant analysis. He added that sustainability could feature as a separate unit in the sociology curriculum or could be 'blended but integral'. This was intertwined with

comments about how Coastal as a university and he as a person both contribute, in fairly modest ways, to pro-sustainability practices and behaviours…

Appendix 5: Excerpts From Original Interview Transcripts

Staff interview

[PB – Patrick Baughan, the interviewer.

AD – the staff respondent].

PB: Do you see any examples of sustainability around the campus, whether it's in policies, practices, teaching? Do you see sustainability around the university?

AD: Yes, certainly. The focus on student experience. The focus on student experience is partly cynically strategic to generate good student feedback returns in order that we raise our KPI but it also has an effect for students themselves, and that is very important, to give students a positive experience and a fulfilling experience, an enriching experience, not just in economic terms but in personal and individual terms, because that feeds back into wider society. If we stop doing that and we just give students an empty experience of gaining a qualification at the end and of our learning outcomes corresponding with boxes that they can tick, yes I can remember doing that. But without any sense of enrichment from it, then university education will lose status in wider society. I think it is losing it now, I feel that is already happening. So that's one example where sustainability feeds into strategic requirements, where the two can be the same thing. So the emphasis on student experience is something I very much welcome.

PB: Can you give me any examples of how you have drawn on sustainability policy or practice in your own work here?

AD: Apart from my campaign about getting them to fit doors which will close automatically, that's an example in those terms. In much broader strategic terms about the sustainability of universities, one of the things that we need to be able to do is to provide students with something which is required by society at large and increasingly required by professional employment but which other people may not have. OK, so what I've had introduced, I've had in my teaching for about ten years now since before I actually arrived here is in my third year modules and emphasis on students doing presentations to each other, and actually taking a

teaching role in doing that, because I explain to them, look, as soon as you leave here and go for a job, you're going to have to do presentations, probably even at the interview stage...

PB: Would you gain more fulfilment if you were in a department or university that you could see was genuinely making an effort to develop in terms of its pro-sustainability values?

AD: What would increase my sense of citizenship to the University would be a much more would be an open discussion about exactly what sustainability is because that's simply what we don't have. In this University or, I gather, in many others now is discussion and debate among those people who are supposed to be the most intellectually able, some of the most intellectually able, educated people around, are actually denied the opportunity to discuss strategic concepts like sustainability, what does it mean and how can we best achieve it? Instead, these things are reduced to tick box exercises.

PB: Is there a place to consider sustainability in sociology curricula?

AD: Yes.

PB: Is it something which is important, do you think? Does it happen here?

AD: Well it's something that we're currently engaged in, an enormous process of curricula reform.

PB: I heard about that…

AD: Yeah, university level. We're all being subject to this with no opportunity for discussion of core concepts such as discussion of sustainability. We're told what these things will mean and we're told how to achieve them. What we've got to do is engineer our programmes, our curricula, in such a way that it includes opportunities for us to able to tick those boxes, basically. It has nothing to do with student experience, it has nothing to do with actually adding value to the degree we give students. It's about us ticking the boxes that our management require us to tick.

PB: So no room maybe for those things that we've talked about?

AD: No, there is room. There's always room. I make room.

PB: … there are all sorts of debates going on about whether sustainability should form a stronger part of university curricula... But in the sociology curriculum, is there a relationship there which we could explore more?

AD: Yes, certainly, I mean one could envisage, it's a great idea, having an entire module on sustainability where we could discuss what this core concept actually means with students, and encourage *them* to discuss it in imaginative and innovative ways…

PB: We've talked about barriers to introducing sustainability….

AD: Yes, I think it could potentially be in some situations, yes, where people simply dogmatically refuse to change, refuse to accept that new demands were legitimately being required of them, yeah. New responsibilities. New responsibilities come with a changing society. That's fair. I can accept that, otherwise, you asked earlier about is there space for sustainability on the sociology curriculum and sustainability surely is about a combination of social reproduction and social adaption. Two of the things that are at the very bedrock of sociological theory. How does society reproduce itself? How does society adapt to technological change, to transformations in the external global environment and so on and so forth. Now, those things take on a different, are differently scaled, differently scoped, but they're still pertinent questions for us to answer.

Student interview

[PB – Patrick Baughan, the interviewer.
AM – the student respondent].

PB: Moving onto the sustainability aspect… if you hear the word sustainability mentioned, what if anything comes to mind?

AM: I don't really picture anything but I don't think on a broad scale we're, as a world, we're not living a very sustainable lifestyle. That's how I feel, I couldn't give you a definition of sustainability.

PB: That's something though.

AM: I don't know what it is but I know what it's not. I know what's unsustainable. I can detect, I like to think that I can identify something that's unsustainable.

PB: Can you elaborate at all?

AM: Like consumerism, like oil gas, like natural resources, they are completely unsustainable. We're outgrowing our natural resources.

PB: Yeah, thanks, that's a very pure definition... There's a view that universities should be more sustainable... It's often argued that universities should try to encourage more sustainable behaviours.... And a range of activities... What do you think about all that?

AM: I would agree because my personal background, like my dad went to university but my mum never. And my dad is so more kind of aware, like, put the recycling out, recycle this, don't do this, use the food bin, like that's the kind of stuff. But my mum, she doesn't, I don't know, I don't know what it is. My dad went to university a long time ago but it's kind of, even like whenever he went in the 80s, I think there was still like kind of this little message getting imprinted in his mind, like, aw no, but it's something that my mum doesn't really, she's aware of it but it doesn't come into her line of thought. So not like on a regular basis, but I know from the university they have like a whole stand of fair-trade snacks and we recycle like 85% of our waste a month, or something like that. So that's I think increasing sustainability.

PB: Is that something that you think is good or important?

AM: Yeah, I do think it's important, definitely.

PB: You spoke about your values and what it meant to be a student. Do those environment aspects link in any way to your notion of being a student?

AM: I think it is, increasingly so. Like before I came to uni, I wouldn't really, it sounds terrible saying it out loud, but I wouldn't really think to myself about dropping a little bit of paper on

the floor, or a wrapper, on the ground. But as I'm walking, eating… something, I wouldn't think twice about dropping it on the floor. That sounds really bad![laughs]

PB: It's good that you're honest.

AM: So many people do it but I've noticed as I've come to uni that I'm much more, pick that up. I find myself picking up people's rubbish and going, did you drop something?

PB: Really, have you actually gone up to someone?

AM: I have, I have. And I've actually done that to a […] local, and they've looked at me like, what are you doing? And I'm like, you just dropped a sandwich wrapper on the floor, like there's a bin there. At bus stops people do it. And there's always a bin at bus stops and I think, what are you doing? But, erm, on the social aspect as well, like, erm, my, the club I'm in, I'm in like cricket and if we ever do anything in public, like in the park or at the local cricket club, we produce rubbish. At the end of it we sweep and pick up the rubbish which is probably more than you hear about doing a day on the beach, like, you hear about the litter on the beach and stuff like that. And I think I'd be more conscious if I went to the beach and I had some rubbish. I wouldn't just leave it there and cover it up with sand. I'd obviously just take it and dispose of it.

PB: So you've kind of answered my next question already which is, is sustainability and pro-environment something you practise in your day-to-day activities?

AM: Yeah, definitely.

PB: Do you recycle at home as well?

AM: Yeah, we recycle. […] isn't very good for recycling.

PB: What, as a university?

AM: It's every other week.

PB: Yeah.

AM: But it's just taking that extra 10 seconds and thinking, like, especially in the university library they have, like, they have one bin but it's sectioned off. It's like half a bin for food waste and half a bin for plastic and half a bin for recyclable materials. And it's just taking that 10 seconds to think I'm going to take my crust out and put it in the food bin and then put my sandwich wrapper in the recycle bin. It's not going to affect your day in any other way other than maybe delay you by maybe 10 seconds. But I've definitely noticed I've started doing it because, I think it's quite sad because I see my friends just chuck it all in the bin, just throw it in the bin.

PB: So in a way being at university has pushed you in that direction?

AM: Yeah, it's made me even more aware of it.

PB: That's great. Interesting. Have you seen anything else that the university do?

AM: Yeah. They do, I know the student's union do beach cleans, and they go a couple of times a year, like mainly in the summer, September. They go at 6 in the morning down to the beach and down to the common with, like, black bags and pick up all the litter. That's not a university space, that's like a voluntary kind of activity as of making […] a nicer place