Heritage Conservation and the Building Crafts: a qualitative study of Yorkshire craftspeople

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Abstract

This research began as an approach to understanding a longstanding issue with the capacity of craft skills for heritage conservation in England. It diverged from traditional research based on a projected economic need for such skills by seeking an insider view of the reason for continued decline. By using a series of complementary, mixed archival and qualitative methods to study the craft community in Yorkshire, this thesis demonstrates that, throughout the 20th century, conservation as a discipline influenced craftspeople incidentally and without real direction. This is problematic, not only because of the risk that it poses to craft skills but also because it disregards craftspeople's distinct heritage values and thereby contradicts heritage conservation as an holistic and multi-faceted value-led discipline.

The inductive methodology employed has been particularly revealing. As an innovative approach to researching building craftspeople it has drawn on the participant observation work of Marchand, Thiel and Yarrow, and has shown that it has real value for understanding the processes of building conservation when on site. When compared to the archival findings from an historical case study, it shows that the commercial management of conservation currently predominates on-site practice, to the extent that it obstructs value-based decision-making. I argue that this is a structural issue underpinned by a false perception that conservation can be divided into two stages of concept and labour, practised by professionals and craftspeople, respectively.

As a solution, the thesis suggests that conservation should make space for interdisciplinary on-site educational opportunities, where the different stakeholders of conservation can learn the value of each other's expertise. The more empathetic understanding of craft expertise that this enables should form the basis for future cooperation and a more central role for craftspeople in conservation, which would have real practical meaning for the discipline.

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Author's Declaration

I declare that this thesis is a presentation of original work and that I am the sole author. This work has not been previously presented for an award at this, or any other, university. All sources are acknowledged as references. Some of the material contained in this thesis has been published in the following papers:

- Loader K and Norton S (2012). *Supplying the heritage industry: an analysis of UK craft companies' experiences.* Paper presented to Heritage 2012, 3rd International Conference on Heritage and Sustainable Development, 19th – 22nd June, Porto.
- Loader K and Norton S (2015). 'SME Access to Public Procurement: An Analysis of the Experience of SME's Supplying the Publicly Funded UK Heritage Sector'. *Journal of Purchasing and Supply Management,* 21(4), 241 – 250.
- Norton S (2017). 'The Devil is in the Detail: Capacity Building Conservation Skills at the Stone Masons' Lodge'. In G Chitty (ed.), *Heritage, Conservation and Communities: Engagement, Participation and Capacity Building,* 275 – 286.

• Chapter One •

• Introduction, Aims and Methodology •

1.1 Project background

In recent decades, heritage management has become widely recognised as an interpretive activity that seeks to protect the value that society attaches to historic buildings and places, rather than their objective or inherent significance. Although this value-based approach represents a theoretical transformation for the discipline and its allied areas of study (explained in Chapter Two), adoption of the paradigm into practice has been slow and decisions based on material archaeological and architectural remains prevail (Walter 2017). Disentangling multiple stakeholder views when their values diverge from this is certainly challenging (Getty 2002, 5), and so researchers continue to test methodologies that explore the eclectic voices of expert and non-expert communities (Everill 2009; Madgin et al 2017; Yarrow 2019). In using a mixed-methods approach to consider the community of craftspeople that practises heritage conservation, this thesis builds on these foundational studies while also concentrating on an issue that has dogged heritage conservation since at least the 1970s (Council of Europe [CofE] 1975): an insufficient supply of traditional craft skills for the conservation of buildings and above ground archaeology (hereafter referred to as 'conservation').

This particular focus arises from my own experience as a conservation professional at the University of York. As Regional Heritage Skills Coordinator between 2009 and 2015, I worked alongside stakeholders from the heritage and construction sectors in order to understand and address a shortage of craft skills for conservation in Yorkshire. It was clear that all the work to establish the need for a more skilled workforce continually preconceived craft skills as a 'means to an end' in conservation (Donkin 2001), in a way that seemed incompatible with heritage's newfound value-based inclusivity. The approach assumed a causal interaction between craft and conservation that was based entirely on the construction sector's ability to meet the heritage sector's current economic demand. My work seeks to challenge this view through two key ideas: I have taken a person-centred approach to understanding the diverse experiences of craftspeople working in conservation throughout the 20th century (generally referred to as 'conservation craftspeople' as explained in section 2.5), and my critique of these has for the first time revealed the depth and complexity of their longstanding symbiotic relationship with conservation. This thesis therefore offers an alternative view on the ongoing alterity between conservation's need for the craft skills available and, in keeping with developments in heritage studies, emphasises the utility of a more conciliatory version of conservation that recognises craftspeople as a community worthy of engagement.

1.2 A critical qualitative methodology

Although the rich and contextual descriptive data of qualitative inquiry is arguably very appropriate for analysing the complex machinations of the English construction industry, the sector has viewed it with 'suspicion' (Pink et al 2013, 3) and it is not yet applied to the 'material transformation' of conservation routinely (Douglas-Jones et al 2016; Jones 2017). From the outset, this project sought to respond to this through the rigorous application of research tools from across the humanities and social sciences in an inductive and cyclical approach to gathering and analysing data, developing grounded theory, testing that theory and collecting more data (Streubert and Carpenter 1999). It interweaves a range of mixed archival and qualitative methods in an innovative coalition that makes a contribution to the studies mentioned so far and discussed in further depth in section 2.4 of my literature review. That the major part of this research was undertaken qualitatively was enabled by my two roles of professional and researcher, a dual position that brought both privilege and compromise, as this section explains.

The aim of my work – to bring craftspeople into discussions about the value of heritage and conservation skills shortages – naturally called for a person-centred research design. This is seen as a partnership approach because it empowers participants to disclose their experiences and share their view of the environment, so that researchers can understand their values and help ensure they are respected. As such, heritage management can be seen as a person-centred approach that can be usefully applied to conservation, as this thesis demonstrates. Because the qualitative tools of person-centred research usually place both parties in foremost roles, appropriately reflexive studies take care to consider the impact of the researcher on the participant. This deference effect is a concession of qualitative research that is balanced by the insider perspective (or 'emic', as it is often termed in the social sciences [Avrami et al 2000]) it generates, and for giving voice to lesser-heard communities (Di Leonardo 1987, 4).

My position in this study is therefore complex. As a professional, I could access research participants easily and engage them in an area of shared interest, while also being distinguished from most participants by my occupation and gender. This unique position brought a degree of distance that made me well placed to interrogate this subject objectively as a non-craft conservation professional (or 'non-native insider'), but it also compromised my neutrality in the participatory element of the research, as set out in 1.4.3 below. Quite typically for sociological research (Jenkins 1992; Bourdieu 2001), I have dealt with this through continued reflexivity, criticality and remaining conscious of 'the relationship between [myself] and the object of the research' (Brannick and Coghlan 2007, 61).

The risk of misrepresenting participant experiences and accounts is further mitigated by my adoption of a range of qualitative methodologies; the results of which are verified against each other in a process of triangulation. This is an oft-used concept in the social sciences, which 'requires the use of a suite of different methods in complementary ways' (Getty 2002, 16), because the layering of analogous results reinforces and leads to greater confidence in findings. In this project, triangulation substantiates through comparison the findings from each case study and also my position as a non-native insider professional-cum-researcher. My positionality during each element of the fieldwork is therefore given in section 1.4 below, as part of the rationale for each method employed, any ethical implications and each case study's contribution to triangulation. As well as pursuing this overarching methodological aim, the thesis' four core chapters explore five principle thematic research questions.

1.2.1 Research questions

Aim:	To test the use of qualitative methods in heritage conservation through an inductive exploration of its influence on craft practitioners since the 19th century. To propose adjustments to the association that enhance value-led conservation and conservation craftsmanship simultaneously.

RQ1 (Origins)	How and why did craft practice change in the 19th and 20th centuries? Chapter Two draws on discourse in 19th-century publications and more recent literature to assess how the building craft industry changed while the discipline of conservation developed.
RQ2 (Social Reality)	What is the social reality of craft in conservation? A combination of archival and qualitative methods is used to investigate the profiles of previous and current practising Yorkshire craftspeople. Findings reveal how their skills were gained, their economic viability, and other reflections on being conservation craftspeople.
RQ3 (Structure)	What is the organisational structure of craft practice in conservation? By evaluating the impact of organisational change, professionalisation and an increasing presence of paper-based materials, the project establishes behaviours that have sustained Yorkshire conservation craftsmanship. Close attention is paid to power, authority and control in conservation.
RQ4 (Academic Theory)	Do craftspeople relate to academic portrayals such as the 'inalienable relationship'? Consider whether my recordings and descriptions of craftspeople and their work reflect imposed theories such as the academic inalienable relationship (explained in section 2.4), or their own distinct insider views.
RQ5 (Sustainability)	How is conservation craftsmanship sustainable? Based on the research findings, make recommendations for the heritage sector about how and why it might

positively influence conservation craftsmanship in a more conscious and systematic manner.

1.3 A Yorkshire case study

Although the inspiration for this work is very much craftspeople themselves, the geographical limitations of my professional focus provided a convenient area to situate the research. The focus of the exploration is therefore the former English region of Yorkshire, which encompasses the four sub-regions of North Yorkshire (including York), East Yorkshire (including North and North-east Lincolnshire), West Yorkshire and South Yorkshire (Figure 1a). As a veteran home to groups active in both conservation and crafts, Yorkshire was also appropriate from another important perspective: there were a healthy number of case studies and research participants to involve in my longitudinal study.

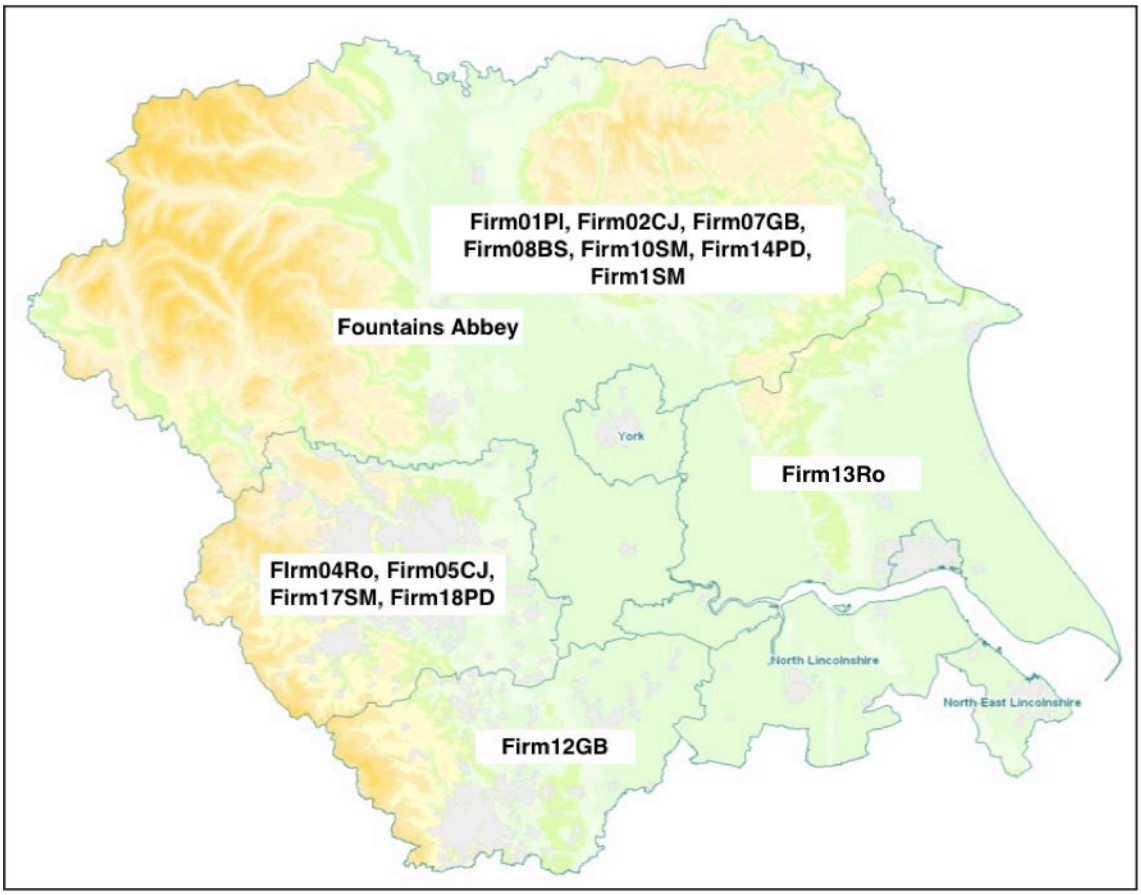


Figure 1a: York at the centre of the Yorkshire region with participants roughly plotted (Firm03SM, Firm06CJ, Firm09Ro, Firm11SM and Firm16GB were based in York) (Author's own 2019)

At the centre of the region, the City of York has long been established as a centre of architectural conservation education and innovation. Early conservation developments include the campaign to save the City Walls in 1822, the adoption of the Esher Report by the City Council in 1968 and the establishment of the first UK postgraduate course in Conservation Studies at the Institute of

Advanced Architectural Studies in 1972. As host to the Headquarters of the Council for British Archaeology, a large Historic England (HE) office, a thriving university Department of Archaeology, over half of the accredited conservation architects in Yorkshire (Architects Accredited in Building Conservation 2019) and groups such as the Civic Trust, the York Conservation Trust and the York Conservation Areas Advisory Committee, York continues to be a hub of heritage and conservation activity.

The profile of conservation in York is no doubt inspired by York Minster; an iconic building that continues to be cared for by stonemasons employed in one of the few remaining cathedral workshops in England. Such a presence may have spurred professional and general interest in conservation and craftsmanship, as both are viewed as having thrived in the city and its environs. Wealthy Yorkshire residents patronised local clusters of craft 'luminaries' as far back as the 17th century (Beard 1966, 24), while Hanson (2003a) refers to a 'tenacious craft community'. Local support for membership organisations the York Artworkers' Association and the unique York Consortium for Conservation and Craftsmanship further demonstrates a lively regard for crafts. Although the craftspeople and skills represented by these groups are incredibly wide-ranging, they generally have in common a close association with Yorkshire. In his photographic record, *Yorkshire Craftspeople at Work*, David Rees Morgan (1981) suggested that the size of the region and distance between settlements had helped preserve the 'individuality of village life, its values and remaining craft traditions'. Nearly 40 years later, the area continues to be a base for craft activity and the skills that Rees Morgan captured (Figure 1b). It is these craftspeople and firms, including William Anelay Ltd – established in 1747 and, until its closure in 2016 (*Construction News* 2016), one of England's oldest building companies – that form the basis of this study.

Figure 1b: Rees Morgan's (1981) photograph of a Yorkshire roofer 'us[ing] a slater's hammer to cut stone roof slates'

Chapter Two is unique to the thesis for looking beyond Yorkshire to contextualise the more focussed research. In draws on international and national developments in heritage conservation throughout the 19th and 20th centuries, and shows that craft has been a recurrent but largely misunderstood

theme. The three case studies were therefore selected to foster an historical narrative that opened up the relationship between the two, and explore how conservation has interpreted and shaped craft over time. They are thus presented chronologically and begin with a group of stonemasons who reflect on both their and their predecessors' work at Fountains Abbey from the interwar period to around 1990. The second case study draws in participants from private craft firms across Yorkshire and provides a manifold view of their work between 2011 and 2012, while the final case study involves the on-site observation of three apprentices in a very specific exploration of craft training in 2013. The methodological tools used to explore these primary case studies are detailed here.

1.4 Case study objectives and methodological implications

1.4.1 The Fountains Abbey stonemasons

Chapter Three focuses on the experiences of a specific group of craftspeople, who all worked at Fountains Abbey (a popular heritage site in North Yorkshire) during the mid 20th century. Several archival holdings (the Vyner Collection held at West Yorkshire Record Office, the English Heritage [EH] archaeology store in Helmsley, HE's central archive and the National Archive at Kew[1]) show that the continuous lineage of stonemasons at Fountains Abbey began in 1927, when the site's owner recruited a foreman of works. The findings from the archive are compared with accounts from an interview and a focus group with stonemasons who were later employed by the public bodies responsible for its conservation. The complementary qualitative and archival research methods utilised to explore this historical case study serve as a chronological and methodological bridge between Chapter Two's literature review and the contemporary Chapters Four and Five, which are mainly based on qualitative research.

1.4.1.1 Methodological tools

This is the principal chapter for testing the appropriateness of interweaving archival and qualitative research tools. Traditional archival searches in the above collections involved systematic review of the information so that a broad timeline of decision-making and practical conservation work at the Abbey could be established. Gaps in the archive are highlighted, and some are explored through a limited number of qualitative encounters, including a focus group comprised of former Fountains stonemasons. As with the later case studies, the objective of these encounters was to bring craftspeople to the fore in a person-centred approach to understanding the lived experience at Fountains.

Archive information was gathered in a very controlled setting, where it was methodically interpreted and recorded. The drawback of archival sources is that much information, such as alternative

[1] Catalogue references are given in the Bibliography

options considered and people's discussions or thoughts about them, is missing. The data generated in the less controlled interview and focus group settings provide a fuller picture of reality at Fountains, as well as information about the value of data missing from the archive. A second aim of the focus group was to ask the stonemasons to map their careers, to illustrate more about their trajectory since Fountains, and how their experience at the site influenced it. Both encounters were recorded, transcribed and anonymised where necessary, before being cross-referenced with the findings from the archive.

1.4.1.2 Sample and ethical considerations

Although Fountains Abbey is well known as a tourist attraction and an historical site rich in archaeology, works to conserve it have been less widely acknowledged. But the 'first phase consolidation', begun after the state assumed guardianship of the site in 1966, created a hive of activity and employment for many people, including key individuals such as the site foreman. One former foreman remains local to the area and acts as the key informant for this case study. Through him, I was able to snowball sample and invite six more stonemasons to a one-day focus group in November 2013, as follows:

- Adam Stone ('Stone')
- Andy O'Boyle ('O'Boyle')
- Dickie Dawson ('Dawson')
- Eric Donovan ('Donovan')
- My key informant Henry Rumbold ('Rumbold')
- John Maloney ('Maloney')
- Steve Taylor ('Taylor')

There are two main ethical considerations to deal with in this case study. Firstly, the stonemasons themselves were fully informed about the objectives of the project on being e-mailed an invitation to the focus group. Because the pool of people that the sample is drawn from is very small, the stonemasons were asked to complete a consent form agreeing to their involvement. All participants were offered anonymity and it has been guaranteed where necessary. It is considered that, because the stonemasons in the focus group are consenting adults discussing a non-sensitive subject, these procedures attend to the ethical considerations at an appropriate scale. Both the interview and focus group were openly recorded on a Dictaphone and transcribed verbatim in the months following. It is therefore possible to determine what was said at the focus group on an individual basis, but individual attribution of quotes that reflected the group's consensus has been omitted. Transcripts are available in Appendix One, but this is not publicly available. This position will be reviewed in five years' time.

The second ethical consideration pertains to the archive itself. Much of the documentation contains information about individuals who have a right to protection under the General Data Protection Regulations (GDPR) 2018. Some archive information is normally held in HE confidential repositories, so any information used here is carefully anonymised.

1.4.1.3 Researcher positionality

The qualitative aspects of this case study were enabled by my existing professional relationship with key informant Henry Rumbold, because we had worked together sporadically for several years by the time of the encounters in 2013. This may have had an effect upon his accounts at interview and the focus group dynamics, especially as I had not met most participants before the research (although I had met Maloney and O'Boyle on one occasion each). The potential impact of this is considered in Chapter Three, which, like the other case study chapters, ends in a short reflection on the methodology.

1.4.1.4 Application in triangulation

The case study addresses RQ2 (Social Reality), RQ3 (Structure) and RQ4 (Academic Theory) (Figure 1c) and is deliberately located across the mid 20th century to provide an historical context to the contemporary experience of conservation through craftsmanship. Methodologically, it also brings perspective on the combined and comparative use of traditional paper records of conservation and the accounts of craftspeople.

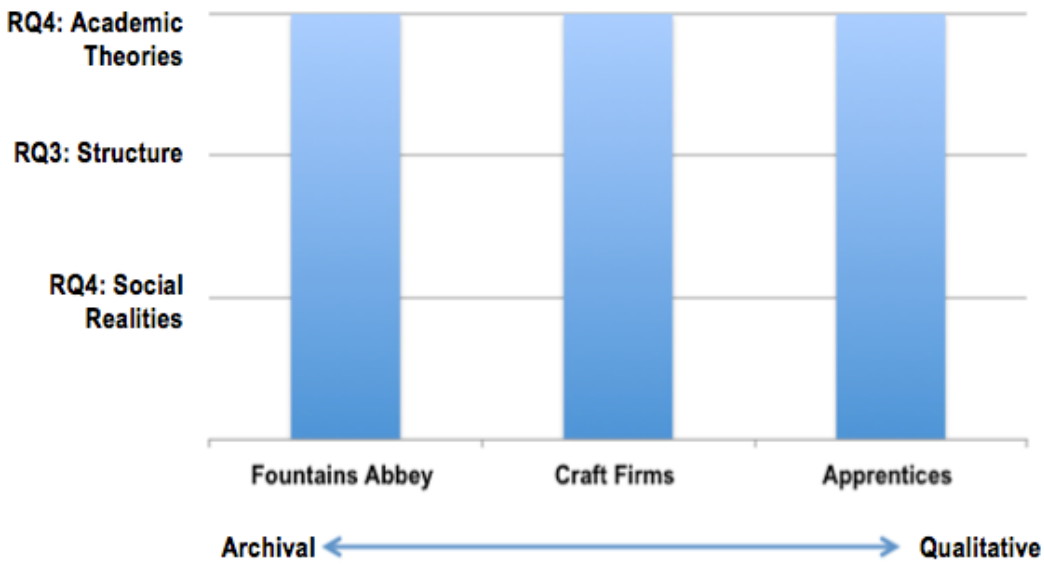


Figure 1c: The qualitative and archival research methodologies used in the different case studies respond to the research questions (the triangulation of various methods allows for the comparison and verification of results) (Author's own 2019)

1.4.2 Conversations with craft firms

Chapter Four begins by exploring conservation craft activity in Yorkshire in 2011/12. Because this timing coincided with a tumultuous period in the construction industry, which is further explored in Chapter Two, I anticipated that interviewees might raise economic and business issues that lay outside the scope of this piece of work. I therefore invited Kim Loader from the York Management School to conduct the interviews alongside me, in the hope that any important trends such as the firms' parallels with other small businesses (Loader and Norton 2015) could be identified. Not only was working with another researcher safer, Loader's experience and comparable distance from the subject secured further objectivity, which my close 'non-native insider' proximity put at risk (as section 1.2 explained). Loader contributed to the interview design (particularly theme two in Figure 1d) and also helped steer the interviews. Loader is referred to as 'KL' in the transcripts in Appendix Two.

Between November 2011 and April 2012, Loader and I conducted formal semi-structured interviews with 18 individuals whose firms were based in the Yorkshire region. Further details about the sample are given in 1.4.2.2 below, but the broad approach was based on my non-native insider knowledge of companies involved in conservation coupled with Loader's interest in small enterprises. With Loader's agreement, I contacted 20 individuals in management positions explaining that we would like to interview them about their own education and career background, that of their employees and the context within which the firm operated. A range of people and organisations were represented and this induced a variety of viewpoints that sometimes corresponded, but also conflicted. As such, this chapter presents an holistic interpretation of the sector and individuals' place within it, which responds to RQ2 (Social Reality). In addition, the craftspeople interviewed provided rich data relating to the other central research questions about negotiating authority (RQ3) and recognising academic theory (RQ4) (Figure 1c).

1.4.2.1 Methodological tools

The uncontrolled and unwieldy nature of semi-structured interviews offers both advantages and disadvantages. More positively for a person-centred approach, conversations are jointly steered by both the interviewer and the participant, important in a discipline – conservation – that has often been dominated by expert opinion and decision-making, as set out in section 1.1 and explored in Chapter Two. Our interviews were deliberately designed around a set of key issues that could be probed in an open-ended way and then explored by the interviewee in conversation. To ease the situation, interviews mostly took place at participants' place of work (one was necessarily held at the university offices). The unmanaged, conversational nature of the interviews meant that not only

could each interview have been different at another time or date but that they all followed different courses, making data less directly comparable than in more structured encounters. Nevertheless, my research's framing in the inclusive outlook of critical heritage studies meant that there was a fundamental advantage to partnering with and empowering interviewees in our encounters because gaining the view of the craft community that they represented far outweighed any analytical challenges it created.

Each semi-structured interview lasted between one and two hours and was guided by five pre-defined themes with allied question prompts (Figure 1d). This study is primarily interested in responses that illuminate these, but statistical information about the companies was also of interest because it helped identify patterns in the dataset. After transcribing the interviews verbatim, I applied two coding systems: firstly, indexing codes (Figure 1e) highlighted points of interest in the qualitative script so that comparative material from different (and even within) interviews could be easily studied. Several codes were applied to same excerpts concurrently and this 'co-occurrence' often provided a useful starting point when mining the material for arguments that responded to the research questions (the interview transcripts and the table of code co-occurrences are included in Appendices Two and Three). The second coding system involved applying quantitative data about the company such as the size of workforce and number of craft employees. This unexpectedly showed that the quantitative characteristics of a company influenced the way in which they experienced and viewed the heritage sector.

	Themes	Open-ended Prompts
1.	Working in the heritage sector	How do you define heritage? How influential is the public sector? How influential are professionals? If you think of the sector as specialist, why?
2.	Competitiveness	Who are the firm's main competitors? How far does the firm travel for work? How competitive is the sector compared to before 2008?
3.	Working practices	Which building crafts can the company provide in house? What sort of tools, methods and materials does the company use? Where does the company source their materials?
4.	Training	What sort of training does the company adopt? Why does it (not) take on apprentices? What do you think of qualifications (such as National Vocational Qualifications [NVQs]) and training centres (such as further education colleges)?
5.	Individuals' profiles	How did you gain your skills? Who else works in the company? How did they gain their skills?

Figure 1d: Semi-structured interview themes and question prompts

(Author's own 2018)

Although the process of index coding was itself analytical, three of the five research themes identified in Figure 1d mapped directly to four of the coding groups listed in Figure 1e. These themed coding groups (Competing for Work, External Factors, Education and Working Practices) can be seen as deductive, whereas the other three (Class, Researcher Influence and Business Culture) developed inductively. Systematically indexing the data like this allowed the different participant accounts to be compared, the narrative analysed and interpreted for key themes, and then quotes selected to exemplarily represent those themes (Bernard and Ryan 2010). Chapter Four is therefore comprised of excerpts from interview transcription and supporting explanatory text that rationalises how they represent the various views of the interview participants. Close attention has also been paid to excerpts of interviews that give insight into RQ3 (Social Reality), RQ4 (Academic Theory) and RQ5 (Sustainability).

Themed Coding Group	Code	Rationale	Researcher-led (deductive) or participant-driven (inductive)
Business Culture	Contracting	Chapter Two's literature review presents a history of organisational change in the building crafts that has affected conservation craftspeople. Based on this, it was predicted that they might want to discuss contracting and subcontracting	Deductive
	Family business	As the interviews progressed, it became apparent that many firms were either family businesses or displayed such a culture	Inductive
	Heritage knowledge	When participants talked about the importance of having heritage and conservation knowledge, or displayed such knowledge	Inductive
	Multi-skilled	When having complementary skills, either within or outside the firm's specific craft skill, was deemed advantageous	Inductive
	Recruitment	Discussions about who and how to recruit, as well as any associated challenges	Inductive
Class		When participants talked about the UK class system as affecting their work, either explicitly or implicitly	Inductive
Competing for	Fair situation (level	Challenges around comparing	Inductive

Themed Coding Group	Code	Rationale	Researcher-led (deductive) or participant-driven (inductive)
Work	playing field)	prices or tenders equitably	
	Pricing	The process of giving prices to win work	Inductive
	Recommended	Gaining work through recommendation	Inductive
	Specification	The role of the specification	Inductive
	Tendering	The process of competitive tendering to win work	Inductive
	Unknowns	Items arising during a project that meant the agreed price or tender could only be a forecast	Inductive
Education	Accredited training	Training that led to a qualification	Deductive
	Coincidence	Arriving at the conservation crafts by accident	Inductive
	Journey	A learning experience that transpired over an indefinite period	Inductive
	Unaccredited training	Self-guided training that did not lead to a qualification such as work experience with a respected craftsperson	Inductive
External Factors	Administrative restrictions	Challenges caused by legislation, policy or procedure	Inductive
	Client	When a client's point of view or involvement had an impact on the craftsperson's work	Deductive
	Economy	Impact of overriding economic conditions	Deductive
	Heritage sector influence	Impact of the heritage sector, including HE, the Heritage Lottery Fund[2] (HLF) and the local authority	Deductive
	Other firms	Impact of similar or competing firms	Deductive
	Professionals	Impact of a professional's (usually a regulator such as a conservation officer or a specifier such as an architect or surveyor) point of view or involvement	Deductive
Individual Motivations	Challenging	Participant's interest in their work quickly became apparent, so the theme here is inductive. However, the individual codes, which are positive, display the researcher's bias and are therefore deductive	Deductive
	Creative		
	Interesting		
	Passionate		
	Pride		
	Satisfying		
Researcher		When the conversation was	Inductive

[2] The National Lottery Heritage Fund superseded HLF in 2019 but I refer to HLF as the relevant organisation throughout the period of this research.

Themed Coding Group	Code	Rationale	Researcher-led (deductive) or participant-driven (inductive)
Influence		overly steered by the researcher	
Working Practices	Bespoke	Participants discussing their products or work as bespoke	Inductive
	Care	References to the care taken in participants' own firms	Inductive
	Decision-making	Reference to craftspeople making their own decisions relates to RQ3 (Structure) and the findings in Chapter Three. Conversations occurred inductively but the application of the code was preconceived	Deductive
	Innovational	This code comes from the researcher's prediction that craftspeople apply new materials in innovative ways	Deductive
	On site	Reference to craftspeople steering projects on site relates to RQ3 (Structure) and the findings in Chapter Three. The conversations occurred inductively but the application of the code was preconceived	Deductive
	Other crafts and craftsmanship	When participants talked about what it meant to be a craftsperson, as distinct from discussing their direct relationship with 'Other firms' (above)	Inductive
	Part of a whole	Conversations about the contributions of other stakeholders to conservation	Inductive
	Traditional Working Practices	Relating to RQ4 (Academic Theory), descriptions of traditional working practices used by the participant's firm or placing a value on such practice	Deductive

Figure 1e: The coding system applied to the interviews analysed in Chapter Four shows that many arose inductively

(Author's own 2018)

1.4.2.2 Sample and ethical considerations

As indicated above, purposive sampling among firms known to the researcher was necessary to ensure that they employed traditional craftspeople and had worked within the heritage sector. From

the 50 or so craft firms available to choose from, the 20 invited to interview represented a spread of crafts, company size and geographical location (Figure 1a and 1f). As well as being a manager of the company, most interviewees were also craftspeople themselves, and several opted to end the interview with a tour of the workshop or to show pictures of their previous work. Although conducting interviews with managers presented limitations, it was felt that gaining their overview was important in this case study because it attempts to understand the structural context for conservation craft activity. It is complemented well by the much more focused explorations of the stonemasons and apprentices in Chapters Three and Five.

Interviewees were initially approached by e-mail explaining the project and aims for the interviews, which were then arranged at a mutually convenient time that allowed a period for participants to withdraw from the project. When asked if they were comfortable with the interview being recorded, all participants responded positively, which perhaps reflected the non-sensitive nature of the subject. Interviewees were then e-mailed an anonymised transcript of the interview and were given the opportunity to remove their data from the study. Given this, and the fact that all participants were fully informed, consenting and non-vulnerable adults, it was felt that this procedure fulfilled academic ethical considerations appropriately. Transcripts of the anonymised interviews are available in Appendix Two, but this is not publicly available. As with the data from the Fountains Abbey case study, this position will be reviewed in five years' time.

Participant ID	Craft Discipline	Location	Recent Performance
Firm01Pl	Plasterers	Rural	Steady
Firm02CJ	Carpenters/joiners	Urban	Steady
Firm03SM	Stonemasons	Urban	Steady
Firm04Ro	Roofers	Urban	Workforce reductions
Firm05CJ	Carpenters/joiners	Urban	Steady
Firm06CJ	Carpenters/joiners	Urban	Steady
Firm07GB	General builders	Rural	Growth
Firm08BS	Blacksmiths	Rural	Steady
Firm09Ro	Roofers	Urban	Growth
Firm10SM	Stonemasons	Rural	Growth
Firm11SM	Stonemasons	Rural	Growth
Firm12GB	General builders	Urban	Steady
Firm13Ro	Roofers	Rural	Workforce reductions
Firm14PD	Painters/decorators	Rural	Steady
Firm15SM	Stonemasons	Urban	Workforce reductions
Firm16GB	General builders	Urban	Workforce reductions
Firm17SM	Stonemasons	Urban	Workforce reductions
Firm18PD	Painters/decorators	Urban	Steady

Figure 1f: Characteristics that influenced sampling of conservation craft company subjects

(The size of companies is shown in Figure 4c)

(After Loader and Norton 2012)

1.4.2.3 Researcher positionality

As with the Fountains stonemasons case study, my existing professional network within the sector enabled these qualitative encounters. Although I was less familiar with the interviewees than with Rumbold, I had met several at least once and it is possible that this influenced the accounts given at interview, which in turn could effect the viability of the person-centred – as opposed to researcher-led – approach. The impact of this and the efficacy with which triangulation mitigated it is reflected upon at the end of Chapter Four.

1.4.2.4 Application in triangulation

Figure 1c above shows that this case study uses a typically qualitative research technique, semi-structured interviewing, to respond to RQ2 (Social Reality), RQ3 (Structure) and RQ4 (Academic Theory). Interviews are utilised more regularly in other disciplines than in conservation, and although their application in this subject area is growing, it is still useful to compare their employment here to the other methodological tools, especially to discern their contribution to this mixed methods approach. Reflections on the methodology used for this case study take place at the end of Chapter Four, when I also consider the impact that the interviewees had on the development of the rest of the project. This is because, although this case study appears in chronological and thematic order in the thesis, the interviews themselves took place early on in the project and influenced some of the research themes, in a way that accords with grounded theory.

1.4.3 Participant observation of apprentices and apprenticeship

Chapter Five aims to cast light upon contemporary issues around training in conservation crafts in detail. The case study relates to a specific conservation project and reveals more about craftspeople's positions in and perspectives on the conservation sector, although both the method of sampling and data gathering is very different. As a participant on a conservation building site, I was able to observe and analyse the craftspeople and trainees negotiating the building, figures of authority and their own decision-making. The most effective way of doing this was to be immersed in the project and have a rapport with the participants, so that I could observe their responses in as natural a context as possible.

1.4.3.1 Methodological tools

Participant observation has been used to collect the data that underpins much anthropological and social science research (Everill 2009; Jenkins 1992; Thiel 2012a). It involves acting as part of a community for the duration of the primary research, thereby allowing the researcher to observe the different members of the community in a natural setting. Researchers can choose to conduct themselves either overtly, which means revealing themselves as researchers, or covertly, which

means hiding the fact. There is a tension here: sociologists often argue that such research has to be done on a covert basis to ensure that members of the community act as naturally as possible, while anthropologists consider covert research to be unethical because participants become involved without consent. My reasons for revealing myself as a researcher as well as a professional are described below in the section on ethical considerations.

The focus of this case study was a small-scale conservation project that took place in 2013 and was conceived as a development opportunity for three apprentices. The building and location have been anonymised and the pseudonym 'Stonemason's Lodge' is used in order that the identities of the participants are protected. My role coordinating the project programme meant that I was already part of the project team as a professional; a privileged position that provided access to the site during its conservation, which can be challenging in the construction sector (Thiel 2012a). This participatory case study is the element of fieldwork where my vested professional interest required compromise, as discussed in sections 1.2 and 1.4.3.3.

On average, I attended the site for two days per week over the six-week period, often working full days and always participating in the conservation works alongside the apprentices. I tiled, worked with lime, applied surface treatments and laboured. While on site, I took photographs and afterwards made field notes of the day's events, as well as sketches depicting any technical challenges met. My field notes comprise the bulk of the data for analysis, and are included in Chapter Five with the explanatory narrative of the thesis. In writing my field notes quickly, I tried to mitigate the risk of losing data, but, even so, my observations often focused on verbal information and missed other important non-verbal communications. As such, much of Chapter Five focuses on my view of the site and the limitations of this are discussed in the Chapter Six.

1.4.3.2 Sample and ethical considerations

Although similar research methods have been used frequently in anthropology, observational studies are less well known in conservation. This case study therefore represents a rare opportunity to test an innovative methodological tool, but it is also the most ethically challenging. The project and participants involved were both sampled for convenience, so it does not represent the population of conservation craftspeople in any way. However, using it in comparison to other, more randomly sampled, cases does mitigate the risk of it creating bias in the final project findings.

Of greater ethical concern was the age of the participants, who were all around 20. The research was explained to them and they signed consent forms that stated the project's objectives and informed the signatories that they could choose to withdraw at any time. It has been agreed that they

will remain completely anonymous in this study, through referring to the building as the Stonemason's Lodge and concealing its location. This means that any written sources about the site are only referred to in general terms.

1.4.3.3 Researcher positionality

My unique dual position as a professional-cum-researcher considerably influenced this case study. Although it was originally intended as an ethnographical observational study that would capture the participants in a natural setting, I came to realise that my vested professional interest in the project's success obstructed this central aim. As a result, the case study is presented as qualitative participant observation in recognition that although the fieldwork was often participatory and often observational, I did not always assume the neutral role of an ethnographic participant observer. This is reflected upon at the end of Chapter Five.

1.4.3.4 Application in triangulation

As with the other chapters, the data from this section responds to all three main research questions (Figure 1c). Although data was less systematically gathered than that for other chapters, it provides perhaps the richest insight into the way that craftspeople – particularly trainees – negotiate authority in conservation. Without immersing myself in an on-site or other similar setting, observation would have been impossible, and, as such, discussions about respecting, supporting or subverting conservation as an authority would have gone unnoticed. Therefore, although my vested interest did make participant observation in a purely ethnographic sense untenable, my reflexive use of participation and observation, coupled with analysis through triangulation, has allowed me to exploit the considerable advantages of observational study.

1.5 Thesis structure

This opening chapter has set out the scope of the project and has established five important research questions to be explored through literature review and three regional case studies. The chronological framework for the rest of the thesis begins in the following chapter, which establishes the intellectual context for the research in a literature review that traces the subject of craft in conservation from the discipline's 19th-century origins. The second half of the chapter then introduces the theoretical developments and various charters of the discipline, in preparation for a discussion of their influence on conservation as practised by the research participants. Chapter Two's review of key 19th-century discourse partly responds to RQ1 (Origins), and this is expounded by Chapter Three's focus on a key conservation project that began during the interwar period.

Based on the results of archival and qualitative research, Chapter Three makes a key contribution to the thesis both chronologically – in the link to Chapter Two – and methodologically because of the use of mixed methods to respond to the three core research questions: RQ2 (Social Reality), RQ3 (Structure) and RQ4 (Academic Theory). Together, Chapters Two and Three not only show that crafts were identifiably linked to conservation during its emergent period, but that the dynamics of conservation building sites have been affected by an increasingly professionalised construction industry that recognises a false distinction between the concept of building and building itself. This central theme throughout the thesis is generally referred to as a dichotomy of 'conceptual' and 'material' construction. When discussing the related areas of expertise, I prefer to recognise a commonality and so use the terms 'office-based' and 'site-based' staff in discussing Fountains and the Stonemasons Lodge, or 'thought-based' and 'motor-based' work where place plays a less central role.

Chapters Three and Four develop this central idea by showing that craftspeople are best able to conserve heritage when working in autonomous collaboration with others. This was facilitated by a sense of shared heritage values that conveyed between parties in various ways; including a strict hierarchical code of practice at Fountains Abbey, and more latterly through drawings, specifications and a series of relationships. Throughout all the case studies there is consideration of how international and national conservation policy developments have affected craftspeople, and reflection on unexpected inductive findings around recruitment and the resilience of family firms. Chapter Five's extremely focused discussion of apprentices at work brings richness and an environmental setting to several of these themes, highlighting craft as a bodily practice of efficient material intervention. It adds a further dimension to the study that correlates with the recent ethnographical research reviewed in Chapter Two.

Chapter Six concludes the thesis with a discussion of the research findings and how far they have addressed the overall aim and five research questions set out in section 1.2.1. It further critiques the conservation sector's current status quo and shows that the combination and triangulation of methodological approaches used here has produced meaningful information about the way in which conservation is practiced and managed. As well as considering this point in relation to future research avenues, the conclusion makes recommendations about changes or enhancements to practice. This is relevant to the wider heritage conservation field, which, as shown in Chapter Two, continues to grapple with identifying, defining and conserving an inclusive, postmodern idea of heritage.

• Chapter Two •

• Conservation and Craft: a critical literature review •

2.1 Introduction

The close association between the building crafts and conservation was observed soon after the discipline's late 19th-century origins, when the Society for the Protection of Ancient Buildings (SPAB) developed detailed 'conservative repair' methods to ensure 'ancient fabric was disturbed as little as possible' (Drury 2000; Powys 1995, v). This literature review traces a theme within the well-established historiography of conservation and shows that the role of crafts was intermittently and rather indirectly deliberated until the 1970s, when it was formally acknowledged. The broad view taken in the first half of the chapter shows that several features of contemporary conservation practice, including the role of architects and technical drawings, developed inadvertently and without recourse to the proponents of conservation that had championed craft as an individualistic pursuit. Section 2.3 then considers these features through the lens of contemporary conservation thinking and reveals a tension for practice, where opportunities for decisions based on craft values continue to be distorted by the misplaced direction of individual experts (Clark 2001). After making this point, the final part of the chapter establishes a theoretical framework for the rest of the thesis by beginning to argue that the continued exclusion of craft values from conservation is contradictory in a discipline now internationally recognised for embracing inclusive, value-based principles of management.

2.2 Conservation, craft and modernity

The discipline of historic building conservation in the UK is well known to have arisen in an outraged response to the work of several prolific architect-restorers, infamous during the 19th century for their work on medieval cathedrals. Further detail about this inaugural period is given in section 2.3, but for now it is important to note that the years 1877 and 1882 – respectively the dates of the SPAB's foundation and the first statutory step to protect the historic environment – are seen as watershed years in conservation. However, they actually represent important milestones in a longer-standing reaction to the historic environment being threatened by increasingly fast-paced industrial change, which was denoted by earlier landmarks such as the establishment of the Society of Antiquaries in 1751. Because these events reflected a growing European interest in the 'systematic, archaeological study of antiquities' (Jokilehto 1999, 47), itself a product of Enlightenment thought, it can be said that the discipline of conservation was stimulated by twin effects of progress: industrial change and the rational, scientific positivism of post-Enlightenment reasoning.

The latter of these two factors has been hitherto neglected by conservation studies, but recent reappraisals show that it influenced conservation's singling out of ancient from in-use buildings

(Choay 2001); a distinction that meant that ancient buildings became relics of previous cultures. It was disruptive because it monumentalised the 'material production of traditional cultures' at the expense of continuing cultural – or living – traditions such as craftsmanship (Walter 2017; 55), and can thus be seen as an attempt to break from the past. The distinction of intangible from tangible heritage is explored in further detail later in section 2.1.3, but I have introduced it here as evidence of the Enlightenment's influence on conservation's formulation. This is because it is the source of another central concern for this study: the revival in modernity of classical views about the mind and body as separate entities was a similarly simplistic classification, which I argue has so fundamentally infiltrated conservation practice that it undermines the overarching aims of the discipline.

2.2.1 The mind-body dichotomy

René Descartes' dualistic classification of mind and body was a response to the question of how the immaterial and material could causally interact. Because the mind was linked to the immortal soul, it was seen to transcend and dominate the body, and the unintentional logic of this philosophy led to an imbalance that privileged fine arts over mechanical forms of production (Risatti 2007). Disquiet about this appeared as early as the mid 18th century, notably with the publication of Denis Diderot's 1751–1777 *Encyclopédie ou Dictionnaire Raisonné des Sciences, des Arts et des Métiers* ('Dictionary of Sciences, Arts and Crafts'). Diderot's empirical study of 'the most skilled workers in Paris' (Sennett 2008, 94) is an illustrated (see Figure 2a for example) celebration of craft knowledge and skill as a collective entity (Diderot 2003). Although it was not intended to refute the Cartesian problem directly, the aim of reconnecting society with craft recognised an effect of a dualism that considered functions of the mind distinct from and superior to those of the body.

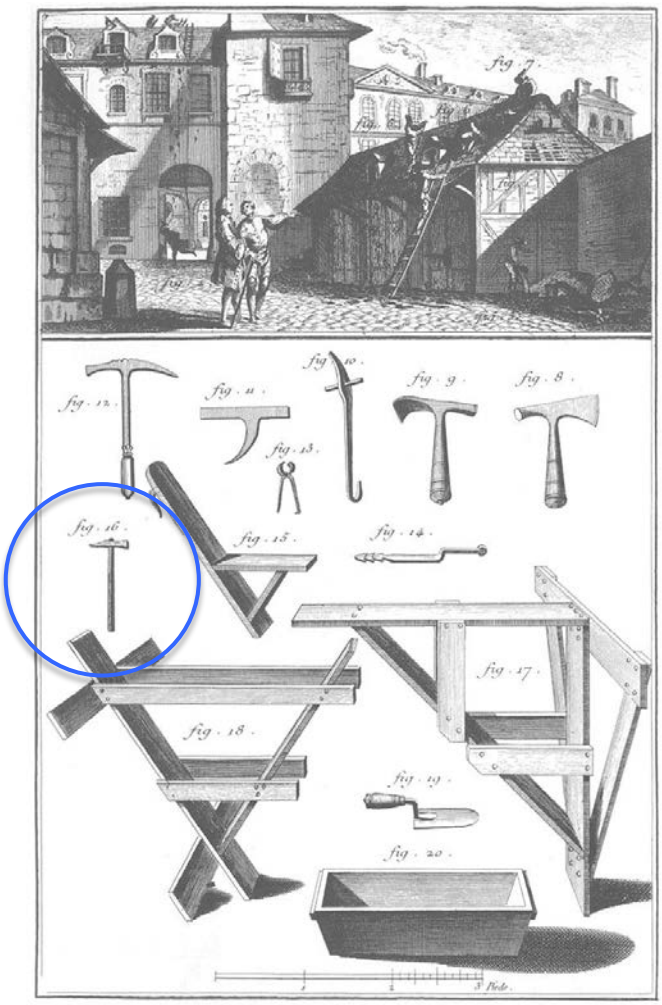


Figure 2a: Diderot's roofer (2003)

(The circled 'slater's hammer' is different from the tool being used by Rees Morgan's craftsman in Figure 1b)

The mind-body dichotomy was seminally challenged in Gilbert Ryle's *A Concept of Mind* in 1949. Ryle (1973) argued that the 'Cartesian doctrine' of the mind as defined principally by being non-mechanical was an absurd 'category-mistake' (1949, 22–29) that had created a 'mythical bifurcation of unwitnessable mental causes and their witnessable physical effects' (1949, 34). Inspired by the work of Ludwig Wittgenstein, Ryle employed philosophical prose to highlight the limitations of language for understanding the relationship between mind and body. His use of 'thick description' established a methodology that anthropologists and ethnographers would find useful in their study of cultural practice during the 20th century. His 'ghost in the machine' – the myth of the mind operating a separate body – continues to inspire the works of contemporary philosophers, such as Daniel Dennett and John Searle, who explore consciousness as a non-distinct but immaterial phenomenon of the body. The central finding that bodily reactions are more than causal effects of the mind means that Ryle's thesis remains relevant today, particularly to the study of embodied cognition.

The embodied approach to cognition argues that intelligence is acquired through an agent's multi-modal interactions with the world (Shapiro 2014). The theory is based mainly on empirical evidence that sensory and motor-based experiences together contribute to the development of knowledge, memory, thought and feeling in the mind and body. It is important here because the Cartesian misunderstanding that it challenges can be seen as a key cause of dichotomy in conservation that has disadvantaged craftspeople, as this literature review begins to show. The rest of this thesis therefore uses the terms 'embodied cognition' and 'embodied craft expertise' interchangeably, to describe the acquisition and application of knowledge possessed in both mind and body.

2.2.2 Detachment from the building crafts

Although Diderot did not recognise the distinction of mind and body itself as inappropriate, he did perhaps reject an effect of it. In studying his subjects, he had discovered much about their worth, and he realised that there was scope for society to re-engage with the crafts in order to elevate them (Sennett 2008). In England, a similar disenfranchisement has since been discussed in terms of the modernising of the building industry, which, during the 19th century, involved several factors. As well as the technological advancements anticipated by Diderot, the 'state's concerns about inefficiencies in building processes' led to significant changes to the way that building projects and sites were organised (Thiel 2012a, 9).

'Contracting by gross', which the Office of the King's Works adopted in 1813, was then a new form of competing for projects whereby a single builder would give a fixed price for an entire building project and take responsibility for its delivery (Colvin 1973). Rather than directly managing those responsible for each package of work, the client could enter into a single contract with an overseeing organisation. Although it was logical that this should fall to a general contractor who, for the first time, gathered together all types of skilled craftspeople into one organisation (Price 1980, 23), it marked the establishment of a structural dichotomy between architecture and craft in building. Despite its flaws, the rise of the large, general contractor was swift, especially in urban areas with a high demand for building, and they quickly began to usurp the single craft master who had dominated the building world during the 18th century (Price 1980). Although there was concern that working to a fixed price would prioritise 'completing work within a short and fixed period' over quality (Colvin 1973), the method grew in popularity for myriad reasons.

The new method of organisation was initially favoured by leading Victorian architects such as Charles Barry and AWN Pugin because it allowed them to exercise a high level of control over both the complete design and the details comprising it, particularly when used in conjunction with pre-fabricated ornament (Hanson 2003a). Pugin was not unique among architects when he established

an enterprise for the production of architectural components (Wainwright 1996, 163). He was following in the footsteps of the Adam brothers, who, a century before, had utilised early conveyor-belt machinery to produce cast metal ornamentation (Rykwert and Rykwert 1992). Although their techniques have since been held responsible for the 'death' of hand modelling by practising plasterers (Millar and Bankart 2009), they 'guaranteed regular repetition for the brothers' obsessive, omnipresent patterns', which, with 'willing' craftspeople, could realise their 'ambitious [design] control' (Rykwert and Rykwert 1992). Such terminology is noteworthy because it recognises the increasing domination over craft output that was being exercised. The separation enabled by the use of a general contractor would have further appealed to aspirational architects wanting to establish an intellectual and social distance from the craft world (Adamson 2018b, 18; Summerson 1973, 20). So, while implementation of both the modern manufacturing and administrative methods went ahead, the fate of the craftsperson was far from the central concern that Diderot had envisaged.

That the changing structure of the country and industry had an impact on craftspeople is indisputable: the very existence of the general contractor threatened the position of the small masters who had worked alongside architects and had enjoyed an elevated position in a stable, collegial industry. Working to a fixed, competitive price tendered by a generalist created a division between the architect and the craftsperson, and put unprecedented pressure on those executing the work. It is understandable then that these methods were not always met with agreement from the craft world. Barry and Pugin faced industrial action from the workforce in both Birmingham and London, where, in 1841, masons from across England supported a strike at the Houses of Parliament (Hanson 2003a). The central reason for the dispute was the general contractor's 'tyrannical' site foreman, but Price (1980) has argued that it was also reflective of a wider debate about power, authority and control in the 19th-century building industry. The notice of strike action issued by the Operative Society of Friendly Stonemasons demonstrates craftspeople's dissatisfaction at the new organisational structures they were working in (author's emphasis):

> When we take a retrospective view of the times past, what a particular change we perceive in the situation of our once respected branch, in those days masters had a confidence in each other, <u>they contracted for their own</u>, they spurned the idea of being led by those who thirsted for rights not their own…We have not only seen but felt the bad effects of the change.
>
> (Mace 1999, cited in Price 1980, 25)

Despite the opposition, 'the Victorian builder was tough', able to 'command [his men] and, if necessary, endure their hatred' (Summerson 1973, 14). The growth of the general contractor was therefore unrelenting and other episodes of social unrest commanded by various sectors of the craft

world arose throughout the 1840s. The impact that this had on the craft community did not go unnoticed.

2.2.2.1 19th-century commentary on craft

Several 19th-century writers were concerned about the plight of the working man, including Thomas Carlyle, the son of a Scottish stonemason, whose influence on John Ruskin has been generally overlooked (Hanson 2003a). Indeed, like Carlyle – and more latterly Sennett – both Ruskin and William Morris believed that there was a social value in doing skilled work well 'for its own sake' (Marchand 2007; Sennett 2008, 12), which was threatened by a narrow view of economic growth. Carlyle (1931) observed that this threat was already materialising as 'qualitative productive values' were sacrificed for 'profit and cheap consumer gratification' (Morrow 2006, 118), which turned him against the mechanisation of industry entirely. Although he 'parts company' with Diderot on this point, he had also praised the *Encyclopédie*, referring to it as 'nay an impetuous endeavour' and 'towards something more excellent' (Carlyle 1869, 470, cited in Hochstrasser 2007, 15). The most important similarity between Carlyle and Diderot, which Sennett also shares, is an appreciation of the broader value of craft. Hanson's (2003a) interpretation of Ruskin's writings shows that they can also be seen to make an important contribution to this debate.

Ruskin's influence on the building conservation discipline is well known. His *Seven Lamps of Architecture*, first published in 1849, was groundbreaking for bringing the plight of England's architectural heritage into the public domain. It inspired William Morris and the SPAB and as such can be seen as a precursor to the conservation movement itself (Delafons 1997; Jokilehto 1999). But to perceive this as the sum of Ruskin's contemplations on architectural and craft heritage is both prosaic and restricting, because it disregards the wider cultural context in which he is implicated. His reciprocal presence is discussed in terms of both his impact on social discourse (Chitty 2003) and the world's influence on him (Brooks 2003a), which is where Hanson (2003a) looks when considering Ruskin's perspective on the building crafts. It was the cultural influences of people like Carlyle that encouraged Ruskin to call for architects to return to earlier models of co-working with craftspeople, rather than controlling them from above (Hanson 2003a). This marked a change in Ruskin's emphasis: in *Seven Lamps* he considered that the architect (or builder) was capable of commanding the architectural revolutions, including conservation, that he desired, but, from the 1850s onwards, as his focus shifted to social and economic concerns, he advocated engagement and collaboration.

In 1849, Ruskin called for architects to stand by new laws, or 'lamps', that would guide their output and would encourage them to consider their own political role. He (Ruskin 1903a) petitioned

architects to reject machine-made ornamentation because it misleadingly appeared to involve high levels of craft skill, and pleaded with a single builder to achieve variety and imperfection in architecture. By 1853, however, when 'The Nature of Gothic' was first published in *The Stones of Venice*, Ruskin's tone was different. Multiple 'builders' and the 'union of various mental characters' were praised for achieving 'savageness' and 'changefulness'; the two most important characteristics of Gothic architecture (Ruskin 1903b). In the 1889 edition of *Seven Lamps* Ruskin wrote that 'the idea of an independent architectural profession was a mere modern fallacy' (Ruskin 1903a), and that since *Seven Lamps*' first publication, he had seen the architect 'knocking down every beautiful building he could get his hands on; and building the largest quantities of rotten brick they could get contracts for'. Such statements relate to Ruskin's insights on craft's social value, which shows that he prioritised happiness and health over the accumulation of monetary wealth (Stimson 1888). When Ruskin despondently noted that if silversmiths were unproductive then 'we will acquiesce in their extinction' (Ruskin 1903c, 78), he – like Carlyle (Swenarton 1989) – was aware of the fate of a non-commercial occupation and was trying to highlight their alternative contribution to society. In Ruskin's later work, then, there was a sense of traditional craft as 'a very fascinating art' as enjoyed by the 'folk' wheelwright George Sturt (1974), which prompted his call for a revival of the 'medieval master builder' (Ruskin 1903b). Such people would have a craft background like the Yorkshire 'joyner and architect' William Thornton (Beard 1966, 24), and so could understand the crafts, empower craftspeople and enhance not only the experience of the building process but the building itself. This would consequently improve society as a whole.

2.2.2.1.1 Challenging Ruskin

Ruskin's view of the medieval master craftsperson has been variously criticised as patronising (Unrau 1981), idealistic (Frayling 2012) and a quixotic antidote to the present (Adamson 2018a). Furniture maker and craft revivalist David Pye is perhaps most disarming in his careful evaluation of 'The Nature of Gothic', which questions the accuracy of Ruskin's prose: 'you cannot get individual fire into plain walling or the cylindrical shaft of a column' and that 'a fair proportion of tedious work is necessary if one is to take pleasure in any kind of livelihood' (2015, 117–118). However, this scepticism mainly disputes Ruskin's notion of workmanship in the detail, and neglects his recognition of the broader issue that crafts and craftspeople were increasingly marginalised by commercialism and industrialisation (Swenarton 1989). This is important because although Ruskin romantically called for 'medieval' craftspeople, the collaborative practices he was advocating did not become fully displaced until the 17th and 18th centuries (Hanson 2003a; Lynch 2013; Risatti 2007), when the antithetical definitions of mind and body took hold. This thesis therefore accepts the view that Ruskin was at times idealistic, but maintains that his commentary on the organisation of society and its

impact on the building world as disenfranchised and overly controlled holds sway, especially as some of his ventures proved that his ideals could be put into practice (section 2.2.2.2.1).

2.2.2.2 Theory in practice

So far, this chapter has discussed writers', philosophers' and social critics' awareness of the impact of industrialisation on craft, and these commentators were not alone in their concern. Practising plasterers Miller and Bankart's (2009,1) identification of a 'great gulf between the conceiver and the producer' evoked frustration at operating where 'design exists at a stage removed' from craftsmanship (Risatti 2007, 172). Similar frustration was evident in contemporary publications, where the Ruskinian ideal of liberating craftspeople was seen as a viable corrective. The following excerpt, which appeared in the journal the *Ecclesiologists,* a publication devoted to church building, is taken from a review of a paper about Charles Barry's work at the Houses of Parliament:

> When shall we learn that along with more of architectural display a different and more liberal mode of managing those employed is appropriate when building a church or a college from what may not be unsuitable to a boundary wall or workhouse?
>
> (Anon 1846, 225, cited in Hanson 2003a, 90)

The issue of remote control also arose in a number of other periodicals established at a similar time. From 1842, *The Builder*, under the editorship of York-born architect Josiah Hansom, who himself had been involved in strike action defending the small masters of Birmingham, was disseminated to engage craftspeople with the public and each other. Material was varied, often describing methods of construction or ornamentation, but an article entitled 'Treatment of Work-People by their Employers' in the first edition indicates the tension between craftspeople and their employers. Although the article does discuss wages and working conditions, the following statement implies a certain amount of indignation at craft skills being treated as unthinking and mechanical:

> …to regard as a machine a man whose skill or industry assists them to maintain their own families in respectability, is altogether unchristian, and that by viewing work-people in such a light, would deprive themselves of some of the finest opportunities of usefulness, and of cementing the bonds of society.
>
> (Anon 1842, 4)

The writers of these articles recognised that a remote and controlled style of management was ineffective (Thiel 2012a), debasing to craftspeople, socially restrictive and produced unappealing architecture. The social values of craft understood by social commentators were being

acknowledged by both building professionals and craftspeople, who recognised the alternative ways of working put forward by Ruskin.

2.2.2.2.1 Experiments in 'liberating the workmen'

In addition to the contemporary discourse discussed above, there were occasions where the architect or others sought to engage with and 'liberate the workmen' (Blau 1982, cited in Garnham 1992). Indeed, some of Ruskin's most practical endeavours concerned teaching craftspeople during the building of the Oxford Museum. Although the exact nature of Ruskin's interest continues to be disputed (Garnham 1992; Hanson 2003a; Howell 2003; O'Dwyer 1997), Howell (2003) thinks that his main intention was to recruit pre-Raphaelite artists to design ornament for execution by craftspeople. Garnham (1992) disagrees, saying that Ruskin actively supported the Irish architects Deane and Woodward in realising at Oxford their shared belief in the meaning of ornament 'residing in its value for the maker'. It is clear that the architect's practice of asking artisans to design the building's decorative features would have appealed to Ruskin, who had advocated it in 'The Nature of Gothic'.

The 'savage changefulness' of ornament achieved on the building was designed and executed by the O'Shea brothers, Irish craftspeople invited to Oxford by the architects. Their methods of drawing inspiration from nature and working independently of designers are well documented (Garnham 1992), and a high degree of lively architectural variety was achieved at the museum. Although contemporary critique of the building – 'scarcely two of the 108 capitals on the exterior of the museum are exactly alike' (Anon 1854, 425, cited in O'Dwyer 1997) – upholds Pye's view about Ruskin's preoccupation with ornament, it is clear that these results were achieved through craftspeople retaining autonomy in some aspects of design. Ruskin's aspiration of collaborative, liberal working was therefore realised with some success at a project he was certainly involved in. It is possible then that his experience in Oxford shaped his contribution to a simultaneous venture, the Architectural Museum, which he embarked upon with the architect George Gilbert Scott (1811–1878) (Hanson 2003b).

A prolific architect of the 19th century, Scott is generally recognised for the restorations of medieval cathedrals that provoked the conservation movement (Fawcett 1976; Marx 2011). Loosely associated with the Arts and Crafts style via his pupil GE Street, who went on to teach many of the movement's key figures, Scott was also interested in the liberal education of craftspeople, which he witnessed first hand at Cologne Cathedral. Derived from medieval drawings rediscovered in 1814, the plans for its conservation became a defining project of the period in Germany; an embodiment of German Romantic thought on the stylistic and political reaches of neo-Gothic architecture (Crawford 1985; David-Sirocko 1998, 156; Swenarton 1989). The vital working drawings revealed much about

the ‘rules and proportions’ of the medieval craftsperson (Lewis 1993, 32) and led to attempts to revive their ‘work-practices’ in adjacent ‘bauhütten’ (Hewison 1996, 13), where craftspeople could take inspiration from architectural casts and other objects in ornamenting the cathedral’s structural elements (Hanson 2003b) (Figure 2b). The advocate for several important craft commissions at Cologne was the politician August Reichensperger, who believed that recreating the medieval process of building was ‘more remarkable than the recreation’ itself (Lewis 1993, 47). This novel approach affected not only Scott but the lives of Cologne stonemasons Frederick Schmidt and Vincenz Statz, who later became celebrated as ecclesiastical architects in their own right (Sisa 2002), while ‘respect for arts and crafts’ became a foremost principle of the neo-Gothic in Germany (David-Sirocko 1998, 163).

Their respective experiences in Oxford and Cologne must have united Ruskin and Scott, who came to share the view that ‘naturalism promised the craftsman a vital measure of independence from the architect’s ideas’ (Hanson 2003a, 231). Together they amassed a collection of organically inspired casts (Figure 2c) that were intended to stimulate ‘happiness’ (Hewison1996, 9) and ‘the genius of the unassisted workman’ (Acland and Ruskin 1893, 83). This enlightened approach to craft teaching, played out at both the Architectural Museum and the Working Men’s College (Hewison 1996), evoked the traditional ‘unwritten’ education of artisans (Smith 2004, 7). It openly challenged the methods favoured by the official Government School of Design, which aimed to achieve parity of technical education through a national ‘drawing curriculum’ that provided ‘rigorous training for the hand and eye’ (Brett 1988). From Ruskin’s perspective, this would have appeared to pay insufficient attention to ‘engaging the imagination’; rather, that the provision of approved designs for copying actually restrained the craftsperson’s autonomy (Figure 2d) (Hewison 1996). Ruskin’s preoccupation with ornament – which he regretted in later life (Ruskin 1903a) – meant that he misjudged the usefulness of repetitive work and concentrated his two most practical efforts at liberating craftspeople to architectural decoration. We must therefore look to the later Ruskin-inspired Arts and Crafts movement for a representation of how his ideals manifested themselves in collaboration with the skilled ‘workman’ (Pye 2015).

Figure 2b: The bauhütten, or workshop, adjacent to Cologne Cathedral

(Hanson 2003b)

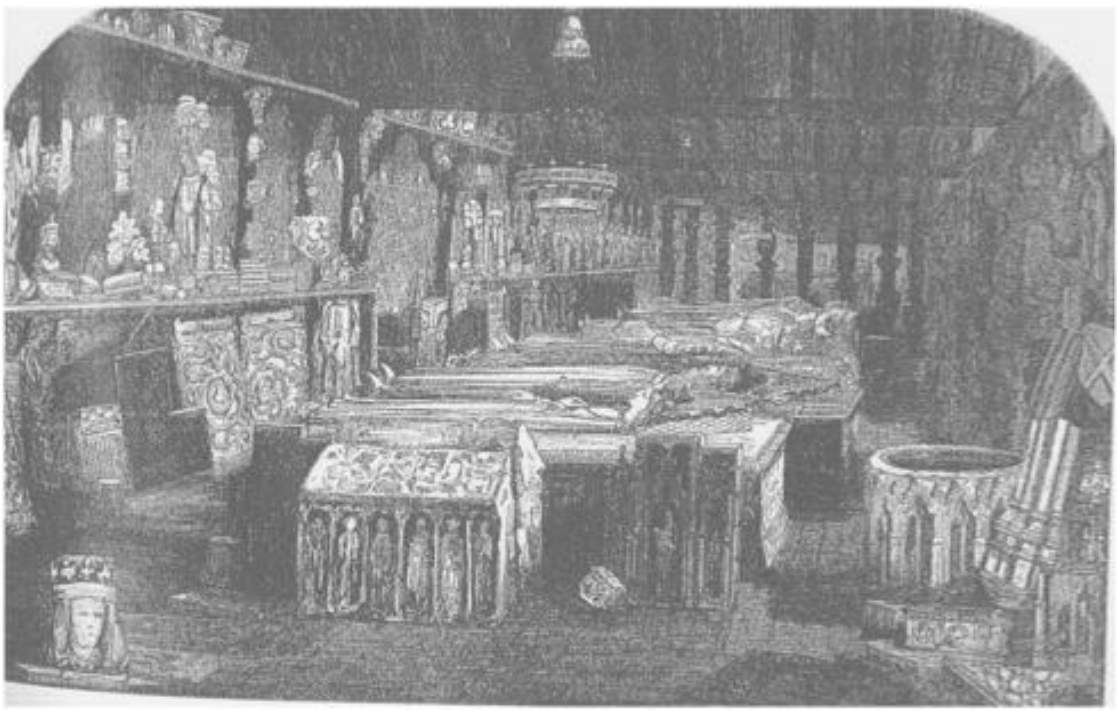


Figure 2c: An assortment of casts at the Architectural Museum

(Hanson 2003b)

Figure 2d: Template from the *Drawing Book of the Government School of Design*, which trainees copied

(Author's photograph reproduced with permission of V&A images)

2.2.2.3 William Morris and the Arts and Crafts

William Morris and Philip Webb are considered 'fathers' of the Arts and Crafts movement for their influence on several architects. Although they were both pupils at the architectural offices of GE Street, whose controlling style contrasted with Ruskin's position on liberal craft practice (Hanson 2003b), the movement's various practitioners' working methods were all different (Drury 2000). The joinery inside at least two of John Dando Sedding's church restorations was closely supervised and worked on by himself in a union with craftspeople that earlier architects would have found degrading, and close analysis of the screen at St John the Baptist in Axbridge shows the design to have been inspired by nature (Snell 2003). These practices owe a debt to both German Romantic thought and to Ruskin, as we have seen, but arrive in mediated form via the campaigning and lecturing of Morris, who elucidated the political relationship between 'tyrannical' commercialism, 'uncorrupted' cooperation and 'aesthetic appreciation' in a very pragmatic way (Morris 1884; Petts 2008, 42).

It is significant that several leading Arts and Crafts architects, including WR Lethaby, Ernest Gimson and Detmar Blow, all developed a style of 'rational building' while studying ancient structures at meetings of the SPAB (Lethaby et al 1924, 2–4, cited in Drury 2000, 20). Inspired by Morris' assertion that ancient buildings symbolised 'the hope that was, and yet shall be, of freedom and honour of labour [and] the energy of cooperative art' (1914, cited in Miele 1995, 77), they embraced

burgeoning theories of art in the everyday and satisfying work. A critical role was played by Webb (Miele 2005), whose gentle appreciation of sound materials and truth in construction led him to encourage other architects to practise and attempt to understand craft in order to 'remove architecture from the architect's office to the builder's yard [and] craftsman's workshop' (Lethaby 1935, 125). He was also known to have criticised the conservation work of an architect without craft sympathy (Stamp 2017).

Although Webb's approach could appear to rely more on the architect's ability to control from within than on true collaboration, the resonance with Ruskin is clear in the work of one of Webb's pupils. While we know that Blow, who travelled the country with a group of 'itinerant' masons, hand selected key architectural features, he was absent from at least one project site until 'the walls were some feet high' (Gimson 1938, cited in Drury 2000, 91). The substance of Blow's relationship with the craftspeople has gone unrecorded, but his 'departure from the ordinary method of employing a contractor' (Weaver 1919, 16) infers trust: we can imagine that the 'charming easy natural' Blow brought the concept of a functional, collaborative and cooperative craft to life (Gimson 1938, cited in Drury 2000, 91). Elsewhere, other Arts and Crafts figures like the Barnsley Brothers and CR Ashbee also elected to directly employ craftspeople rather than 'contract' out their designs (Crawford 1985).

The theories of Morris and practices of Webb were foundational features of the Arts and Crafts movement, which was underpinned by three fundamental factors: 'unity of art', 'joy in labour' and 'design reform' (Crawford 1997). Diderot, Carlyle and Ruskin had discussed the former two concepts previously, but Morris was the first to fully elucidate the intrinsic aesthetic dimensions of craft reform. His sociopolitical theories of art and education can be seen to argue for:

> …a nation of good work as the basis of appreciation, such that the appreciative audience could not have existed but for the constant, unconscious education which was going on….by means of the ordinary work of the ordinary handicraftsmen.
>
> (Petts 2008, 42)

Morris thought that when an individual derived personal value from 'good work', as exemplified in ancient buildings, they learnt to appreciate it and thus the society of appreciation grew. His view of a cycle of good work and craft continually thriving in an educated, appreciative society resonates with recent case studies that position craft practice as social capital with sustainable development advantages (Chambers and Conway 1991; Ferraro et al 2011; Loader and Norton 2012; Parts et al 2011). Altogether, they suggest that understanding and empathy between different groups in society 'depends on exchange' (Sennett 2013, 93), a point reinforced by several craft historians' view that

crafts have continually interacted with and adapted to the needs of modernity (Adamson 2018b; Greenhalgh 2002). This definition of crafts as a dynamic 'process' provides refreshing comparison to the view in conservation and is revisited later in this chapter (Adamson 2018a, 3), after a short examination of the changing role of technical drawings as a final piece of evidence for the momentous changes in the building industry during industrialisation.

2.2.2.4 Architectural drawing and the building crafts

Nowadays, it is generally assumed that craftspeople work to the drawings and specifications of architects or other designers. However, Ingold (2010, 93) has argued that Renaissance architect Leon Battista Alberti, who wrote that 'it is quite possible to project whole forms in the mind without any recourse to the material' (Alberti 1988, cited in Ingold 2010, 93), was the first person to regard the abstraction of architecture more highly than its built form. Questions about the utility of working architectural drawings during earlier periods are a recurring theme in literature, with Toker (1985, cited in Robbins and Cullinan 1995) asserting that surviving medieval examples would not qualify as such today because they are not entirely 'self-sufficient as a building guide'. However, although they often contain less information than their contemporary counterparts and so would not direct the overall design of a building, the full-size scale and level of detail in some of the earliest drawings suggest they were made by craftspeople as an aide to their work in three dimensions (Pacey 2007).

Although it is difficult to research the exact role and use of those rare working drawings that survive, literature implies that detailed plans, elevations and cross sections that visualise whole buildings have grown in prominence only relatively recently. Even 19th-century architects such as Pugin, who longed for remote design control, felt that 'detailed drawings [were] unnecessary' when working with his most familiar builder George Myers (Spencer-Silver 1993, 12). This means that an absence of buildings drawn in their entirety implies a more collaborative relationship between the architect and the craftsperson, as explained by plasterer Jenny Saunt (2019) in her examination of a 1763 stucco ceiling design by William Chambers:

> Once you start looking for the type of detail that might be needed by the artisan, you realise that a drawing like this would not be much practical use beyond giving you a general outline of the scheme.

It is therefore possible that the proliferation of paper-based designs in building is a modern phenomenon that 'threatens to displace forms of judgment that emerge in practice' (Jones and Yarrow 2013; Yarrow and Jones 2014).

I return to Jones and Yarrow's studies throughout this thesis as landmark pieces of work that problemetise the uncritical use of modern construction processes like technical drawing in conservation. Conservation practice has not historically accepted these processes so comprehensively: the first Irish Inspector of National Monuments, the architect TN Deane restored 'the most interesting relics of antiquity' (Deane 1882, 201), but his recordings have been criticised as erroneous (Barry et al 1981; Stalley 1980). It could be that their absence suggests his time at Oxford with Ruskin, where we know he utilised alternative, liberal approaches that emphasised 'textilic' rather than 'architectonic' processes of building (Ingold 2010; 100), and it is interesting that this now raises questions about the surviving archaeological information. That Deane's work contrasts markedly with the sketches and detailed notes made by General Pitt-Rivers, his English counterpart, alludes to the variant conservation practices that can and have arisen according to local cultural values. The relevance of this to my study is discussed in the next part of this chapter.

This literature review has so far revealed a deep and complex relationship between craftsmanship and the interlinked practices of construction and conservation. It has discussed craft skill as a broad concern of early conservation protagonists such as Ruskin and Morris, but also considered how incremental changes in the construction sector have had an impact on craftspeople's ability to work autonomously from remote management and control. These contextual factors are important as I go on to discuss craftspeople as a community of practice whose views of heritage have been unfairly neglected by the postmodern framework for heritage conservation. To make this argument, I now revisit the recognised historiography alluded to in section 2.1.1 above in order to establish the importance of a value-based approach to disentangling the role and status of crafts in conservation.

2.3 The foundations of heritage protection in England

This thesis has already referred several times to heritage conservation's increasing inclusivity, which can be most straightforwardly understood in terms of the discipline's historical roots. The move to protect historic buildings began as a campaign against aspects of Gothic Revival architecture in 19th-century England, a popular style associated with a need to reform liturgical practice as advocated by Pugin (1851) in *True Principles of Pointed or Christian Architecture*. The subsequent reordering of a number of ancient churches provoked outcry because it was felt that proposals to save them, based on conjectural forms that may never have previously existed, were overzealous and unnecessarily damaging. Although the work saved many buildings from disrepair, 'Stylistic Restoration', which claimed to 'bring a building back to the best time in its history', was considered so radical that it was publicly condemned as 'arbitrary' and 'destructive' (SPAB 1877). Thus, the SPAB was founded by Morris to petition for the conservative repair of ancient buildings, which he admired as symbols of freedom and cooperation in art (as section 2.2.2.3 showed). It became a 'potent force in the politics

of conservation' and its campaign, which led to the Ancient Monuments Act 1881 – the first legislation protecting 'scheduled' archaeological sites in the UK – is generally seen as highly influential (Delafons 1997, 21; Glendinning 2013; Jokilehto 1999; Pendlebury 2009). As a national amenity society, which since 1996 has actively trained several 'craft fellows' each year (Bucknall 2017), the SPAB continues to exercise considerable influence in the conservation sector.

Research has shown that the Ministry of Works was able to follow the SPAB's code of minimum intervention in implementing the 1882 Act (Emerick 2003; Thurley 2007). The first Chief Inspector of Ancient Monuments was responsible for co-opting 63 ancient monuments to England's first schedule of protected heritage sites, but lack of funding meant that there was little conservation action (Thurley 2007). Under the later direction of the Ministry of Works' architect Charles Reed Peers, the preservation treatment at many monuments involved retaining only the oldest fabric, removing later layers and landscaping (Thurley 2007), techniques that together presented a singular medieval heritage (Emerick 2003; Fry 2014). Apart from insisting on the retention of the maximum historic fabric, neither the Ministry of Works nor SPAB gave much consideration to the 'skill of the workman' until the interwar period (Powys 1995, 5). Both organisations advocated the use of modern materials until it became clear that their impermeable properties were damaging the older fabric. At this point, the specification of traditional, breathable materials came to be considered best practice for conservation (Historic England [HE] 2013, 84; Holmes 2007), but it is notable that this standpoint grew from esteem for historic fabric rather than craftspeople or craft tradition.

2.3.1 International approaches

It is a noted paradox that the SPAB's (1877) call to 'resist all tampering' fed into an ideal of minimum intervention that diverged somewhat from Arts and Crafts ideals but had an enduring impact on conservation in the UK (Miele 2005). In some ways, other international approaches to conservation – the process-based methods of Deane in Ireland and Reichensperger in Germany – had more in common than the SPAB with Morris' later political beliefs, particularly Reichensperger who saw 'use of the past' as a vehicle for social change (Emerick 2003). Today it is well understood that approaches to heritage conservation are rooted in various ideologies, including religious belief systems (Swenarton 1898), and it is therefore celebrated for having developed distinctively all over the world in accordance with cultural setting. That this was not always the case is evident in the exacting terms of the Athens Charter (AC) 1931 (AC 1931).

The first international conservation charter, the AC was very much in the spirit of the SPAB manifesto. It called for monuments to be preserved in situ and presented in a way that their historic 'character' could educate the public, and, like Morris' plans for craft, engender a societal appreciation

for them. There was perhaps a faint recognition of the significance of diverse cultural values when it recommended that the preservation of monuments should be dealt with by national legislation (Jokilehto 1999), but the charter is otherwise quite inflexible in outlook. Its forthright approval of modern materials such as reinforced concrete left little scope for craftspeople or other communities to contribute technical conservation solutions. This is not surprising because concepts of value-based decision-making would not be applied to conservation practice for several decades.

Yet successive international charters did acknowledge progressively broad definitions of heritage, eventually encompassing craft skills as intangible heritage. The Venice Charter (VC) 1964 (VC 1964) is known for increasing the scope of the AC by embracing the concept of a monument's setting, but there was still a focus on physical components such as 'sculpture, painting or decoration', which should be preserved 'in the full richness of their authenticity' (VC 1964). The use of the term 'authenticity' prompted international debate about the probity of this advice, particularly in relation to the strikingly different approaches of Western Europe and Asia. While countries in Europe, like the UK, tend to revere tangible historic fabric, the relevance of other values is illustrated very clearly in a famous and oft-cited example in the context of Japan. Here, the regular renewal of the timber at the Shinto temples employs original building technology, including craft skills, unchanged through generations (Jerome 2008; Stovel 2008). This and other examples led to the International Council on Monuments and Sites (ICOMOS) revisiting the concept of authenticity at the Nara conference; the proceedings of which 'challenge conventional thinking in the conservation field' and 'broaden our horizons to bring greater respect for cultural heritage and diversity to conservation practice' (Nara Document on Authenticity [NDA] (ICOMOS 1994).

Spearheaded in Japan, the NDA calls into question the Western construct of authentic heritage as physically 'unspoiled, pristine, genuine, untouched and traditional' because it envelops the subjective values attached to place (Handler 1986). Its advocacy of community engagement in identifying heritage reflects international recognition that this should be an inclusive process (Emerick 2014; Lowenthal 1999; 2015; Smith 2006), but the mechanism for achieving this remains inconclusive (Poulios 2014). Evidently, the monumentalisation and 'fetishism' of fabric is extremely deep rooted (Munos-Vinas 2005), as seen in the influence it continues to exert on 'alternative' approaches.

A notable effect of the challenge posed by non-material heritage was the United Nations Educational Scientific and Cultural Organisation's (UNESCO) attempt to differentiate the tangible and intangible in separate World Heritage Charters (1972 and 2003, respectively). Although the approach is understandable given the Europe-centric trajectory described here, several researchers have argued that this is a 'false division' (Jones 2010; Walter 2017, 19). This binary view of heritage applies

awkwardly to traditional building crafts, which have been conflated with the ongoing conservation of fabric in several World Heritage Site inscriptions (UNESCO n.da; n.db). Indeed, if craft is embodied in the skill of the practitioner, the process of creation and the final product, then it is most accurately defined as 'living heritage': a community's continuous association with sites and their management (Poulios 2014). Certainly, any focus on the connection between tangible and intangible is more akin to 20th-century discourse on craft and the environment as interdependent (Pye 2015), which argues that process and technique not only give craft objects their form – as Ruskin and Morris recognised – but that the 'social life of craft objects' is at the essence of craft being craft (Risatti 2007, 153).

The relationship between tangible and intangible heritage in England is particularly inequitable because the UK has not ratified the UNESCO (2003) Convention for the Safeguarding of Intangible Cultural Heritage. It therefore trails behind other European countries in this area, which generally follow international convention in identifying the binary distinction. Despite this context, there are isolated examples where value-based conservation has been shown to enable an authentic process of craft education (Emerick 2013), which challenges outdated sentiment around a 'sad end' to 17th-century fabric, even when it was replaced with a 'fine piece of carving' (Wood 2016). Although this argument transcends the 'professional direction' of honest repair and moves towards liberal craft practice in architectural conservation (Miele 2005, x), unpacking the multiple competing values at play during conservation have yet to be overcome in a more mainstream sense. The policy context for this does exist however, as explained below.

2.3.1.2 The Burra Carter in England

The Australian Burra Charter (BC) (2013) sets out a three-stage process for collecting and understanding varied views of a place's cultural significance, which should underpin decisions about conservation practice. It has been very influential in the UK, where, from the 1980s, a change of emphasis in government legislation and policy altered the principles of conservation substantially, bringing a public focus and more holistic terminology that broadened its reach. The National Heritage Act (NHA) 1983 (NHA 1983) made it the 'duty' of English Heritage (since 2015 known as Historic England) to 'promote the public enjoyment of historic buildings' (NHA 1983), and shortly afterwards the Planning (Listed Buildings and Conservation Areas) Act 1990 (P(LBCA)A 1990) sought to conserve the 'special character and appearance' of places. So, by 1992, when the Department of National Heritage (DNH) was formed, a framework was in place for local planning authorities to conserve and enhance historic places, encouraging long-term regeneration and economic growth. Further change to the sector came in 1994, when the first appearance of the all-encompassing term 'historic environment' in government policy (Department of the Environment [DofE] 1994) coincided with the establishment of the grant-giving organisation the Heritage Lottery Fund (HLF) (National

Heritage Memorial Fund [NHMF] 2012). The new emphasis on heritage's public benefits not only corresponded to international trends but also allowed the UK government to invest in heritage as a sustainable resource for people and communities (Lennox 2016).

This meant that, despite the UK's dismissal of the intangible heritage convention, the international language of managing 'significance' based on multiple 'values' began to prevail. The HLF – by far the biggest funder of conservation in England – was an early adopter of the BC (2013) processes and advocates 'informed conservation' that engages people in determining 'significance' (Clark 2001; Semple Kerr 1996). Although it initially seemed to undermine established heritage expertise, the benefits of a more inclusive approach are now widely accepted (Pendlebury and Townshend 1998; Steaggles and Lake 2005), as is evident in high-level guidelines, such as *Conservation Principles* (EH 2008; HE 2018) and the National Planning Policy Framework[3] (NPPF) (Department for Communities and Local Government [DCLG] 2012). The case for conservation in England is therefore based on a language of including and understanding multiple values, but its effect on practice is as yet questionable.

The statutory framework for heritage conservation – the 1990 Act and the 2012 NPPF – is outdated in its focus on the 'archaeological', 'aesthetic' 'character and appearance' of buildings and monuments, which restricts much conservation practice to these terms (Jackson 2016). Furthermore, the key guideline relating to value-based approaches, *Conservation Principles* (EH 2008), employs the language of significance, but in analysis contains familiar references to 'material heritage and the art historical' (Walter 2017, 40). The limitations of this are exemplified by the replacement of 'the [lost] 80 [carved] winged dragons that once adorned the Great Pagoda' at Kew Gardens with nylon replicas that would appear as 'intended' by the architect William Chambers (Morrison 2017). A view of the building's aesthetic significance validated this controversial technique in spite of 'protests from leading craftsmen' (Felton 2016, 11), who wanted them replaced with hand carvings. It is of course possible that Chambers – with his liberal practices (Hanson 2003a; Saunt 2019) – intended the craftspeople to exercise a degree of autonomy in carving the dragons, but the physicality of the aesthetic argument prevailed over the craft community's more nebulous point.

Conservation has therefore failed to follow heritage's postmodern lead (Walter 2017), and there are even signs of it regressing regardless of academic resistance to the focus on material (Jones 2010, explored in section 2.4). Proposed changes to *Conservation Principles* (HE 2018) not only suggest using more traditional terminology to define heritage significance but also downgrade the importance of 'communal value' (see Figure 2e for a breakdown of the proposals). This realigns *Conservation*

[3] The 2012 NPPF was being revised at the time of writing and was republished in 2018.

Principles with the outdated statutory guidance, but means that its radical capacity to account for community values holistically is limited to those with 'historical associations'.

Conservation Principles for the Sustainable Management of the Historic Environment	
2008	2018 (proposed)
Evidential value	Archaeological interest
Aesthetic value	Architectural and artistic interest
Historic value	Historic interest (including communal interest when historical associations of a place have 'become enmeshed with the identity of a community')
Communal value	

Figure 2e: Changes in terminology to *Conservation Principles*

(HE 2018)

England's framework for conservation is not unique for being criticised by scholars. It is difficult for practitioners to involve everyone in society in the ongoing process of defining and managing cultural heritage (Jones 2017; Madgin et al 2017; Yarrow 2018a), as urged by the Faro Convention (2005). Even the discourse of the BC has been found to have 'passive and impersonal language' that prioritises tangible heritage, reinforcing the expert position in heritage management and failing to incentivise participation from non-expert communities (Waterton et al 2006). Furthermore, it has been noted that this rhetoric has overlooked the process of conservation, not *what* to conserve but *how,* which now demands more consideration (Avrami et al 2000; Chitty 2017). This is unfortunately reflected in the recent draft of *Conservation Principles* (HE 2018, 10):

> …when making decisions about conservation it can be useful to draw a distinction between design created through detailed instructions (such as architectural drawings and the creation of a work of art who is in significant part the craftsman (such as a sculptor).

The misplaced suggestion of craft skill as controlled by professionals negates the view of it as a dynamic and creative process of problem solving (Marchand 2016; Risatti 2007; Adamson 2018b), which in turn prevents craftspeople from authoritatively engaging in decision-making. I argue that this is the perpetuation of a false dichotomy that not only ignores the literature discussed here but also clouds the sector's recent approaches to resolving craft skills shortages, which are described in the next section.

2.3.2 Conservation and craft skill

The HLF's expenditure on capital conservation works – an estimated £1.9 billion between 1994 and 2012 (HLF 2012) – majorly altered the landscape of funding for conservation. Its early years coincided with a period of consistent economic growth in England, and the net effect was an increasing demand for traditional building craft skill, which was first recognised by specialist

organisations such as the Association of Conservation Officers (Barker 1992; Council on Training in Architectural Conservation [COTAC] 1993). In response, the heritage and construction sectors joined forces to establish the National Heritage Training Group (NHTG), which worked through a regional network of contacts that included the author of this study (as explained in Chapter One). The NHTG sought to understand and address future implications of 'heritage skills' shortages (2005; 2008; 2013); a term that sought to distinguish 'heritage skills' suited to building conservation from those in the new-build construction sector, which contextualised the NHTG's research and activities.

The NHTG attracted criticism from early on, with Preston (2006) claiming that the focus on crafts did not fully serve such an interdisciplinary sector. Distinctions of 'heritage' craft and professional skill are undoubtedly murky in the NHTG's research, which is impeded by many of the problems that this literature review has already uncovered. Firstly, the studies retreat from the 'messy' (Greenhalgh 2002) debate around defining crafts, and instead describe them by 'fixed set[s] of things' (Adamson 2018a) like 'roofer' and 'timber preserver'. Although this approach has been used elsewhere (Bilbrough and Moir 2004), and is likely symptomatic of 'craft' not being officially defined in the UK (European Commission 2011), it does not constructively provide a way of delineating craft from non-craft, or heritage skill from skill. Interpretations referred to already such as craft as 'as a habit of action' (Adamson 2018b, 3), 'polythetic' (Marchand 2016) and contextualised by pre-industrial processes are more interesting because they realistically recognise crafts as a complex interaction with material things (Risatti 2007). With the exception of Jones and Yarrow's study (2013), all the literature reviewed so far suggests that conservation has yet to appreciate this, a fact that is evident in the discipline's response to skills shortages.

The building crafts' intrinsic relationship with the fabric of heritage has advantages and disadvantages. That their continued existence in the construction sector relies in part on a market for heritage work is evidenced by the closure of several well-known heritage companies during a period of recession and reduced HLF expenditure (*Construction Enquirer* 2010a; 2010b; *Construction News* 2011; Loader and Norton 2012). Furthermore, comparably few building crafts are considered critically at risk by the Heritage Crafts Association (HCA), which publishes an annual *Red List of Endangered Crafts* (HCA 2019). Conversely, the heritage sector's infatuation with historic fabric has led to a far clearer understanding of 'traditional buildings', which the NHTG (2013) interpreted as anything built before 1919. This disparity has allowed material heritage to eclipse the role of craftsmanship almost entirely, so that research into the use of permeable materials in conservation typically ignores but 'unconsciously pay tribute to' the enormous strength of craftsmanship (Pye 2015, 18). In specifying materials to conserve historic fabric, the sector often fails to recognise the standards of craftsmanship that were intrinsic to the material heritage's creation and endurance.

Confused definitions around crafts, professions and traditional buildings have hindered the NHTG's progress. For, taken together, they signify that 'heritage skill' is nothing more than physical work to a pre-1919 building that employs the 'right' materials. The unqualified use of the word 'right' throughout the most recent study (NHTG 2013) is particularly questionable, because its meaning was obscurely set by focus groups of 'stakeholders' that did not involve craftspeople, who could only participate in the research through structured telephone interviews. This all points towards the inadequate dichotomy between conception and production in building that was instilled in England during the 19th century, as section 2.2 showed. The dichotomy is also evident in a number of other studies on the skills needed for heritage conservation, which generally list professions in curious detail but mention 'builders' and 'craftworkers' comparatively cursorily (COTAC 1993; ICOMOS 2013).

The final shortcoming of the underlying assumptions in the NHTG research relates to its application. The extremely broad interpretation of the term 'traditional buildings' led to an inflated forecast for the future economic demand for heritage skills, which in turn influenced the development of the first National Vocational Qualification (NVQ) tailored to craftspeople working in the historic environment. Despite this milestone, and evidence of continued skills shortages on a very local level (Guise et al 2017; Love 2017; Napier 2018; Snow 2016), the qualifications have not been popular. National agencies have therefore attempted to integrate traditional craft practices into mainstream construction training (Pers. Comm. 2012), but without consideration of the alternative routes that successful that craftspeople have pursued. The next section of this literature review therefore explores other resources and opportunities that facilitate the pursuit of craft expertise; options that craftspeople are known to engage in (Bilbrough and Moir 2004 and Chapter Four).

2.3.2.1 Learning a craft

The presence of craftspeople in professional and academic literature in conservation shows that they are highly cognitively engaged in the subject. Conservation architect Diodati (2016) argues that the craft-based processes of traditional building construction, honed over many centuries, rely on a 'shared language' that allows architects and craftspeople – such as himself and longtime collaborator Octavio Salcedo, a master carpenter and joiner – to work in a partnership that empowers each party with substantial autonomy. Master brick mason Dr Gerard Lynch (2013) advocates a return to a conscious interdependence between designer and 'artisan', which, like Hanson (2003a), he deems a false separation rooted in the 18th century. The unique expertise that 'emerges' from interacting with the physical world (Marchand 2016) is illustrated in master plasterer Phil Gaches' (2016, 20) critique of the repair of a Jacobean ceiling with 'a generic [19th-century technique] of lime plastering', which 'look[ed] very nice' but was as inappropriate as 'plasterboard

and gypsum', and so highlighted the architect's 'lack of deep understanding of [ ] 16th- and 17th-century plaster techniques'.

To attain the high levels of authoritative expertise expressed above, craftspeople often engage in development external to their interaction with the material world. They are involved in groups on linkedin.com and twitter.com, where they contribute images of work that leads to discussion and comment from peers. Organisations such as the Building Limes Forum and the Association for Preservation Technology International provide opportunities for giving and receiving training, networking and sharing unique, experiential perspectives. Rather than questioning the suitability of universal craft standards (Hill 1995; Marchand 2007), these craftspeople show that essential training can be the foundation for an attractive vocation. In a country like England, where formal routes into traditional craft training are not easily available or attractive to younger people, these networks of practice perform an important function for promoting crafts.

To develop a career in heritage conservation, would-be craftspeople must either gain an apprenticeship or employment with a conservation organisation that employs craftspeople. Or they may be fortunate enough to win a place on a specialist training scheme, such as the Prince's Foundation's building craft programme or the SPAB's craft fellowship, or a bursary for heritage training from the HLF (Ecorys 2017). It is notable that these three opportunities all take place outside formal 'apprenticeship' routes (explained in Chapter Five) and as such are overlooked in official statistics relating to training for craftspeople. The known 78% reduction in apprentices employed in conservation companies between 2006 and 2012 (EH 2012) is therefore unduly grim. To offset this severe statistical picture, my research is inspired by the work of craft historians that take a broader view of craft, and by the ethnographical tools of anthropology. As Chapter One showed, this thesis seeks to consider traditional building crafts in Yorkshire 'from the inside' (Ingold 2013), and shed light on its changing relationship with conservation in a way that is unencumbered by a fixed view of heritage and the commercial demand for its repair.

2.4 Qualitative research in conservation and craftsmanship

Chapter One has already stated that the uses of qualitative methodologies in this specific area are limited in scope. However, there are some notable exceptions to this that explore the complex processes of architecture, building and crafts in England and internationally, which this study has been inspired to draw upon considerably (Marchand 2010; Thiel 2012b; Yarrow 2019). In addition to this, work from within the heritage sector specifically illustrates the ulterior perspectives on heritage value that qualitative approaches can provide.

An interview-based exploration of the Pictish stone, the Hilton of Cadboll, contested the use of widely accepted conservation treatments (of which relocating the stone was a part) because the local community's 'material connection' with the site would be lost (Jones 2010). This showed that the polarisation of debate about constructed and material authenticity was unhelpful, and instead suggested that 'inalienable relationships' with heritage deserve consideration. This interpretation is very useful here because it enables an exploration of material heritage in a constructed realm identified in context, culture and the community. A later exploration among stonemasons working at Glasgow Cathedral (Jones and Yarrow 2013) developed this idea and emphasised the importance and fragility of tacit values such as skilled craft judgement, which could be curtailed by a managerial need for a visible paper record. Similar findings have emerged from international studies of vernacular buildings.

Asquith and Vellinga (2006) made the case that the existence of vernacular craft skill is as important as any material building; itself an empty physical manifestation of 'traditional building' in the active sense. This point is 'brought to life' in an anthropological study of mud masons in Mali (Marchand 2006, 47–56), which portrays a master's production of a 'tiny, round aperture' to flaunt his masonry skills as 'embodied practice' that 'takes place in a participatory forum located on-site'. These decorative features were the innovation of a master mason working in Djenné in the mid 20th century and are not archaeologically accurate, conjectural nor required for adaptive reuse. As such, they jar with accepted standards of conservation in England, which focuses on an unrealistic ideology of architectural intention (EH 2008). However, as innovative and creative solutions to building repair and maintenance, the techniques are in keeping with an authentic tradition of crafts, craftsmanship and Morris' ideal of 'joy in labour'.

Marchand's 'apprentice-style' field method (2009; 2012) employs a combination of observational and participatory research that aims to 'better grasp how craftspeople come to know what they know' (Marchand 2016, 1). This first-hand view of embodied craft cognition supports the assertion that design is honed during the process of crafting (Risatti 2007, 171; Pye 2015). In contrast to Ruskin, these researchers have analysed their insider experiences of craft and unraveled one of its secrets: conceptual and abstract designs are not necessarily restrictive or controlling, rather design can be taken forward fluidly in a process of refinement and finishing that is directed by the autonomous craftsperson. These alternative accounts demonstrate that the 'mystery' of craft is largely imposed (Adamson 2018b), and perhaps bolstered by conflicting depictions like those in Figures 1b and 2a (which show different 'slater's hammers').

Autonomy in craftwork also emerges as a theme in most ethnographic studies that explore the building industry, having been found on site at 'Keyworker House' in London (Thiel 2012a), in the Cotswolds (Yarrow 2018a; 2019, 201) and at Glasgow Cathedral (Jones and Yarrow 2013). It was perhaps difficult to reconcile craft autonomy with the early requirements to conserve archaeological and historic fabric, but value-based approaches provide more scope. Indeed, Yarrow (2017; 2018b) has shown that debate and decision-making is lively throughout the conservation process, especially through meetings that act as a forum for the many stakeholders of conservation to navigate practice together. This study seeks to reveal more about this nexus of people and place by seeking a person-centred understanding of craft values at this critical point, where tangible and intangible heritage unequivocally interconnect.

2.5 Conclusion

This literature review contends that the discipline of conservation emerged against a backdrop of modernisation in the construction industry that has hitherto been underplayed. Ruskin recognised the effect that the rapid changes had on both ancient structures and the traditional craft world, but his opinions on the latter did not mature until later in his life, as his focus on architecture shifted to political economy. This is important because, as this chapter has shown, Ruskin was, until recently, one of the only theorists of historic environment conservation to equate respect for the tradition of craft with the value of buildings as material culture. That his views went on to inspire Morris' SPAB and the Arts and Crafts movement supports a view, argued for here, that 'Ruskinian consciousness' (Brooks 2003b, 19) can be reflected in conservation practices that aspire to conserve both material remains and the 'living' craft traditions to which they inherently relate (Poulios 2014).

Conservation in the UK is embedded in the Western art historical notion of authentic fabric and the aesthetic experience, and transforming practice to account for other values is problematic. This is exemplified by the lack of research or discussion about communities engaged in collaborative conservation processes. In parallel, conservation studies has neglected historic research that has tried to define and understand crafts, and as such sought to address skills shortages in ways that can be seen as incompatible with craft itself. More encouraging ethnographical work has shown that existing models of liberal craft process can arguably embody authenticity, but this is threatened by the dominance of non-verbal instruments as the main method of inter-disciplinary communication. Professionalisation, the use of paper-based materials and the sustainability of crafts through training and other means are therefore analysed throughout this thesis, especially where it relates to wider dialogue about power, authority and control between stakeholders in the modern construction industry.

As set out in Chapter One, this study has adopted a largely qualitative approach to gathering primary information from craftspeople active in conservation practice. I deviate from the heritage sector's typical view of the building crafts as fixed to the product of their creation, preferring to interpret them as a process characterised by a physical interaction with historic materials. By engaging with 'conservation craftspeople' in their broadest sense, this study shows that craftspeople and their heritage values are intrinsic and enduring constituents of the historic environment that cannot be easily categorised as tangible or intangible. They are therefore an ideal community of practice to study as part of the ongoing need to employ critical qualitative methodologies that reveal more about the application of value-based approaches during the conservation process.

The next chapter of the thesis begins this exploration with an in-depth account of a group of stonemasons who were responsible for the conservation of Fountains Abbey throughout most of the 20th century. The chronologically presented case study examines how far the international and national policy developments discussed here infiltrated the site's organisation and the masons' craft. I have employed terminology that reflects mid 20th-century ideas about heritage to make clear the context for this chapter, which is differentiated from the latter two case studies by both the era the masons were active and the singularity of Fountains Abbey's medieval ruins. Because the craftspeople discussed in Chapters Four and Five generally practiced more recently, I discuss their work conserving the historic environment in the more current language of value and significance (EH 2008).

• Chapter Three •

• Conservation Craftsmanship from the 1920s: the stonemasons of Fountains Abbey •

3.1 Introduction

By the year 1900, when Ruskin passed away and the Society for the Protection of Ancient Buildings (SPAB) celebrated its 23rd anniversary, but still 13 years before it became a crime to damage an ancient monument, Fountains Abbey in North Yorkshire had been of interest to visitors for more than two centuries (NT 2009, 8). Following early antiquarian attention, the Abbey ruins had grown in popularity as a tourist destination, particularly from the late 18th century, with the growth of Harrogate as a fashionable spa town, and then, during the mid 19th century, when the railway arrived in Ripon (Taylor and Stride 2011). Although popularly known as Fountains Abbey, the site was, and still is, multi-layered, having been transformed into an elegant water garden incorporating the medieval ruins during the 1700s. It was further added to during the 1870s with St Mary's Church, a High Victorian Gothic building now known as a masterpiece of the famous architect William Burges, and it is the unique character of this outstanding group of features that continues to contribute to the site's special character (Figure 3a).

The Abbey's early archaeological and antiquarian renown attracted attention throughout the 1800s, with scholars such as Reeve and Walbran surveying the site (Coppack 2009; Gilyard-Beer and Coppack 1986). It is therefore unsurprising that the Government Ministry of Works included it in the schedule of ancient monuments in February 1915, less than two years after the 1913 Act empowered such action. This trajectory at Fountains, of an antiquarian interest steadily developing and eventually culminating in legal heritage protection for public benefit (Emerick 2013), had an impact on the conservation practised at the site and on the masons who were present there. The first half of this chapter therefore establishes a rough timeline of conservation at Fountains and argues that both the scale and technique of works can be seen as reflective of the international conservation movement into the late second half of the 20th century. Stonemasons were based at Fountains throughout this period and directly experienced this, and so an analysis of their accounts of the conservation practised forms the second half of this chapter. My research reveals that the continuous and overlapping presence of several key figures who fulfilled the important role of foreman mason made the community relatively stable, and so these individuals and the nuances of their position as conservation transformed are given particular attention.

Figure 3a: Iconic images of Fountains Abbey

(Clockwise from top left: the view of the Abbey ruins in William Aislabie's 18th-century garden [United Nations Educational Scientific and Cultural Organisation (UNESCO) 2019]; the east elevation of the Abbey with Huby's Tower to the right [NT 2019]; the west end of the church nave in front of Huby's Tower and the entrance to the cellarium on the right [*The Guardian* 2019]; the interior of the church nave [author's own 2013])

At the turn of the 20th century, Fountains Abbey, like many other nationally recognised heritage sites, was owned by an individual as part of the large Studley Estate. The second Marquis of Ripon had only just inherited the property in 1909, when the 'Commissioners of his Majesty's Works and Public Buildings' drafted a deed 'constituting the Commissioners Guardians of Fountains Abbey' (VR5686/VCEstatePapers/Miscellaneous 1909). Comments on the deed by the Estate solicitor, mainly pertaining to clarification over public access and maintenance responsibilities, suggest a degree of caution on behalf of the owner, and the guardianship deed was never agreed. Similar annotations to the 1915 notice of scheduling, reading 'the owner cannot object to having the monument placed on this list', indicate that further reluctance to submit to the government's heritage protection regime remained (VR5686/VCEstatePapers/Miscellaneous 1915). Such a reaction to the early Ancient Monuments Acts, known as the first parliamentary actions to restrict private owners on their personal property, was commonplace and is one reason why the 1913 Act enabled government to proceed with scheduling without an owner's consent (Delafons 1997, 30; Thurley 2013, 78). The acknowledged tension between 'public law and the rights of individuals' was seen internationally as a

local challenge to be resolved by national legislation that could respond to 'the trend of public opinion' (Athens Charter [AC] 1931).

Despite any uncertainty about owning a scheduled monument, the ruins remained in private ownership as part of the Studley Estate for another 51 years. The next owner, Commander Clare Vyner, acquired the Estate in 1923 and worked with the government to conserve and restore the Abbey ruins until its eventual sale to West Riding County Council (WRCC) in 1966 (NT 2009). On passing into public ownership, Fountains Abbey finally came into state guardianship, and consolidation and presentation of the ruins began in earnest. After 18 years of cooperation between the local authority and successive central government departments (the Office of Works to 1940, the Ministry of Works and Buildings to 1942, the Ministry of Works and Planning to 1943, the Ministry of Public Buildings and Works [MPBW] to 1970 and the Department of the Environment [DofE] to 1983 when the Royal Commission was established), the site once again changed hands; this time into the charitable sector. The National Trust (NT) purchased the site in 1983 and the current partnership with the English Heritage Trust, which retained responsibility for such sites after its 2015 split from HE, began.

In many ways, the gradual transference of management structure at Fountains reflects the international attitudes to heritage management and conservation identified in Chapter Two. In keeping with the Athens Charter (AC) (1931), the early Ancient Monument Acts empowered the state to protect archaeology of public interest on private land, whereas later provisions for listed buildings, conservation areas and parks and gardens identified broader characteristics such as 'aesthetic value' and 'setting' (Venice Charter [VC] 1964). In England, the trend for recognising heritage and its setting as part of place-making was discussed as the 'character and appearance' of conservation areas, which were created by the Civic Amenities Act 1967, just one year after Fountains was acquired by WRCC. It is no coincidence, therefore, that there was a 'considerable body of pressure locally [ ] that Fountains should be taken into public ownership' (HLG131/510/NA/LoanSanctionForAcquisitionOfStudleyRoyalParkAndFountainsAbbey 1965a): the acquisition reflected a more local need for the state-led conservation service, which, by the 1970s, had transformed from 'being a bystander to becoming a provider and implementer of a comprehensive conservation system' (Miele 2005; Pendlebury 2009, 38). The site finally changed hands to the NT in 1983, when the current management regime began.

Mounting numbers of heritage designations affecting the site parallel the history of the varied ownership described above, and are similarly reflective of the conservation movement's progression. The early 1915 scheduled monument designation and its achievement of guardianship status in

1966 were followed by Studley Royal's registration as a Grade I historic park and garden in 1984. The Abbey ruins and mill were designated Grade I listed buildings in their own right in 1986, and the site was inscribed as a World Heritage Site (WHS) in the same year (Figure 3b). Each heritage designation description reveals something about the values being associated with the site. The scheduled monument description focuses on archaeological and historical evidence for the site's Cistercian history from a European perspective (Historic England [HE] n.da). The park and garden description repeats some of the historical information, and adds more about the buildings' 20th-century history and contemporary uses (HE n.db). The list descriptions discuss the architectural and artistic qualities of the standing remains, including the 19th-century working mill infrastructure (HE n.dc; n.dd). The interpretation of these more workaday features as significant compares interestingly to the World Heritage inscription, which emphasises the site's heritage as a designed landscape, describing the gardens, the Abbey remains and the Jacobean manor house in design terms, as well as the contribution of several leading characters, including William Aislabie, credited with the design of the garden, and the first Marquis of Ripon (UNESCO n.dc). An absence of a conservation area or any locally listed buildings means that there is no locally authored official assessment of heritage to compare with these national and international ones.

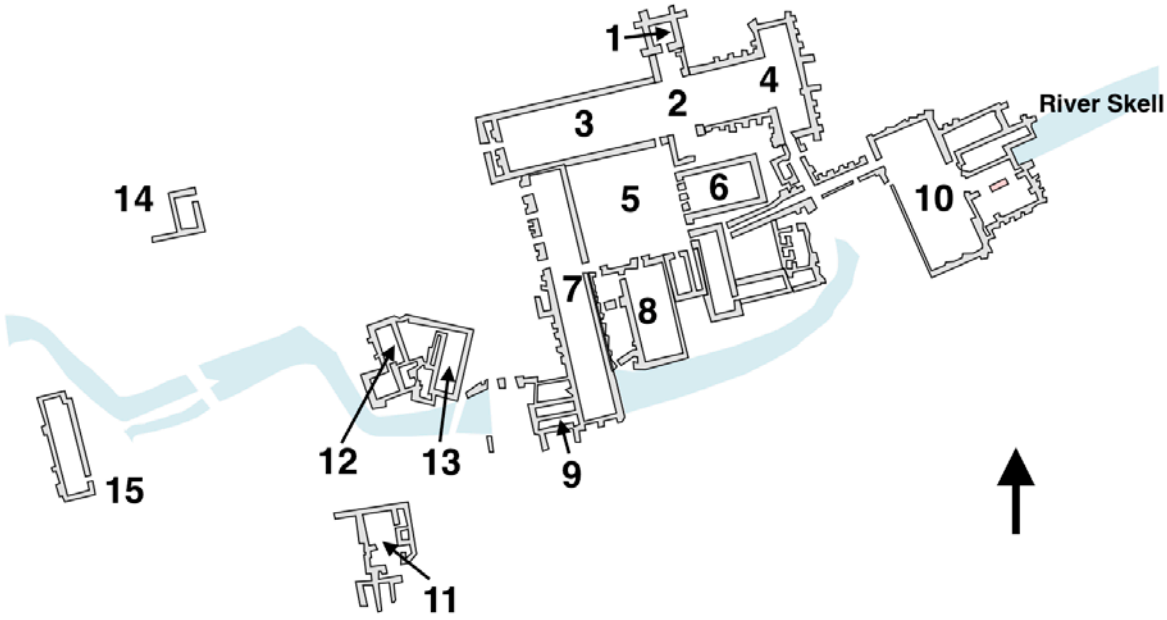


Figure 3b: A plan of the Abbey ruins (not to scale): 1) Huby's Tower 2) Transept 3) Church nave 4) Presbytery and the chapel of the nine altars 5) Cloister 6) Chapter house 7) Cellarium 8) Refectory 9) Reredorters 10) Infirmary 11) Outer court (bakehouse and prison) 12) West guest house13) East guest house 14) Porter's lodge 15) Mill

(Author's own 2019)

Taken together, the various heritage descriptions disclose an imbalance of information in favour of standing remains and associations with famous protagonists. Alternative stories such as the history of agriculture, building and conservation are scarcely mentioned except for a few brief sentences about the Abbey mill. Although arguably such a bias can be attributed to the reasons behind designation, it also reflects a wider tendency to recognise elite qualities deemed special and rare by architectural historians (Arnold 2002) and other experts (Smith 2006), usually on a national or international scale. Fortunately, several archival resources illuminate the stories of other people and activities connected with Fountains, such as the Fountains Abbey Settlers Society and the community of stonemasons explored here. The range of resources, including structural reports, correspondence, minutes of meetings and qualitative encounters, provide a wealth of information about these other groups' activities. The rich picture it establishes shows that the masons' association with Fountains went beyond their daily work undertaking physical conservation intervention; the site was the backdrop to a formative period in their craft education, and many went on to use their highly developed conservation skills as the basis for successful careers. The following evidence, based on a new interrogation of the archival and qualitative resources, compares three distinct periods in Fountains' conservation history in order to consider why the network of organisations and people there might have created such a fruitful environment for would-be stonemasons. Following that, sections 3.3 and 3.4 discuss the intangible and tangible outcomes of the conservation in more detail.

3.2 Conservation stonemasonry at Fountains

3.2.1 Selecting the first conservation foreman

In 1927, Commander Vyner compelled the Ministry of Works, via its Director of Works, the architect Sir Frank Baines, to conduct a structural survey and repair specification for the scheduled monument of Fountains Abbey (VR5686/VCEstatePapers/Miscellaneous 1926). The report was prefaced by a 'note upon the principles adopted by HM Office of Works in dealing with repairs of medieval ruins', which sets out a 'governing rule' that 'work shall be for preservation only and not for restoration' and therefore corresponds exactly to the SPAB manifesto (REP0034/EH/FountainsAbbey/Fabric/MinistryOfWorksReports/ReportsSeries 1927). The report recommended several urgent and desirable works in accordance with works to other monuments that were intended to prevent further collapse of the ruins and loss of archaeologically important fabric (REP0034/EH/FountainsAbbey/Fabric/MinistryOfWorksReports/ReportsSeries 1927). There was also an acknowledged need to make the ruins safe for the visiting public, and Vyner had specified that recommendations should be based 'upon the immediate repairs required', and the 'ultimate repairs which it might be desirable to undertake at some distant time in the future' (REP0034/EH/FountainsAbbey/Fabric/MinistryOfWorksReports/ReportsSeries 1927). The repair

schedule is drawn up accordingly with each item marked ‘U’, ‘N’ or ‘D’, denoting ‘Urgent’, ‘Necessary’ or ‘Desirable’ works.

The report, undertaken by the Office of Works’ Chief Architect in charge of ancient monuments, Mr Heasman, is dominated by text, with only one drawing and approximately 30 photographs illustrating the written material. Descriptions of several of the urgent works indicate repairs to areas that were structurally very weak or even failing. Of the west wall of the north transept, the report states that ‘voussoirs in four of the window arches are loose and about two-thirds of mortar joints are open’. Remedial ‘re-set[ting] of the loose stones in their original position’ is given as urgent work, while work to ‘rake out open joints and fill with mortar’ is only necessary (REP0034/EH/FountainsAbbey/Fabric/MinistryOfWorksReports/ReportsSeries 1927). Similarly, a note about ‘a diagonal fracture in the South buttress [of the West face of Huby’s Tower] extending from the ground to the first weathering’ is diagnosed as ‘a somewhat dangerous fracture, and proper bond stones should be inserted and the fracture grouted with cement [urgently]’ (REP0034/EH/FountainsAbbey/Fabric/MinistryOfWorksReports/ReportsSeries 1927). Several of the urgent works have been underlined as if to highlight their exigency, but it is not clear when or by whom this was done. It is possible that it occurred sometime in 1929 before the Office of Works updated the report, again at Vyner’s request, and in an apparent attempt to prompt the Estate to undertake some of the works that the Office understood would follow the original 1927 report.

In an internal covering memorandum to the report, a representative of the Office of Works stated that ‘[Vyner] asked that a report should be prepared and forwarded to him, and he indicated that, although he did not wish to transfer the building to the guardianship of the Crown, yet he desired to allocate a sum of money annually towards the repair of the structure’ (WORK14/686/NA/Works1923–1938 1927). None of the expenditure on the monument appears to have materialised, and, in April 1928, Heasman recorded the following notes of a conversation between himself, ‘Mr Raby and Mr Peers’ and Vyner ‘with respect to the execution of repairs at Fountains Abbey during the financial year 1928/29’ (WORK14/686/NA/Works1923–1928 1928a):

1. Mr Vyner stated that he wanted to allocate a sum of about £600 during the present year; he was informed that this amount was rather small, and would not enable a large staff to be employed.
2. The minimum staff suggested: a Foreman, a Mason and 2 Labourers, and one of the men should be capable of assisting the Foreman with the erection of scaffolding.
3. The wages of such a staff, with the necessary materials, would probably amount to about £850.
4. Mr Vyner was under the impression that this Department would desire to supply workmen as well as a Foreman, but it was pointed out that this would not be necessary. If the Foreman were one of the

properly trained men belonging to this Department, he would be able to educate local Masons or Labourers.

5. It was also Mr Vyner's desire to employ direct, the Foreman and the workmen, but it was pointed out that the skilled Foreman in the Department obtained continuity of service to become eligible for establishment and for gratuities. It was not desirable therefore to break service. So far as the workmen were concerned, none would be transferred from other buildings and an endeavour would be made to obtain them locally.

(WORK14/686/NA/Works1923–1938 1928a)

This conversation is the first written record of a protracted discussion between the Studley Estate and the Office of Works over the most suitable candidate for the important role of foreman mason. The two parties considered the issue for nearly 20 months until 12 December 1929 when the Estate Land Agent, Frank Sutherland, wrote to the Office of Works with details about the appointment of their foreman mason (WORK14/686/NA/Works1923–1938 1929a).

The attention given to the selection process is notable because it clearly shows that such 'foremen' were not only considered able to carry out work delegated to them by the Office but were also accomplished enough to 'educate' or train others, as discussed in the excerpt above. On a very practical level, the foreman would also have been the only Office of Works representative to attend Fountains every day, and so would presumably have been supervising the works to this important scheduled monument. An internal Office of Works memorandum on 21 May 1928 provides further evidence for a relationship between the Office's office-based and site-based staff, in a nomination for the position at Fountains that discussed not only the potential candidates' names but also their levels of skill, areas of strength and their 'appearance':

Nominations for Leading-hand herewith.

1. Simpson, Leading-hand at Whitby
2. Frankland, Mason at Whitby
3. J. E. Bowler, Mason at Middleham

Bowler is a young man of good appearance and would, in my opinion, compare with Harris of Egglestone.

Frankland is not so presentable perhaps, but is a thoroughly good Mason and has better experience than Bowler, although he would have to be 'nursed' on clerical work.

Simpson is similar to Frankland but can carry out whatever clerical work he has been entrusted with, and I would, therefore, recommend him.

(WORK14/686/NA/Works1923–1938 1928b)

In fact, none of these men was selected as the foreman for Fountains, because the Estate perceived their wages to be too high. However, it is interesting to consider not just the importance that the Office attached to the craftsperson's 'clerical' know-how but also their 'presentation'. Even though the Estate did not recruit in this instance, the Office continued to press for a competent and trustworthy craftsperson, informing Mr Sutherland on 26 May that 'the Department desires to have a careful and responsible man in charge of the works of repair owing to the importance of the Building and the dangerous character of some the operations which would have to be carried out' (WORK14/686/NA/Works1923–1938 1928c). After this date, the correspondence became less frequent, with the main discussion around finding a house for the foreman near to the Abbey, but, in April 1929, the conversation about suitable workers arose again at a meeting between Heasman and Vyner. In the file note, Heasman recorded being 'taken [ ] to see' Mr Vyner, who 'had been reading the Office of Works [1927] report very carefully and [ ] come to the conclusion that [the Estate] would rather the works of repair be carried out by some experienced contractor'. According to Heasman, the Estate had a 'firm in mind', 'Messrs. Ainley of York, who have been making alterations to [nearby] Fountains Hall', but was 'still desirous that the Office of Works should give necessary supervision and supply the foreman. In response, Heasman wrote: '…told Mr Vyner that if he wished to employ a contractor he could do so, but I did not quite see how it would be possible for one of my foremen to supervise; I should have to give the matter consideration. [ ] In the end I succeeded in gaining him and Captain Sutherland in my point of view and was informed that the money would be forthcoming to commence repairs' (WORK14/686/NA/Works1923–1938 1929b).

Heasman therefore clearly favoured craftspeople to be directly employed by the Commissioner of Works to Ancient Monuments. His preference is echoed in a letter from Sir Lionel Earle, Permanent Secretary of the Ministry of Works and member of the Ancient Monuments Board Advisory Committee (Fry 2014), to Mr Vyner in July 1929. He agreed with the architect that 'the employment of a contractor is not so economical as the system of direct labour, nor is it so easy to supervise' (WORK14/686/NA/Works1923–1938 1929c). This is significant because it shows that, rather than being the opinion of the letter writer, the direct employment of craftspeople for ancient monuments was considered best practice by the Office of Works almost as a matter of policy, as consistent with SPAB advice of the time (Powys 1995, 5). Conversely, craftsmanship and experiential knowledge of materials were not considered at all in impending international policy (AC 1931), which emphasised the importance of collaboration between archaeologists and architects while advocating the use of modern materials to preserve ancient fabric in situ.

After Earle's intervention, the Estate seems to have agreed to directly employing workmen and covering the cost of a foreman based at Fountains but employed by the Office of Works.

Accordingly, in August 1929, another letter, this time recommending Victor Brown from Tintern Abbey as a suitable candidate, was sent to Sutherland (WORK14/686/NA/Works1923–1938 1929d). However, the high cost of a foreman employed by the Office was again raised in September 1929, and the Estate resolved to solve the issue in the following way:

> Mr Vyner's idea is to try to get hold of a man who would act as foreman for the work at the Abbey, and also be a sort of foreman mason and clerk of works for the Estate buildings, and who would come on to the Estate staff, and be provided with house and garden, preferably a married man: we have just erected four new cottages, and one of these would probably be available for him. [ ] Mr Black is coming over next week and I will go into the whole matter with him again.
>
> (WORK14/686/NA/Works1923–1938 1929e)

Heasman responded, stating that once works start, it was 'essential for a foreman to be constantly in charge and he should not leave the site to supervise other work. Some of the masonry is in such a dangerous condition that you would, in my view, be undertaking unnecessary risks if you did not have in charge constantly a skilled man who has been trained in work of this type' (WORK14/686/NA/Works1923–1938 1929f). The Deputy Chief Architect, AJ Pitcher, who signed off several of Heasman's memoranda, also expressed concern when he recalled that the 'C.A. considered this was a case where the whole-time services of a first-class foreman would be necessary' (WORK14/686/NA/Works1923–1938 1929g). It is not clear whom the acronym refers to, but it seems possible that it could have been the Chief Architect, Frank Baines, who left the Office in 1927.

It is fascinating that the role of foreman at Fountains was of sufficient interest to both the Estate and the Office of Works to be the subject of this detailed correspondence. By the time William Robertson was mentioned in a letter from Sutherland to Heasman on 4 November, we know quite a lot of detail about his future position. It is clear, and supported by later documentation, that he was to be employed by the Estate at a comparatively low wage, but given a new cottage to live in near the site with, it is likely, his family. He was to work alongside, and, if necessary, train, a mason and two labourers in the conservation of the Abbey, as specified in the 1929 report. He was to be presentable, and a capable administrator, as well as able to supervise the erection of a scaffold so that the team could undertake the works without the help of external contractors. They would be visited regularly and their work inspected by David Black, the Office of Works' York-based Superintendent of Works. What is significant about this discussion is not just the clear importance that both Vyner and the Office of Works attached to employing a skilled site foreman but also the attention given to them as an individual. It appears that the great priority that the Office gave to this, more so than to starting works urgently or achieving the lowest cost, proved invaluable because in

the following years Robertson became an increasingly important and visible figure in the conservation of the Abbey.

3.2.2 Starting the conservation works

On 18 December 1929, Heasman wrote to Sutherland to thank him for the notification that Vyner had appointed Robertson, foreman of Crossraguel Abbey near Maybole in Ayrshire. Although Heasman was personally unaware of the man's work, the reports he had 'received indicate that he is an excellent man and [he thinks] Mr Vyner will be satisfied with the manner in which he carries out his duties' (WORK14/686/NA/Works1923–1938 1929h). Another letter from Mr Heasman, on 20 January 1930, shows that Robertson was by then at Fountains Abbey, and that under him conservation works had started (WORK14/686/NA/Works1923–1938 1930a). However, there was still a lack of clarity surrounding the Office of Works' responsibilities at the privately-owned Fountains, which Heasman undertook to resolve with a visit on 2 April.

In an internal memorandum to Pitcher, Heasman wrote that he 'had been notified that a scaffold had been erected at the south wall of the South Transept by the Estate Clerk of Works Mr Robertson. [ ] The Department had not been consulted with regard to the commencement of work, and I desired to ascertain to what extent supervision and advice were required'. After ascertaining that 'it was the wish of the owner, Mr Clare Vyner, that [ ] the building should be regarded as under the control of HM Office of Work [for repair work]; it was desired that advice and supervision should be given by the Department concerning repairs of masonry, pointing, grouting, re-enforcement of wall heads, the erection of shores and other operation' (WORK14/686/NA/Works1923–1938 1930b). Heasman then 'went round the ruins and pointed out [ ] unstable and [ ] dangerous' masonry, instructing 'Robertson to place tell-tales over all fractures and to keep a tell-tale book, and to provide temporary support to insecure stones', and advising him to prioritise the 'commence[ment of] repairs' on the basis of condition (WORK14/686/NA/Works1923–1938 1930b). These works are all evocative of the in situ consolidation and preservation leanings of the Athens Charter (AC) (1931), which was to be finalised the following year.

The working arrangement at Fountains – of Robertson 'regarding himself (so far as the Abbey was concerned) as an Office of Works employee [that accepts instructions from Mr Black [ ], or other officers from Headquarters' (WORK14/686/NA/Works1923–1938 1930b) – seems to have been accepted by the Office of Works because the next piece of correspondence of note occurred much later in the year on 6 August. In it, Heasman reported to his superior, Pitcher, that 'the arrangements at Fountains Abbey have worked satisfactorily during the past six months'; 'works of repair to the Chapel of the Nine Altars (South Transept) have been completed' and a fallen portion of masonry

from the East Guesthouse has been rebuilt and repaired (WORK14/686/NA/Works1923–1938 1930c). However, the Estate was experiencing difficulty in recruiting masons and as such 'the greater part of the work both in the erection of scaffolding and the repair of masonry has therefore devolved upon the Foreman Robertson who is fortunately a very competent man' (WORK14/686/NA/Works1923–1938 1930c).

This issue, of a lack of resource in terms of both materials and labour, was referred to several times in 1930 and into 1931, when Heasman visited the site again and made 'recommendations for the continuation of repairs during 1931' (WORK14/686/NA/Works1923–1938 1931b). In the letter covering this report, Heasman indicated that Black and Robertson had helped inform the recommendations 'from their experience of the building' (WORK14/686/NA/Works1923–1938 1931a). They considered that 'the North and South Aisle of the Nave and Arches should be given attention [ ] because the stones on the wall heads are very loose' (WORK14/686/NA/Works1923–1938 1931a). That these works were specified in the attached report demonstrates that the input of the craftsperson was both sought and respected when works to the Abbey were being programmed, in advance of on-site conservation being practised. The references to Robertson also indicate that he was a key person on site, taking instructions from both the Estate and the Office of Works, and acting as an intermediary between the two. One such instance occurred in January 1933 when Black informed Heasman that he 'had advised Mr Vyner, through Robertson, to make trial holes at the South side of the Refectory' (WORK14/686/NA/Works1923–1938 1933).

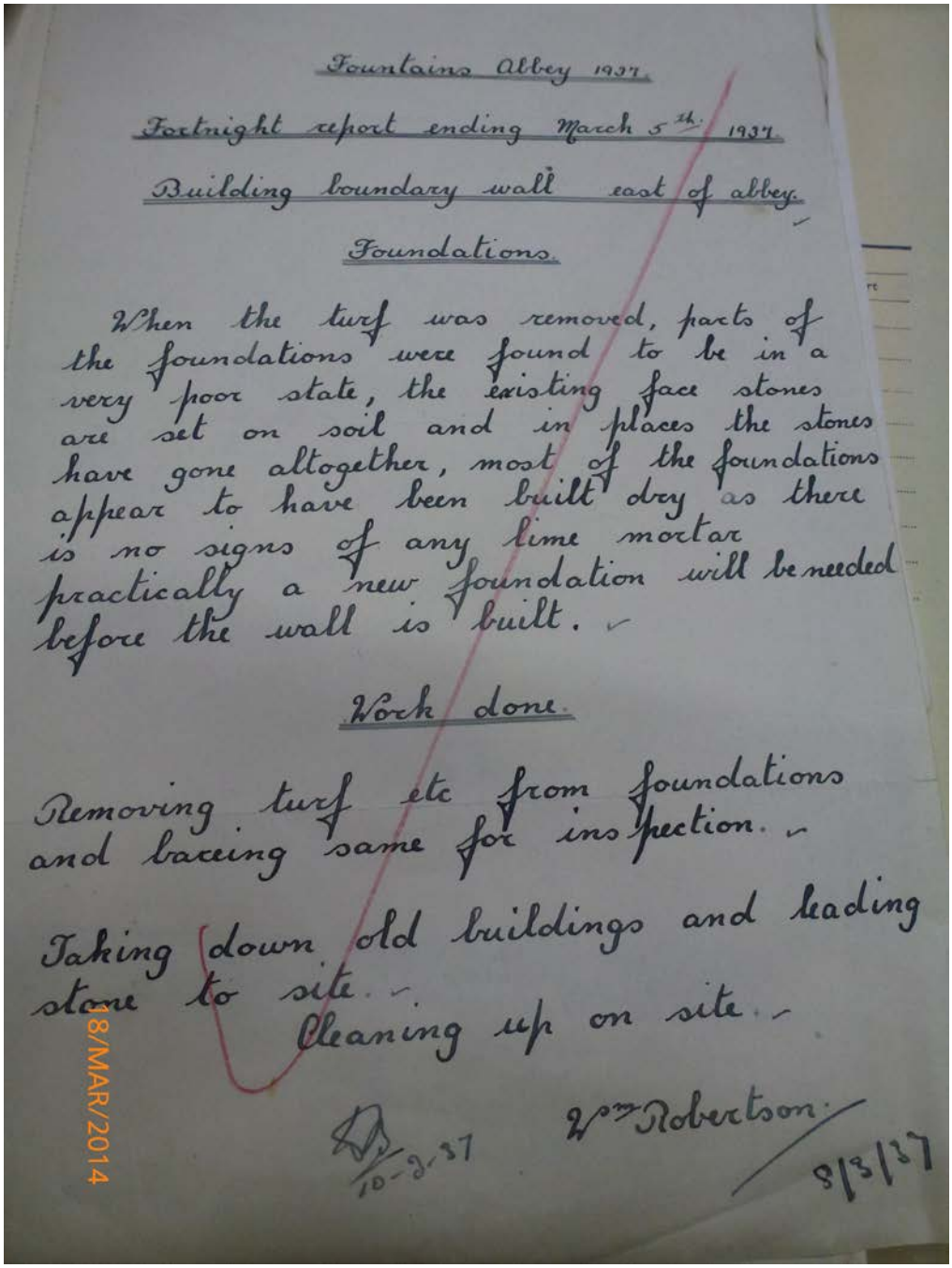
This status quo, of Robertson and his men undertaking repairs to the monument on behalf of the Estate and the Office of Works, seems to have lasted until 1937 when Vyner directed the men to other works on the Estate. At this point, Black wrote to inform Heasman that the craftspeople were engaged in the demolition of a 'dilapidated rustic stone built cottage' so that the stone could be used to rebuild the old precinct wall (WORK14/686/NA/Works1923–1938 1937a). He noted in this letter that the Estate Manager, Sutherland, would have preferred them to be working on repairs of a more urgent nature, and appeared to be concerned about these being attended to on an ad hoc basis and without the normal supervision. Black therefore asked 'Robertson to let me have a short report each fortnight if he was employed on any work in connection with the Abbey so that we [the Office] were kept in touch with what was being done' (WORK14/686/NA/Works1923–1938 1937a). Later, Heasman wrote to Sutherland to inform him that any works to rebuild the precinct wall were thought of as 'restoration and does not commend itself to [this] Department, [because it is their] policy only to preserve the old masonry and that, where possible [they] avoid adding to it because the new work might be regarded as part of the original'. Here, the Chief Architect's stance reveals the direct impact of international policy that the reinstatement of features with new material should always be

'recognisable' (AC 1931), and the SPAB's approach to protecting and conserving – rather than restoring – ancient buildings (Powys 1995), as exemplified in the Office's own *Notes on Repair and Preservation* (Fry 2014), as appended to the 1929 report.

From the beginning of 1936, Robertson started to write occasional fortnightly reports to Black (see Figure 3c for example). This method of reporting and auditing for accountability had been in place on guardianship sites since 1911, which Emerick (2014, 64) has argued represented 'the birth of civil service management procedures'. Auditing and monitoring were more relaxed at Fountains, but Robertson continued to correspond with Black as necessary. After a fall of some masonry in the chapter house in May 1937, he wrote that 'I reported same to Captain Sutherland this morning, this wall is just core work so I have started to hand pick all the loose and dangerous stones from a ladder and to remove all the young trees etc from the wall tops especially the north wall of church it is in very loose and dangerous condition' (WORK14/686/NA/Works1923–1938 1937c). It is notable that, like the chief architect, the foreman mason was familiar with contemporary international and national guidelines on conservation. The fall in the chapter house prompted Black to write to Heasman urging that 'a meeting be arranged with Mr Vyner and the neglect and urgency of repairs to the Abbey made clear to him' (WORK14/686/NA/Works1923–1938 1937d). It is unclear whether this meeting ever happened, but there continued to be differences of opinion between the Estate and the Office of Works on prioritising work, as the following excerpt from Black illustrates:

> Mr Vyner [ ] mentioned to Robertson that he thinks the Guest House Walls should be treated next and to ask what I thought about it. No doubt parts of the Guest House Walls are in a very unstable condition but my opinion is that the Nave North Aisle should be treated next as it is far more dangerous.
>
> (WORK14/686/NA/Works1923–1938 1937d)

In 1938, Robertson wrote a letter to Black informing him that 'he has completed the work at Studley Hall and [is] now working on the Old Mill Fountains' (WORK14/686/NA/Works1923–1938 1938a). It seems that the urgent works to the nave may have been further postponed, because, in 1940, there was a collapse of masonry in the chapel of the nine altars, close to the area of the building that Heasman had referred to in 1937.



Fountains Abbey 1937.

Fortnight report ending March 5th 1937

Building boundary wall east of abbey.

Foundations.

When the turf was removed, parts of the foundations were found to be in a very poor state, the existing face stones are set on soil and in places the stones have gone altogether, most of the foundations appear to have been built dry as there is no signs of any lime mortar practically a new foundation will be needed before the wall is built.

Work done.

Removing turf etc from foundations and bacing same for inspection.

Taking down old buildings and leading stone to site.

Cleaning up on site.

10-3-37

Wm Robertson.

8/3/37

Figure 3c: An example of Robertson's fortnightly report on works to Black, HM Office of Works' Regional Superintendent of Works

(WORK14/686/NA/Works1923–1938 1937b)

(Author's photograph reproduced with kind permission of the National Archive)

After 1940, correspondence about the works at Fountains became increasingly sparing, and the record is limited to a flurry of activity around falling masonry in the chapel of the nine altars (WORK14/686/NA/Works1923–1938 1940a; 1940b; 1940c). These documents show that, while Sutherland continued to be the main contact and administrator at the Estate, there were several changes in personnel at the Office of Works. Robertson himself was at the Estate until after 1 May 1940, when the Office of Works indicated that remedial works would be 'carried out by the Estate

workmen, one of whom' – presumably Robertson but referred to unfamiliarly – 'has been trained by this Department' (WORK14/686/NA/Works1923–1938 1940d). There then seems to have been a drastic reduction, even cessation, in relations between the Estate and the Office of Works because no correspondence or reports survive in the main archives. Such an absence of activity correlates with the situation at York Minster, where, by 1938, 'the workforce [was being] steadily drawn away from the fabric in anticipation of war' (Holton 2010, 144). This prompts as yet unresolved questions about the continuity of traditional craft after World War II (WWII).

It is slightly perplexing that correspondence about Fountains does not recommence until 13 years after the end of the war, but this too could be a reflection of the subsequent shortage of 'available craftsmen in the 1940s' (Holton 2010, 163). The next piece of documentary evidence, written in January 1957, is a note of a meeting between several senior MPBW officials, including the archaeologist Roy Gilyard-Beer. It shows that they were attempting to 'arrest further deterioration of both high standing masonry and low standing walls and foundations' (WORK14/2433/NA/RepairsAndMaintenance/1930–1959 1957a). This note is interesting because it is the only illustration of a conflict over repairs to the ruins from within MPBW, which arose because of disagreement between the archaeologist and the architect over the most urgent areas for attention (WORK14/2433/NA/RepairsAndMaintenance/1930–1959 1957a). Brief discussions about deploying two teams of men to each specialist's urgent area were terminated because, as had been the case earlier in the century, 'the Studley Estate would not be prepared to meet the cost' (WORK14/2433/NA/RepairsAndMaintenance/1930–1959 1957a). The recognition that 'there would be almost insuperable difficulties in recruiting the labour force needed' adds weight to the idea that the losses of WWII brought disorder and discontinuity to stonemasonry (WORK14/2433/NA/RepairsAndMaintenance/1930–1959 1957a). Correspondingly, it seems likely that Robertson's return to the site after the war, recorded first in 1957 (WORK14/2433/NA/RepairsAndMaintenance/1930–1959 1957b), was quite rare. In broad terms, the impact of war and military activity on heritage studies has been discussed (Emerick 2013), but there is a need for further research on its impact on practical conservation and craftsmanship.

Both archival records and the oral history of my key informant stonemason, who began working at Fountains in 1969, show that Robertson worked on the site after it changed ownership to the local authority. In 1966, when WRCC acquired Fountains Abbey, Robertson's name, along with the labourers Richie Sweeney and Brian Yeoman, appeared on a list of Estate employees (WORK/14/2744/NA/Works/1962–1966 1966a). By this time, official employees of MPBW, including a new foreman, Tommy Young, had already been relocated to Fountains to advance the conservation work. Although Robertson was eventually taken on by MPBW, he was no longer

foreman on site, but his position as a communicator of information, supervisor of works and craftsperson undertaking repairs based on only very limited specifications, appears to have been valued in various different ways. During his time as foreman, his work, when referred to, is spoken of highly, as 'A.1' by Black (WORK14/686/NA/Works1923–1938 1936a) and his work on the gatehouse was said 'a sound job [ ] and it is not overdone' by Heasman (WORK14/686/NA/Works1923–1938 1937e). My key informant Henry Rumbold remembers him as a mentor:

> 'And then I had William Robertson. Now Bill was a Scottish, from Borders, and he was. He'd been in the game 40 years had Billy boy. Right? So he was another one of the masons that I learnt my trade under'.

Robertson's masonry work, length of service and experiential knowledge of the site were valued by both younger masons and MPBW, which employed him after the Abbey was sold to WRCC. His knowledge and skills were continued as far as they were transferred into his direct successor, Rumbold, who recalled Robertson's length of service during interview: 'Bill come from the Estate originally. But I think he'd worked for the Ministry beforehand'. It is telling then that Rumbold remembered Robertson being asked to write a retrospective report of the work conducted in the first half of the century. Copies of that report – dated 1969 – still exist (AA020107/2/PC6/HECentralArchive 1969), although no author is credited on one copy. A second is incorrectly attributed to a later quantity surveyor based in York, William Robinson, who, according to my key informant, would not have had the intimate knowledge of the Abbey that the report includes.

Both the archival credit and the contents of the report support the conviction that the report was written by Robertson. The attribution itself is made very informally on the box file where the report is kept (figure 3d) and is not included in any digital or hand written catalogue. The drawn contents are very different in presentation to the earlier Office of Works reports, which included measured drawings in comparison to the sketchy drawings of the retrospective report (figure 3e). However, it is the narrative of the two reports that is the most revealing: the first written in the manner of an official specification, whereas the second contains vast amounts of detail given about the exact nature of the intervention (see Figure 3f for an example of the way works to the south wall of the chapel of the nine altars are described). Furthermore, there are several examples of the writer having been directly 'asked by Mr Heasman' (for example), which accords with Heasman's account of visiting the ruins with Robertson to point out dangerous areas and advise on repair (WORK14/686/NA/Works1923-1938 1930b). As a first-hand account, the report is such rich record of conservation as practiced that it is possible to establish a rough timeline of major works from it,

although it is not possible to trace the lesser works undertaken by the autonomous masons on a day-to-day basis (Appendix Four).

Figure 3d: The box file that misattributes the retrospective report to Robinson rather than Robertson

(Author's own 2019)

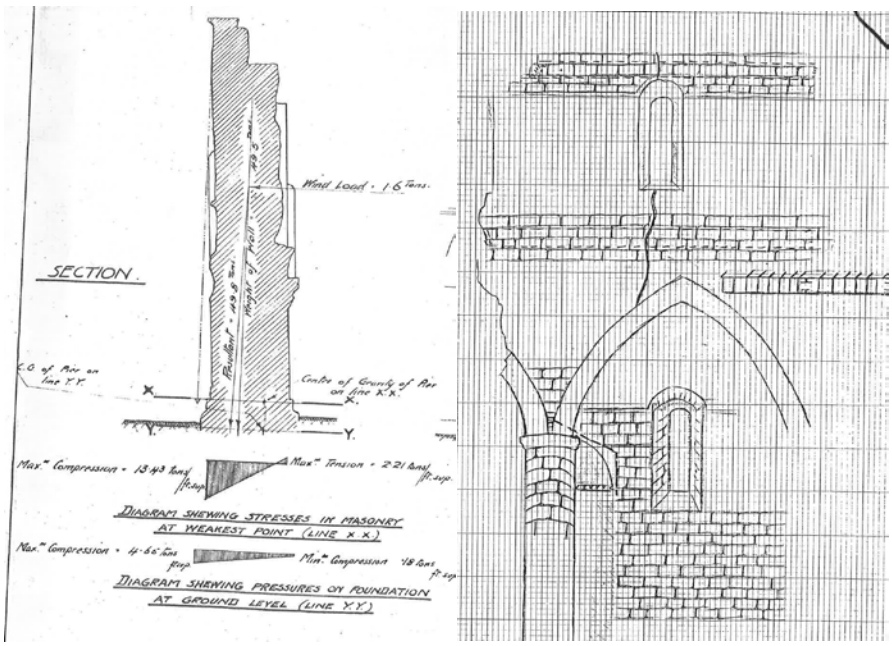


Figure 3e: Annotated MPBW measured drawing of the lean in the chapter house (repaired in the 1960s) (left) compared to the retrospective sketch of a fracture in the nave (repaired in 1935) (Author's photographs reproduced with kind permission of the National Archive and the English Heritage Trust)

Source	Office of Works Report on Works needed	Retrospective Report of Works completed
Date of writing	1927	1969
Contents	Condition of building Practically all the joints are open and vegetation growing in many of them. Serious vertical fractures occur close to the South-West angle extending from the ground to the top, distorting the arches above the entrance doorway. These fractures extend right through the wall and the surrounding masonry is loose. Recommendations The whole of the wall needs thorough consolidation by means of cement grout and the fracture strengthened by the insertion of reinforced ties. Rake out and point the defective joints, rebed all loose stones (urgent).	The South Gable of the Chapel of the Nine Altars was considered the most Urgent and Dangerous [of the works specified in 1927] so was given Priority No.1. While the pole scaffolding was being erected, it was found necessary to erect some Temporary Shoring to the under order of the large window Arch, as some considerable movement had taken place, the South West corner had moved some four or five inches leaving a large fracture between the window and a circular stair-case which had been robbed. Work done Removing vegetation from the wall top, taking off marking and cleaning loose face stones and fixing same. Rough-racking water proofing and pointing wall top. The under order of the main Arch was in a dangerous condition and it was necessary to insert Delta-Metal to make a new seating at the springer of the Arch after which the whole thing was consolidated by means of grouting and tamping. The large fracture between the window and the remains of the stair-case was cleaned out, face stones were drawn and a concealed reinforced bonder inserted, the face stones were reset and the fracture consolidated by means of grout then pointed.
Date of execution	Likely 1930	1930

Figure 3f: This comparison of wording shows the difference in detail contained in the two reports of early works at the Abbey

(REP0034/EH/FountainsAbbey/Fabric/MinistryOfWorksReports/ReportsSeries 1929; AA020107/2/PC6/HECentralArchive 1969)

This archival error is illustrative of the changing visibility of the stonemasons in the paper record, as their expertise was increasingly viewed as manual and material, as distinct from mental and conceptual, work. No longer foreman, Robertson's name disappeared from archive after 1966, reappearing only through his wife, who became an Abbey custodian and when he applied for a custodian job himself (WORK59/104/NA/AncientMonumentsPreservationCommittee1966–1971 1970). In contrast, Robinson's name appears on orders for work, meeting minutes and various reports from the 1980s (for example, AA020107/VOR/PT5/HECentralArchive/VisitingOfficersReports27/07/1963–09/09/1983 1983).

The misattributed archived report – taken from Fountains and now held at the Helmsley stone store – is a mere mistake over two similar names (William Robertson and William Robinson). However, the error is based on an assumption that provokes questions about perceptions of craft knowledge. Entrenched in a transition from the Office of Works' emphasis on physical interaction to a more remote type of paper-based authority, the mistake exposes an unfortunate presumption that the surveyor Robinson must have written the report rather than Robertson, because the latter worked with his hands. It goes beyond the traditional bias towards the elite (such as Commander Vyner's foremost presence in archive) because it highlights the growing dominance of conservation professionals at Fountains, while the craftspeople who made decisions about detail became increasingly obscure. The record of conservation in archive therefore underplays the fact that, intermittently, Fountains thrived as a place of work, craft and conservation from the 1920s to the 1980s.

3.2.3 Working on a guardianship site

Although Fountains did not come into guardianship of the state until 1966, MPBW had already begun basing staff at the site in the years immediately preceding that date. Other than the concerns raised during the late 1950s about the condition of the ruins, there is little clear reason for this documented in archive. Indeed, the only evidence for the MPBW's revivified practical involvement is in the form of a list of officers who visited the site from September 1962, which was compiled by Robertson's immediate successor (and my key informant's predecessor) Tommy Young (AA020107/VOR/PT5/HECentralArchive/VisitingOfficersReports27/07/1963–09/09/1983 1962). According to Rumbold, 'Tommy Young 'ad yes, he'd come from Scarborough Castle', which had been a guardianship site since 1920. Robertson continued to work at the site when Young was brought in as chargehand, but he no longer acted as an intermediary between stakeholders. This became part of Young's role, who, as well as keeping the list, from 1966 completed additional 'visiting officers' reports' describing the verbal instructions he received from inspectors, architects

and area superintendents when they visited site. The reports were then sent to MPBW regional and central offices and the workforce's progress against the instructions monitored and eventually confirmed as complete (see Figure 3g for example). Nowadays, this might seem to reasonably monitor the efficacy of the site-based staff's response to the office-based staff's directions, but the introduction of the reporting system actually marks a notable move towards a more bureaucratic way of working. It is thus possible to interpret this as an important event in on-site relations, denoting a move from a rather loose arrangement of instruction between MPBW and the craftspeople to something more official. I will return to the idea of paper as a means of communication between office-based and site-based staff at the end of this chapter in section 3.4.

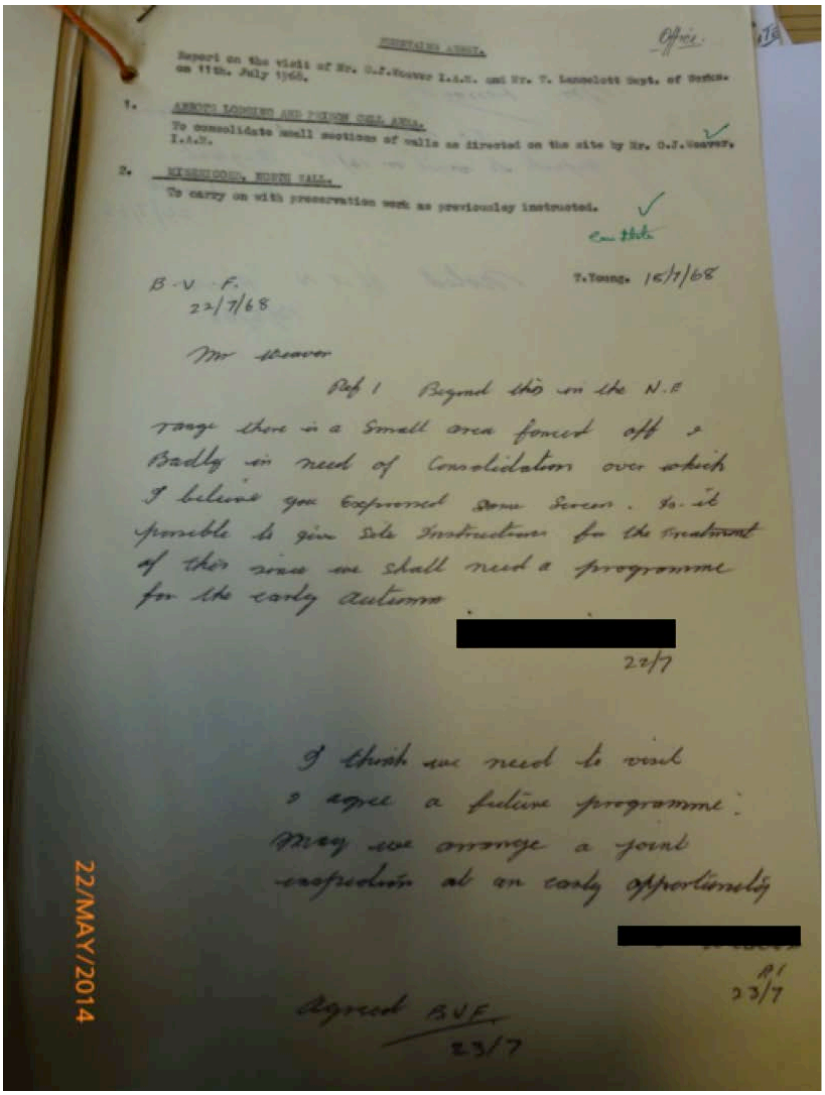


Figure 3g: Tommy Young's interpretation of verbal instructions marked as completed at the MPBW, with further annotations by the architect and ancient monument inspector (AA020107/VOR/PT5/HECentralArchive/VisitingOfficersReports27/07/1963–09/09/1983 1968) (Author's photograph reproduced with kind permission of HE)

Events leading up to Tommy Young's relocation to Fountains are uncertain in the archive, but we do know that throughout the Estate's tenure there were several falls of masonry in, for example, the chapter house (WORK14/686/NA/Works1923–1938 1940b), the chapel of the nine altars (WORK14/686/NA/Works1923–1938 1940b), as well as a general 'deterioration' of condition (WORK14/2433/NA/RepairsAndMaintenance/1930–1959 1957a). This must have attracted the attention of senior figures in MPBW because, in 1958, they produced a report concluding that unless 'a minimum labour force of 20 masons and 10 labourers' could be found for the site, the general decline in condition was unlikely to be reversed (WORK14/2433/NA/RepairsAndMaintenance/1930–1969 1958). As the Estate had at that time only 'two or three' masons (WORK14/2433/NA/RepairsAndMaintenance/1930–1969 1958), the report emphasised the criticality of the situation and, in September 1959, a dual approach to conservation was discussed internally by MPBW (WORK14/2433/NA/RepairsAndMaintenance/1930–1969 1959a). During the meeting, it was noted that, if the 'Department [ ] were to assume control of the whole programme [ ] the Estate masons, who were not paid the normal building trades rates, might not work happily alongside the Department's craftsmen' (WORK14/2433/NA/RepairsAndMaintenance/1930–1969 1959). Because the department did not want to 'become liable for any risks to the public throughout the whole area', they decided to focus their efforts on areas of 'archaeological rather than architectural importance', which, 'broadly speaking [ ] would consist of low-standing masonry' (WORK14/2433/NA/RepairsAndMaintenance/1930–1969 1959b). The assumption was that 'the Estate already had some incentive to attend to the more prominent parts of the monument which attracted visitors, but was unlikely to spend time and money on the less noticeable features which were vital from the archaeological standpoint' (WORK14/2433/NA/RepairsAndMaintenance/1930–1969 1959). This prioritisation of the monument's above ground, visible, fabric was indicative of the MPBW treatment of the site during this period. Again, MPBW favoured one element of the heritage, the physical fabric of the medieval ruin 'as document' (Emerick 2014; Gilyard-Beer 1974), over the other, the later designed landscape. A lack of articulate reasoning for this was discussed section 2.3 and is typical of the Office of Works' early work clearing and levelling sites to present a 'tidied ambience', obliterating later archaeological evidence without clear justification (Emerick 2014; Fry 2014; Gerard 2002; 60-64).

The last piece of evidence demonstrating the reasons for MPBW's renewed interest in the site takes the form of an internal memorandum written by the architect Rawson. In it he referred to two key issues that had been mentioned before. Robertson's important experiential knowledge of the site is consulted when Rawson says:

> …some years ago I asked Robertson, the Estate charge-hand whether he could say from his intimate knowledge of the Abbey over some 30 years, whether, in his opinion, deterioration was taking place, over the whole area, faster than he could preserve. This, he said was certainly true, hence the increase in my estimate over and above increased building cost'.
>
> (WORK14/2433/NA/RepairsAndMaintenance/1930–1969 1961)

This statement was partly intended to justify an increase in MPBW funding to Vyner's Estate because of the continued decline of the ruins, and it demonstrates how valuable Robertson's experiential and 'intimate knowledge' of the site was. The tone differs markedly from Heasman's 'instructions' of 1929 because, after 30 continuous years at Fountains, he was sufficiently expert to foresee repair and estimate their cost. It was paradoxical then that Rawson then drew on Robertson's expertise to endorse expansion of the directly employed *labour*, because of the 'question of technical desirability of working by contract' (WORK14/2433/NA/RepairsAndMaintenance/1930–1969 1961). Consistent with Earle, who was writing 32 years earlier (WORK14/686/NA/Works1923–1938 1929c), Rawson considered that directly employing craftspeople achieved superior standards of conservation. Furthermore, he valued intimate craft knowledge so much that he based an increase in MPBW funding to the site on Robertson's insight: Robertson may have formally been 'directly employed labour' but the profound contribution of his craft-based embodied expertise was well recognised by MPBW.

The archive demonstrates that the rejuvenated programme of conservation at Fountains, which included bringing Tommy Young to site, took place in a context of the monument's continued decline. However, qualitative findings also indicate that, although Rawson valued Robertson's opinion, MPBW found the existing team of Estate masons too small to be effective for the changing nature of the work, which in 1960s included installing floodlighting and electrics, building a café and a toilets, and in 1965 converting the mill into their on-site workshop (AA020107/VOR/PT5/HECentralArchive/VisitingOfficersReports27/07/1963–09/09/1983 1965) (Figures 3b and 3h). It is also possible that by the early 1960s their techniques were seen as somewhat outdated, as shown in the following conversation about the refectory (Figure 3i):

> HR: 'Then we did all the, all the bottom in 'ere'.
>
> SN: 'In the winter?'
>
> HR: 'Yeah. Now what actually 'appened, this was done by the Estate. You can tell it was done by the Estate look, 'ow 'igh it is again look. Bill Robertson did all this'.

Figure 3h: The Abbey mill was used as the stonemasonry workshop

(See Figure 3b for an idea of its proximity to the Abbey)

(Author's own 2019)

Figure 3i: The refectory was conserved with rough-racking, the built-up stones on the wall top at the far south end, and soft topping on the east and west elevations

(These techniques were used by the Estate and the MPBW, respectively)

(Author's own 2013)

In this exchange, Rumbold referred to the rough-racking technique that was used by the Estate as a hard and impermeable method for protecting the wall tops. It was widely used across Office of Works' properties until it was superseded by 'core work', another 'modern' and impermeable weather barrier 'available at their disposal' (AC 1931). Eventually, this would be replaced by soft-topping: a new method using breathable materials that protects the masonry by allowing water to evaporate away (Kent 2013). This conversation demonstrates that, by the time Young came to site, MPBW stonemasons were practising new techniques that were considered better practice, which the Estate employees had not adopted. Rumbold, who joined MPBW in 1969, went on to talk in detail about the wall bases in the refectory, and how Robertson had had to change his working methods when 'he came [and] worked with us' because Tommy Young, as Robertson's 'saviour' had stopped him from working in some 'quite funny ways' (Rumbold). Rumbold remembered:

> '…when I first come 'ere, I remember Bill Robertson sayin' "go in that field, take that bucket". I used to look at 'im right strange, cos he was a real Scotsman was Billy. "Now young laddy", that's 'ow 'e used to call ya, "now young laddy", I were 27, "go up into that field, and where them cows are, get me all that cow crap"'.

An absence in the paper record means that this account cannot be substantiated, which creates a methodological dilemma that is returned to in my final reflections in this chapter. However, taken as accurate, the use of combined earthen mortars, now a recognised vernacular building technique (HE 2012c, 86), perhaps demonstrates that the Estate workforce employed both modern and traditional methods, as often advocated today. Nonetheless, Rumbold's declaration of this as 'funny' and 'strange', and of Young as Robertson's 'saviour', indicates that some of his practices had not kept up with MPBW's and were seen as inferior by 1969. It is clear, therefore, that not only did MPBW occupation bring with it new craftspeople and a vastly accelerated pace of work but also new conservation practices and an organisational hierarchy that included formally recorded instructions from office-based visitors to site.

Although it is not known how Robertson felt about the incoming MPBW masons, Rumbold recalls Robertson and Young as 'having hated each other'. It is possible that they worked separately at first, while the Estate masons were employed on 'architectural' elements of the ruins, and MPBW masons on 'low-standing, archaeologically vital' masonry. Indeed, while the internal discussion in September 1959 is the only MPBW record of the strategy, Rumbold remembers it similarly in a conversation recorded while looking at the low-lying walls of the outer court (Figure 3j):

> 'Now, all that are across there, that was the first lot were done by Tommy Young an all that when they come 'ere. So the bake, the bakehouse, the prisons, the infirmary, all was done'.

Figure 3j: The low-lying walls of the infirmary were among the first worked on by MPBW masons

(Author's own 2013)

Rumbold clearly observed and contributed to MPBW's early work on the low-standing masonry, but thought that this was 'because it was easy to get at' and they 'didn't need scaffolds', which enabled MPBW to 'edge in' on Vyner's territory. Access is undoubtedly easier here, but it is not the reason for its prioritisation given in the archive, which shows it as an expedient approach that accounted for the Estate's work, as well as the threat to significant archaeology. Rather than this being evidence of a tension between office-based and site-based staff, the confusion is more likely representative of the distinct, but unrecorded, concerns affecting the two craft groups. At Fountains, this appears to have become less of a problem from the mid 1960s.

In 1966, as noted above, WRCC acquired the Estate from the private owner, Commander Vyner, who had had specific ideas about the management of the Estate and the conservation of its ruins. It seems likely that the local authority's benign motivation for purchase was due to 'some sort of moral commitment' to saving a monument of national heritage, which reflected growing international recognition of the 'common responsibility to safeguard [heritage] for future generations' (HLG131/510/NA/LoanSanctionForAcquisitionOfStudleyRoyalParkAndFountainsAbbey 1966; VC 1964). In fact, the Ministry for Housing and Local Government (MHLG), whom WRCC applied to for a loan to finance the acquisition, considered MPBW position with regards to ownership as follows:

> [MPBW will] play this cool so as not to push the price up, though I think they would buy at a pinch if the County don't. This is a building, in a setting, of international reputation and no Government could afford to let it be lost or maltreated. MPBW would be very glad to take it into guardianship (i.e. assume full responsibility for upkeep and charges for admission (as at present), but would prefer the County Council to buy.
>
> (HLG131/510/NA/LoanSanctionForAcquisitionOfStudleyRoyalParkAndFountainsAbbey 1965b)

The insinuation in this excerpt, of WRCC being the official owner in title, while MPBW took full responsibility for management and maintenance, seems to have played out in reality. Apart from a meeting about the initial purchase and area (WORK/14/2744/NA/Works/1962–1966 1966b), and an exchange about WRCC plans for grazing the monument's farmland setting (WORK14/2434/NA/HistoricalAndArchaeologicalInformation/1946–1970 1970), little evidence of WRCC's involvement in the site exists at all. Furthermore, none of the names of the three WRCC representatives at that meeting, Kenyon, Hazel and Denby, appear on Young's records of visitors to the works unit, and, similarly, there is no evidence that North Yorkshire County Council (NYCC) officers visited when it inherited Fountains in the 1974 local government reorganisation.

With little involvement from WRCC or NYCC, MPBW would have been the primary stakeholder and decision-maker on site from 1966 until the NT acquired it in 1983. This is a situation that is almost impossible to imagine today, where decisions about heritage aim to be inclusive, and as such, subject to debate, consultation and change. For contrast, a recent Fountains Abbey WHS management plan cites 25 organisations and groups to consult on the contents of the 5-year strategy (NT 2009). Current theory would regard the MPBW 'expert' dominance at Fountains as reinforcing an unrepresentative 'authorised heritage discourse', but it is possible that it brought certain advantages for the craftspeople. Indeed, the comparative lack of debate about conservation priorities, staffing and expenditure in this period suggests one of relative stability: a 'carefully negotiated' (Sennett 2013) environment where a group of professionals and craftspeople created a collaborative partnership that enabled each party to work relatively autonomously in the common goal of conserving the ruins.

Of the reports that do exist in the main archives, there are no correspondence papers or meeting notes; they mainly comprise Young's reports of visitors to site, together with his interpretations of their verbal instructions for the masons. Most visitors were employed by MBPW (DofE from 1970), and often Young recorded that 'no instructions were given' (AA020107/VOR/PT5/HECentralArchive/VisitingOfficersReports27/07/1963–09/09/1983 1967). All this gives the impression that the office-based staff, the ancient monument inspectors, architects and superintendents of works, visited site to issue broad instructions such as 'consolidate all the face

work [of a section of the infirmary passage] in the usual way' (AA020107/VOR/PT5/HECentralArchive/VisitingOfficersReports27/07/1963–09/09/1983 1971). Rumbold recalled that MPBW's 'main office for the North of England, was, er for Yorkshire, Lancashire and Cheshire, was at Duncombe Place in York just opposite the Minster'. In addition to an 'inspection from London' 'twice a year in spring and autumn', when the 'chief inspector would come with the architects [ ] look at all the work and leave us', superintendents of works (people like Burt Ferrar, Alistair Foxdale, Derek Willey and Eric Marsh) at 'Duncombe Place [ ] they actually did the day-to-day running' (Rumbold). The superintendents of works were generally 'ex-craftspeople', who had moved into an office to perform an overseeing role. Their geographical proximity meant that they were much more likely to visit the site than the architects nominally in charge.

This evidence supports the image that MPBW office-based and site-based staff worked together harmoniously and without much outside intervention. Furthermore, it seems that, despite the changeover from MPBW to the DofE in 1970, the on-site relationships were simpler than they had been in the Vyner years a decade earlier. There was a formalisation of process in 1970, when Young, as well as annotating a blank piece of paper with his monthly visiting officer's report, started completing a standard site progress report template. However, interestingly, the pro forma used was headed 'Ministry of Public Buildings and Works – Ancient Monuments Branch' until August 1973 when a new form, identical except for the heading 'Department of the Environment – Ancient Monuments Board', was used. This bureaucratic consistency adds weight to the theory that organisationally this was a very stable time at Fountains, uninterrupted even by a significant change in management structure.

Both archival and qualitative sources suggest that stonemasonry, practical conservation and apprenticeship all prospered at Fountains during this period. The regular reports on on-site progress and visiting officers' instructions show that there was plenty of varied work on the monument ruins and around the site (Appendix Four), which included regular reactive 'first aid work' (AA020107/VOR/PT5/HECentralArchive/VisitingOfficersReports27/07/1963–09/09/1983), recording and dismantling masonry in the chapter house (AA020107/VOR/PT2/HECentralArchive/SiteProgressReports22/01/1970–31/03/1984 1970), straightening a leaning section of masonry in the infirmary passage with 'reinforced concrete' (AA020107/VOR/PT2/HECentralArchive/SiteProgressReports22/01/1970–31/03/1984 1972), 'completely renovating and re-plastering' the Abbey café (AA020107/VOR/PT2/HECentralArchive/SiteProgressReports22/01/1970–31/03/1984 1975) and working on the scaffold around Huby's Tower (AA020107/VOR/PT2/HECentralArchive/SiteProgressReports22/01/1970–31/03/1984 1980). The

same documents show a steady increase in the numbers of stonemasons and labourers on the site during the early 1970s, from a low of three in July 1963 (AA020107/VOR/PT5/HECentralArchive/VisitingOfficersReports27/07/1963–09/09/1983 1963), to 16 in the next available record of January 1970 (AA020107/VOR/PT5/HECentralArchive/VisitingOfficersReports27/07/1963–09/09/1983 1970a), and a high of 35 in January 1972 (AA020107/VOR/PT5/HECentralArchive/VisitingOfficersReports27/07/1963–09/09/1983 1972), before the numbers stabilised at around 20. Concurring with archive, Rumbold remembers that 'at one time we had 30 people here plus five apprentices', which was also the 'happiest time a my life was from 1969 to 1980'. The stonemasons that participated in the focus group in 2013, who all began working at Fountains during or just after this period, remember the time fondly too. For many of them it coincided with their apprenticeships, when they were expected and actively encouraged to develop skills, a trade and gain qualifications. Their particular resonance with the place and training provided is compared with the exploration of apprentices in Chapter Five.

Excluding Rumbold, there were six focus group participants. Of them, four started as apprentices between 1972 and 1982 (John Maloney in 1972, Adam Stone in 1979 and Andy O'Boyle and Eric Donovan in 1982). Interestingly, while their apprenticeship experiences were quite different (Maloney began working at Barnard Castle, Stone at Marmion Tower 'an outpost of Fountains', and O'Boyle and Donovan at Fountains Abbey itself), there were striking similarities. During the winter months, all were based in purpose-built banker shops at Barnard Castle, a depot in Pollington and the mill at Fountains (Figures 3b and 3h). They were taught by individual stonemasons employed by the DofE specifically for this purpose, Jack Hurst at Barnard Castle and Dave Sweeney in the York area (Figure 3k). They all attended the Building Crafts College in London or 'York Tech' on block release to achieve their City and Guilds qualifications in stonemasonry. When the weather was good enough, the apprentices would work on site consolidating the different ruins. Collectively, the four described the apprenticeship as 'great', 'fantastic', 'good', 'perfect[ly] focused' for the job, and as 'training [where] they encouraged you to go on'. The one key drawback of the apprenticeship was that there was limited banker work at the monuments, which prevented apprentices becoming skilled in this vital area of masonry. Their work in the banker shops usually 'went as test pieces in different places', and Donovan recalls that the 'jambs, them keel moulding things' they made for Huby's Tower, the main project at Fountains involving banker work during the period, ended up 'on site at banker shop'. During a tour of the ruins later on the same day, the masons pointed out a pile of unlabelled apprentice pieces outside the mill at Fountains Abbey (Figure 3l). It is the only real example of the stonemason's individuality discernible to the naked eye because interventions on the monument were restrained in accordance with direction from MPBW and internationally. Even when

Rumbold was able to pointed out the work of individual masons, his assertion that 'BJ Sanderson did this' in 1974 (Figure 3m) suggested that he was recollecting the work rather than identifying the hand of its maker.

Figure 3k: Dave Sweeney on the scaffold at Fountains

(Anon, date unknown. Reproduced with kind permission of the NT)

Figure 3l: The stonemasons' apprentice pieces

(Author's own 2019)

Figure 3m: Rumbold recollected BJ Sanderson's pointing work

(Author's own 2019)

Although the lack of banker masonry eventually led the four to leave the site to join Ripon Cathedral or local stonemasonry firms, all participants commended the apprenticeship for the broad range of skills they learnt. As well as their craft, the masons were encouraged to pursue training and qualification in scaffolding and management. Stone remembered himself and two DofE colleagues being the 'first trade trained applicants for an HNC [Higher National Certificate] at York', which Rumbold described as being 'big, big deal. Alistair 'ad to, 'ad to… they 'ad to move mountains in London to get these lads on that course'. He was referring to area superintendent Alistair Foxdale, a 'time-served [York Minster] mason' (Maloney), who was remembered by the four apprenticeship-trained participants as, variously, 'like a father', 'a standout figure' and 'the biggest single influence in my life' in his ambition 'for us to 'ave a trade if we ever left'. It was the 'unorthodoxy' of Foxdale, the participants thought, that led to his area having the 'biggest' training programme, when compared to the other DofE regions nationally. His influence was considered to have achieved 'the best facilities for people to be trained', which was the reason why 'the biggest tribute you can give to Fountains, like Dave Sweeney an 'Enry an people like that, is that just about everybody that went through their 'ands, with minor exceptions, is still in the job'.

So, the recollections, experiences and continued employment as stonemasons of the four apprentice-trained participants demonstrate that the training programme at Fountains during the first 17 years of guardianship could produce consistently excellent results. Although the limited amount of stonemasonry was frustrating, DofE tried to resolve this by providing a purpose-built banker shop, and 'one man, for four years, employed by Alistair, 'e interviewed 'im, to teach us. That was 'is job,

nothin' else'. Furthermore, the broad range of construction and conservation skills they gained, from former foremen of works like 'Josh [Handley], George [Cott], Maurice Winspear, Tommy Young', prepared them for working in the construction sector quite widely. Principally, however, the former apprentices seem to remember it as a place where they were nurtured and encouraged to develop their skills. Donovan encapsulated it like this:

> 'My overriding memory is more or less like being in family. It was a bit dysfunctional but it were a good, it were a very good place to be'.

Corresponding with a recently identified disruption in craft education (Hartley forthcoming), the focus group generally agreed that O'Boyle and Donovan, who started their apprenticeships in 1982, represented the 'last generation to be taught properly'. In 1983, the NT acquired the site, and the culture, which had provided such fruitful conditions for training apprentices, seems to have changed again. The archival and qualitative evidence for this is discussed below.

3.2.4 The Royal Commission and the National Trust

In 1983, the relative administrative stability enjoyed at Fountains was disrupted by the Ancient Monuments Board being incorporated (as the Historic Buildings and Monuments Commission [HBMC] into the newly formed English Heritage (EH) (National Heritage Act [NHA] 1983). At the first, monthly site progress meeting for stakeholders on 24 July 1984, a five-year programme of works to the nave, chapel of the nine altars, east guest house, cellarium and mill was tabled, as well as a more detailed financial forecast for the financial year 1984/85 (AA0020107/2PR/PT2/HECentralArchive/SiteProgressMeetings18/07/1984–14/12/1988 1984a). This was the first time that an itemised and time-bound plan of works had been established, which could be used to scrutinise progress transparently. Such programming of works denotes a further move towards a more officially directed way of working, where the masons were monitored for efficiency as well as quality. Interestingly, the composition of the monthly meeting, to which an architect, superintendent of works, engineer and inspector were invited, suggests a similar trend because there was no one representing the practising craftspeople. While the implication of these two archival vestiges is that the growth of paper-based instruction in conservation directly related to its professionalisation, there does seem to be, in some instances, a practical, rather than a procedural, need for such material.

Although some of the detail of the project programme, such as the 'winter work' in the cellarium (Figure 3n), was already in place on site, it may be that an overarching plan was necessary because, later in 1984, a summary of 'future cost and programme times' found that the directly employed

labour (DEL) were, in comparison to external contractors, working slowly (AA020107/2DT/HECentralArchive/DesignTeamMeetings25/09/1985–09/09/1996 1983). Without mentioning Heasman and Rawson's previous concerns about technical quality, the estimate shows that the existing DEL would take more than 54 years to complete the works, a medium-term contractor (MTC) less time, and that all works would take only 14 years if everything was tendered as lump sum contracts. The stakeholder meeting group therefore advised HBMC to 'supplement the DEL present operation by using Contractors on a Measured Term basis and short term individual contracts to carry out certain Preservation priorities suited to the Contract labour force available in the area' (AA020107/2DT/HECentralArchive/DesignTeamMeetings25/09/1985–09/09/1996 1983). However, it is clear from their strategy of 'improving the annual output of the DEL force' that they envisaged the activities of the DEL adjusting to greater efficiency but certainly not being curtailed.

Figure 3n: Consolidating the cellarium vaults was standard winter work for fully trained masons

(Author's own 2013)

The archive shows that contractors undertook certain work at Fountains throughout the 1970s when, for example, cables were being laid (AA020107/VOR/PT5/HECentralArchive/VisitingOfficersReports27/07/1963–09/09/1983 1970b), and repairs were needed to the roof of the toilet block (AA020107/2PR/PT2/HECentralArchive/SiteProgressMeetings18/07/1984–14/12/1988 1983). However, the early 1980s appears to be the first time that they worked on the ruin, when 'they thought "oh, contractors could do this". So they gave contractors some work on the rear walls and…' (Rumbold). There was concern about the suitability of contractors for the sensitive ancient monument from the stakeholder meeting group at the outset. Rumbold recalled 'not [getting on] very

well' with the contractors because 'they 'adn't been trained properly 'ad they?' He went on 'I remember an [area superintendent] sayin' to me, "Don't worry 'Enry, they'll get rid of 'em eventually." They didn't want 'em neither. They were made to 'ave 'em by the government, weren't they?'

The group devised a 'general strategy [to] employ DEL in any of the more archaeologically sensitive areas of the Abbey, the main church and the buildings around the cloister' (AA020107/2DT/HECentralArchive/DesignTeamMeetings25/09/1985–09/09/1996 1986b). In a lecture given at the Archaeology of Monasteries conference in November 1994, archaeologist Glyn Coppack confirmed this when he said of the period that 'these were the days of the Measured Term Contract, when simple and repetitive work was put out to contract with the intention of concentrating our limited direct labour force on more specialist work' (EHArchiveHelmsley/FountainsAbbey/BoxOfPressCuttings 1994). Unfortunately, as anticipated by Earle in 1929 and Rawson in 1961, the group was unable to monitor contractors working on the monument, and the standard of their works was discussed at length during monthly progress meetings. In September 1985, the group were critical of 'the MTC [ ] staffing their work in a most irregular manner [and] much of the work [being] done by labourers rather than by tradesmen and the quality of the work [ ] leaves much to be desired'. Poor standards of work to both the east and west guest houses, including 'very uneven' pointing, 'damage to a carved stone caused by clumsy maneuvering of equipment', poor 'core work' and 'consolidation of the vault core' on the north-east corner. The diverse array of pointing and consolidation techniques visible today on the guest houses compares tellingly with work to the main ruins in an illustration of MPBW's point (Figure 3o). On top of damage to the fabric, MPBW was also worried that 'the lowering of standards accepted from the MTC could result in a lowering of standards being produced by DEL'. The need for more supervision of the MTC was stressed' (AA0020107/2PR/PT2/HECentralArchive/SiteProgressMeetings18/07/1984–14/12/1988 1985c). This was a reiteration of Robertson's apprehensions of 1961 (WORK14/2433/NA/RepairsAndMaintenance/1930–1969 1961), that the presence of external contractors would have a negative impact on the DEL. The specific concern was different, but the underlying need for consistent treatment and demands of staff was the same, and was resolved on this occasion by making Rumbold 'directly responsible for the supervision of the MTC work' (AA0020107/2PR/PT2/HECentralArchive/SiteProgressMeetings18/07/1984–14/12/1988 1985d).

Figure 3o: The guest house's array of unfinished neat cement pointing (1), untamped white cement (2), and wider, sandy joints (3) for comparison with the neater pointing of Huby's Tower

(Author's own 2019)

The site archaeologist's diary of the 1980s sheds light on how the masons and others on site reacted to the MTC during the working day. On 5 September 1985, the diary states '[the MTC] are running amok with river walls. Had already bedded southern river wall which should have waited to be watched and have completely levelled the wall to beyond recognition' (EHArchiveHelmsley/FountainsAbbey/PlansRegister2.19/2/SiteDiaries1.4/2–1.4/4/Diary25/02/1985–06/05/1988 1985a). Six days later, the diary records that the area superintendent said 'I had to find them another job if I was to stop them' (EHArchiveHelmsley/FountainsAbbey/PlansRegister2.19/2/SiteDiaries1.4/2–1.4/4/Diary25/02/1985–06/05/1988 1985b). The problems were not resolved by Rumbold's appointment, because the following June he was 'not happy' with some MTC work and so 'refused to let them take the area back anymore until a decision reached between the ancient monument inspector and area superintendent' (EHArchiveHelmsley/FountainsAbbey/PlansRegister2.19/2/SiteDiaries1.4/2–1.4/4/Diary25/02/1985–06/05/1988 1986a). Here, Rumbold recognised and halted harm being done to the heritage until his specialist colleagues could advise more fully. This is a good example of the union over the monument's importance enabling a collaborative effort to which each could contribute their own expertise autonomously, while relying on the other in special circumstances. Eventually, the contract with the first firm ended and another company was engaged in the work, and, although

there were problems initially, the working relationship improved when the new MTC proved himself: 'the placing of the stone slabs had been looked at by superintendent of works and the conservation engineer and it was also looked at by the conservation architect following the meeting. All agreed that the work was most unsatisfactory and superintendent of works reported that he understood that the MTC himself, was also unhappy with the standard of work and had asked that it be re-done' (EHArchiveHelmsley/FountainsAbbey/PlansRegister2.19/2/SiteDiaries1.4/2-1.4/4/Diary25/02/1985-06/05/1988 1986a).

The issue of trust between the office-based and site-based staff emerges in archive on several occasions. In 1911, Frank Baines had issued on behalf of the Office of Works *General Instructions to Foremen in Charge of the Works of Preservation* (Emerick 2014, 65). Then, in 1927, the Office stated that 'it certainly appears necessary that expert supervision should be given and it is not suitable that the work should be entrusted, as often is the case, to an Estate Foreman or local builder that has no knowledge of the methods which should be adopted' (WORK14/686/NA/Works1923–1938 1927). The Office also talked about 'trust' when discussing the appointment of a foreman for Fountains (WORK14/686/NA/Works1923–1938 1928b), and they clearly valued DEL skills and consistent relationships with individuals, as opposed to the 'irregularly' staffed MTC. Regard for the DEL was also evident in 1986, when an ancient monument inspector 'asked if consideration could be given to employment of two further apprentices to ensure some continuity of DEL skills in future' (AA0020107/2PR/PT2/HECentralArchive/SiteProgressMeetings18/07/1984–14/12/1984 1986). The records show that numbers of DEL staff and apprentices grew from 1985 when there were nine staff and two apprentices (AA0020107/2PR/PT2/HECentralArchive/SiteProgressMeetings18/07/1984–14/12/1984 1985a), to the last visiting officer's report in 1988 when there were eight staff plus four apprentices (AA0020107/2PR/PT2/HECentralArchive/SiteProgressMeetings18/07/1984–14/12/1988 1988b). Nonetheless, the focus group's assertion that the two apprentices taken on in 1982 were the last to be trained properly deserves some exploration.

The experiences of the two focus group participants who joined the DEL in 1986 show that training did continue, but not through providing apprenticeships to young people. Taylor, taken on as a labourer, describes a rather less formal programme of recruitment, which 'was quite by accident really. It was only ever s'posed to be short term [but I] progressed [ ] was given the opportunity,' and 'ended up there 20 years'. Taylor became 'like on a site supervisor for [Rumbold] and it becomes a massive part of ya life, at the time. And I loved it, it were best time I'd 'ad. Ya know'.

Dawson, who had already undertaken an apprenticeship at a local monumental masonry company that worked on headstones, 'inscribin' 'em, going out and fixin' 'em', recalls a similarly informal experience: 'I came as a monumental mason and I got put on site…' and 'I went wi…Brian Yeoman [ ] John Snowden. [ ] I can't remember who else'. These masons do not consider their training to have been as effective as those who undertook apprenticeships, either because 'I didn't get any practice in the bankers shop at all' or because the training lacked qualification. Indeed, at the focus group, they avoided agreeing that their training was 'the opportunity of a lifetime' despite another participant asserting so. Quality and content aside, opportunities at Fountains also seem to have become more exclusive. Both participants taken on in 1986 were introduced to their jobs as friends of existing masons, whereas the others spoke of a more open style of recruitment that involved adverts 'on the board at school' and rigorous interviews where 'special' candidates were selected on merit. This compares interestingly to the recruitment practices of the firms and estates discussed in Chapters Four and Five.

The introduction of external contractors and accessibility of training were not the only things that altered the practice of conservation masonry at Fountains during the 1980s. On acquiring the site, the NT, reflecting the wider of view of international advice (VC 1964), took a more holistic view of the site's importance. It was primarily concerned with the Abbey's landscaped garden setting, an 'international place in the history of landscape design'. This was a shift in emphasis that was of 'supreme importance' given 'the rather run-down condition of the woods and grounds' (BP2/241/NA/RoyalFineArtCommission/FountainsAbbeyAndStudley/Royal 1982). Fragmented records of the NT's daily activities demonstrate that it largely followed this aim through killing weeds (EHArchiveHelmsley/FountainsAbbey/PlansRegister2.19/2/SiteDiaries1.4/2–1.4/4/Diary25/02/1985–06/05/1988 1986b), planting trees (EHArchiveHelmsley/FountainsAbbey/PlansRegister2.19/2/SiteDiaries1.4/2–1.4/4/Diary25/02/1985–06/05/1988 1987b), and using tractors (EHArchiveHelmsley/FountainsAbbey/PlansRegister2.19/2/SiteDiaries1.4/2-1.4/4/Diary25/02/1985–06/05/1988 1987a). Disagreements between English Heritage (EH) and the NT seem to have been isolated to instances where the conservation of the monument and the landscape clashed, such as in 1987 when the NT stopped one of HBMC's contractors erecting a site hut in the cellarium (AA0020107/2PR/PT2/HECentralArchive/SiteProgressMeetings18/07/1984–14/12/1988 1987), and then in 1988 when MPBW works were disrupted because of bats (AA0020107/2PR/PT2/HECentralArchive/SiteProgressMeetings18/07/1984–14/12/1988 1988a). By the end of the decade, the number of different stakeholders had grown to include, among others, the site's owner, several conservation contractors and subcontractors, and the Nature Conservancy. Over time, HBMC and the DEL questioned all of their treatment of the monument, highlighting, on a

very small scale, the greater potential for conflict that multiple stakeholders can bring to conservation.

It seems logical that a practice of recording instructions clearly and then closely monitoring the progress, quality and cost of works undertaken may have emanated from a need to supervise the increased numbers of stakeholders on site. The first reference to detailed architectural drawings stipulating specific methods for conserving the ruins is in the minutes of HBMC's first monthly progress meeting, which states that the 'drawings are with the DEL' (AA0020107/2PR/PT2/HECentralArchive/SiteProgressMeetings18/07/1984–14/12/1988 1984a). Later, there is evidence that the DEL contributed to making the paper instructions by 'inspecting elevations of the church marking up drawings to show replacement stone required' (AA0020107/2PR/PT2/HECentralArchive/SiteProgressMeetings18/07/1984–14/12/1988 1984b). In June 1985, it was reported that 'Mr Rumbold on site should have copies of drawings and Work Orders made available to him' (AA020107/2PR/PT2/HECentralArchive/SiteProgressMeetings18/07/1984–14/12/1988 1985b), but it was only in 1988 that the conservation architect had to issue completed drawings to the York office 'to allow the DEL to proceed with this work' (AA0020107/2PR/PT2/HECentralArchive/SiteProgressMeetings18/07/1984–14/12/1988 1988c). The tone here suggests that the architect's preparatory work must be complete before the DEL could start, elevating the paper-based part of the conservation process above the physical interaction. According to my key informant, this represented a complete reversal in attitude. Biannual visits from the DofE's London headquarters were hierarchical and 'the Chief Inspector, were in front of the line, with Tommy Young and, [superintendent of works] Goff Hutchinson. Then it went in rank back. Architect were at back at queue' (Rumbold).

This description of practices during the 1970s indicates that, while it was considered important to record archaeological information as part of understanding and managing the ruins' archaeology, detailed instructional drawings from architects were less necessary. The visiting officers' report template used from March 1973 asks for an architect to sign above the instructions as recorded by the foreman. This process demonstrates that an architect would confirm the craftsperson's interpretation of verbally imparted instructions rather than transmit the instructions to them in writing (AA020107/VOR/PT5/HECentralArchive/VisitingOfficersReports27/07/1963–09/09/1983 1973a). Tommy Young's few references to working architectural drawings in the 1970s' records are very explicit (AA020107/VOR/PT2/HECentralArchive/SiteProgressReports22/01/1970–31/03/1984 1971; AA020107/VOR/PT5/HECentralArchive/VisitingOfficersReports27/07/1963–09/09/1983 1973a), suggesting that they were distinctive from taking 'instruction on site' that was reported more

frequently (AA020107/VOR/PT5/HECentralArchive/VisitingOfficersReports27/07/1963–09/09/1983 1973a; 1973b). These pieces of evidence in both the written and oral record denote an important change for the site foreman, who was being overseen increasingly remotely by paper-based materials, which suggests that these only began to prevail over oral communications from the 1980s onwards.

Unfortunately, the masons' archive has been lost (Rumbold), but one example of the drawings they used survives in EH's Helmsley archaeology store (Figure 3p). From it, we can see that the masons sectioned each wall into phases, drew and labelled the tree roots and each stone, and annotated the record twice. Near to where the stones look very loose, it says 'obscured by shoring, section very unstable', and the mason has been unable to sketch each stone separately. Where the joints are much tighter, to the right of the drawing, the mason has written 'joints cleaned out and point in situ. No concrete behind. Top four courses rebed and point' (EHArchiveHelmsley/FountainsAbbey/BoxOfPressCuttings n.d.). Materials notwithstanding, it is clear that these methods are not particularly innovative because they are fairly similarly described in various progress reports of the 1970s (AA020107/VOR/PT2/HECentralArchive/SiteProgressReports22/01/1970–31/03/1984 1972), and even in the 1927 condition report:

> [Wall tops] should be cleared of all soil and vegetation and [ ] waterproofed by re-bedding the loose upper courses in waterproof cement.
>
> (REP0034/EH/FountainsAbbey/Fabric/MinistryOfWorksReports/ReportsSeries 1927, 1)

During the 1990s, architectural drawings were produced with similar, very specific, annotations such as 'remove any growths', 'reset any loose stones', 'rake out all loose jointing mortar' and 'cut out corework between skins', which clearly derive from the works undertaken from the 1920s onwards (AA020107/2/PC2/HECentralArchive/Works10/03/1993–16/02/1996 1993). In contrast, these drawings contain much more directional information than even those made slightly earlier in 1987, when there were very precise instructions given about certain details, but wall tops were to be treated 'as instructed by supervising officer' (AA020107/VOR/QuarterlySiteProgressReports1986–1993 1988). Both are strikingly different to the few drawings of 1930, which recorded and analysed severe structural issues such as the slipping of the west wall of the chapter house, but without specific instructions for repair (WORK31/1241/NA/WestWallChapterHouse 1930). It seems that, during the early period of conservation at Fountains, the conceptual drawings, to borrow Ingold's (2010) phrase, were not supported by detailed instructional drawings from the architect, Heasman.

Masons were instead expected to rely on communications with the superintendents of works, or the general advice given in the early 1927 report.

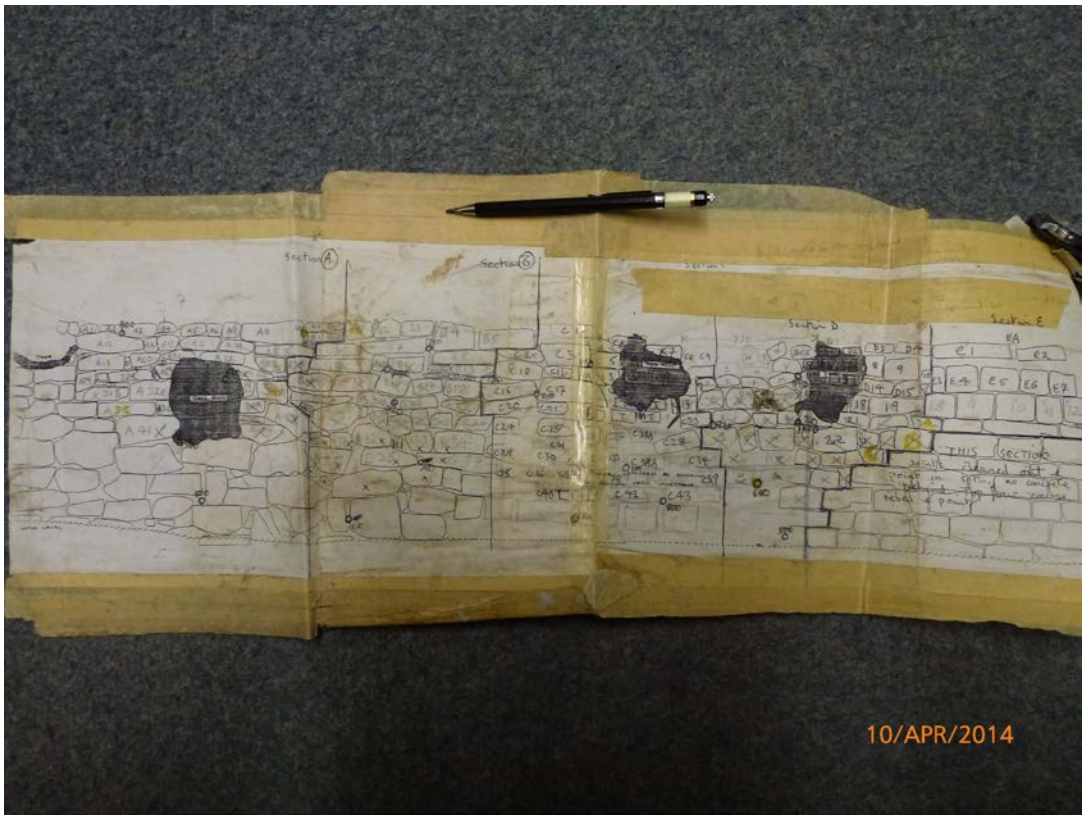


Figure 3p: A stonemason's working drawing of masonry

(EHArchiveHelmsley/FountainsAbbey/BoxOfPressCuttings n.d.)

(Author's photograph reproduced with kind permission of the English Heritage Trust)

So far this section has shown that the relatively stable existence of the masons under the Ancient Monuments Board changed considerably during the 1980s. Although some of the changes such as the influx of external contractors were outside the control of HBMC, the increased use of paper to instruct the masons' work related to the organisation's need to identify an accountable body. The growth of paper-based communication seems to have had an impact on the working lives of the masons, particularly on the foreman's important role as intermediary, which was performed by Robertson, Young and, lastly, Rumbold. They were no longer self sufficient and able to conduct routine work autonomously like their predecessors, who 'designed that Huby's tower scaffold theirselves and did all the scaffolding on', and able to build an electrical substation largely without professional intervention: 'them drawings come for that, and Tommy Young just said to Maurice Winspear an a couple more "build that". Just gave 'em it an they built it'. As HBMC's emphasis shifted from practical conservation to a paper-based concept, the profile of the intermediary's associate – the superintendent of works – also changed:

> ‘In the past ‘they all ‘ad one thing in common. They were all stonemasons. You don’t get that now do ya so much? All the people I deal with for Councils, they’re jobs that in the good old days, that woulda been clerk a works. They’d a been joiners, an brickies, an stonemasons who were comin’ to the end a their career an thought ‘can’t physically do this…’. It’s not like that now’.

From the focus group participants’ point of view, this meant that the masons’ expertise was no longer properly understood. Critically, they had no ambassador to empathise with their needs and represent them at a conceptual level, the ex-craftspeople that ‘set me up for what I am today’. Several of the people described above no longer worked in this field, but it is not just the individuals who have changed. The organisational landscape of conservation has altered radically and research shows (Thiel 2012a) that there is little means for craftspeople to move into more thought-based roles and recreate the impact of superintendents of works, which the masons saw as critical to their needs being understood by MBPW. The privatisation of the DEL, which began in 1993 and signifies the end of this time period, also played a part in this.

The DEL’s move to the private contracting firm Historic Property Restoration (HPR) happened very quickly, and, by 1993, all works at Fountains were being undertaken by HPR and other external contractors (AA020107/2DT/HECentralArchive/DesignTeamMeetings25/09/1985–09/09/1996 1996a). In 1994, HPR and EH began meeting every month to discuss progress (AA020107/2/PT16/HECentralArchive/Works07/09/1994–30/05/1994 1994a). It was the first time that a foreman of works had been invited to such meetings, and symbolises the formal monitoring arrangements necessitated by the new organisational divide between the office-based and site-based staff. Confusion over these arrangements must have remained though, because, in 1995, EH formally asked the NT to stop requesting works of HPR, because of the ‘cost implication’ (AA020107/2/PT16/HECentralArchive/Works07/09/1994–30/05/1994 1995). Indeed, the budget and project timescales came to eclipse all other concerns, with little mention of the quality of the work or the continuity of the masons’ skills after 1990. By 1994, the modern method of organising building sites via an accountable architect and pre-determined specification (AA020107/2/PT16/HECentralArchive/Works07/09/1994–30/05/1994 1994b) was well and truly in place, and HPR was only discussed in terms of progress and cost. The days of the foreman recording his interpretations of instructions to give the craftspeople, which now provide such a rich body of information, were over.

After privatisation, the numbers of masons on site dwindled and, in 1996, EH required that HPR obtain a licence before using the site as a base, even though it had been their permanent place of work until 1993 (AA020107/2DT/HECentralArchive/DesignTeamMeetings25/09/1985–09/09/1996

1996b). This signalled the final days of Fountains as a centre for stonemasonry and conservation, and by the end of the 1990s there were plans to make the former workshop and yard part of the NT's museum offer for visitors. Although some of the tools of masonry were included in the display at the time of the focus group (Figure 3q), the presence of the masons is underplayed given that there were up to five banker stations there at any given time (Rumbold). The invisibility of the masons, in both reality and archive, once they were part of separate, commercial organisations, correlates with Everill's (2009) qualitative study of commercial archaeologists, which shows how transient their on-site presence is, despite the richness of their experiences. The following section relies on a similarly qualitative approach to explore the social realities of the masons at Fountains, both during and since their time there.

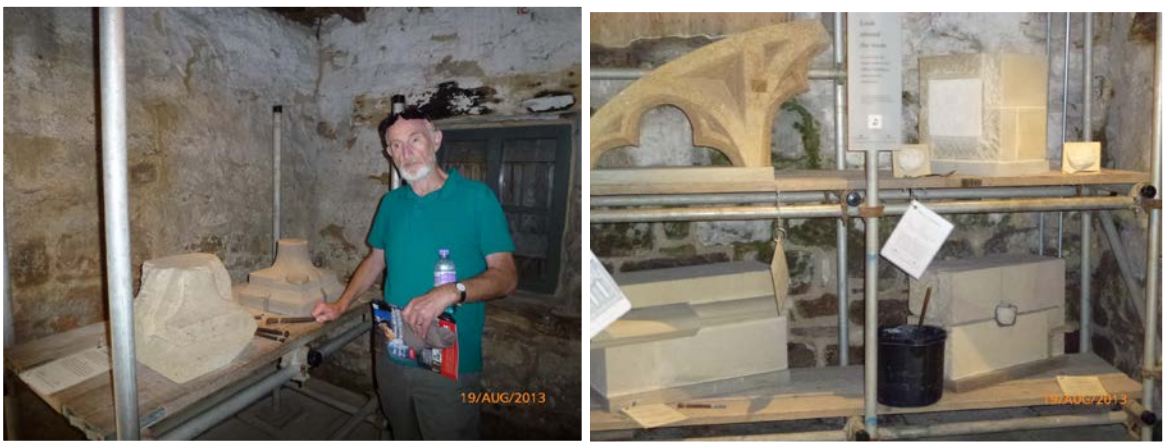


Figure 3q: My key informant Henry Rumbold with his former tools and some worked masonry, both displayed in the mill in 2013

(Author's own 2013)

3.3 The reality of practical conservation masonry

3.3.1 The masons' stories

As discussed in the methodology section of this thesis, the participants in the focus groups held in 2013 were snowball sampled through my key informant. Although snowball sampling did bring some disadvantages in that the participants already knew each other, it did mean that they had shared experiences, which in a focus group setting translated into stories surrounding memory. Several foremost personalities were mentioned, such as Bernard Sanderson, remembered as 'a strange character', and Tommy Young of whom 'there's no bigger character'. As 'the nemesis of Alistair Foxdale' an ex-crafts superintendent of works, Young was considered 'too bowler 'atted' because 'foremen always used to wear bowler 'ats, y'know'. This description correlates with other accounts of him as a 'disciplinarian': 'the one thing about Tommy, [ ] no-one did bad work when Tommy Young were around'. Despite their obvious respect, younger members of the focus group remembered occasional rebellion against his strict working pattern:

> ‘One a the stories is that er all the Helmsley lot, [ ] were in, I think it was in the nave, and er they used to cook breakfast on the scaffold in the morning. [ ] And er Tommy Young was always tryin’ to catch ‘em out, and they used to, they spotted the end a the ladder wobbling one morning and [one man] went up to the edge of the ladder didn’t ‘e, an ‘e peed over the edge, right on top of ‘im’.

Told in a lighthearted way, this story resonated with the conduct of the apprentices discussed in Chapter Five, and with other accounts of the use of ‘banter’ to assert authority on construction sites (Thiel 2012a). Games and practical jokes were among the best thing about working at Fountains, and they recalled: ‘cricket an the coits with the scaffold clips’, having fires in the winter on the scaffold, and once finding a naked colleague in an oil drum.

Other humorous tales included one mason coming to site ‘in [his] best trousers and managed to get akemi [a masonry cleaner] all down them’. Practical jokes were also played on Dave Sweeney, who as ‘the most patient man you would ever wish to meet’, was ‘tormented’ by two apprentices he taught. On one occasion, the apprentices kept putting the same broken scaffold clip back into a bucket that Sweeney was using, which meant, confusingly for him, he kept selecting the same clip. Jokes like this were commonplace at Fountains, and seemed to have been used by the masons to assert and establish themselves on the ‘corporeal’ and ‘masculine’ site (Thiel 2012a). It is unlikely to be a coincidence that the object of the joke was generally a foreman or chargehand. Like the apprentices in Chapter Five, the masons would later adopt this practice to uphold their respected position as the site professionalised.

None of the focus group participants remembered working with architects before the mid 1980s, which adds weight to the evidence in section 3.2 that the numbers of professionals working on the conservation of Fountains grew only latterly. The masons’ discussions about working with professionals were quite diverse, but there seemed to be particular friction between their role and that of the architect, who is normally considered the decision-maker in conservation. Participants who had worked with architects recently thought that they were ‘underused’ and questioned why they were even needed when ‘we’ve done all ‘t settin’ out, we’ll be doin’ all the masonry, we’ll be doin’… So tell me what, why, why do we need ‘em? In some cases. In some cases. Am I wrong or what?’ One account illustrated a ‘big argument’ that had arisen on one of the first projects at Fountains following the DEL’s privatisation, when an architect ‘shout[ed] at one of the masons’. As foreman, Rumbold refused to submit to the architect’s authority on site, to the extent that he told a mason ‘whatever you do, lock that gate’, which was always the masons’ responsibility. Rumbold reasoned that it had to be secure to prevent ‘somebody come[ing] in and pinch[ing] stuff’, but the architect’s refusal to leave by a specific time meant that ‘‘e couldn’t get out’ all night. Despite the

architect being ‘in a bad mood’ in the morning, he eventually implored ‘I think Mr Rumbold we’ve got to ‘ave a truce. We can’t go on like this’. Rumbold then said ‘well you treat my blokes with respect. An then you’ll get respect back’ and the masons were ‘right as rain after that’.

The masons’ account here shows them using a combination of practical jokes and discipline to demand the respect of the architect and re-establishing their authority. It corresponds with the 18th- and 19th-century discourse around a loss of control for the ‘disdain[ed]’ and ‘the once respected’ craftsman (Diderot 2003; Hanson 2003a; Price 1980). It is therefore likely that the evolution and eventual professionalisation of conservation at Fountains echoed the abstracting influence of industrial organisational systems on building craftspeople, especially insofar as their skills became less well understood and, following, regarded. To explore this idea, as well as the impact of other external factors on the masons’ skills, I will next consider their overall sustainability in the current social and economic climate.

3.3.2 Sustaining the skills

When the Queen Mother visited Fountains on 1 June 1986, Tommy Young received an invitation ‘in view of his service at the Abbey’ (AA020107/2DT/HECentralArchive/DesignTeamMeetings25/09/1985–09/09/1996 1986a). Decided at a meeting between an inspector, an architect and a superintendent of works, the gesture was illustrative of the respect that the foreman of works attracted from many within HBMC. While not considered ‘a great mason’, participants in both the interview and focus group conducted for this study described him as having ‘a great discipline for other people’ within a system that was ‘like the Raj’ in rank and ritual. An account of the architect John Ashurst going ‘to open the door’ on his first visit to Fountains, but being told by the Chief Inspector ‘don’t do that. That’s the foreman’s job’ shows how seriously these routines were taken. Rather than being purely ritualistic, there was a sense among the masons that such proceedings contributed to an overall environment of discipline and work ethic, which earned them trust and independence from HBMC in London.

The inspectors and architects ‘were the nicest people in life you could wish to meet. But that’s how they run it. So [ ] when I become foreman, I used to walk across with Gilyard-Beer. And I used to have me book and all that, and he’d come across and he’d say “right Mr Rumbold, we’ve got the [ ] this section of nave wall [to do]. Can you see any problems Mr Rumbold?”’ On finding that Rumbold could not ‘see any problems’, Gilyard-Beer said ‘right, you know what we’ll want. You’ll be inspected on a regular basis from York. You get on’. In this description, the mason is associating the ceremony of biannual visits from HBMC’s London-based professional officers with their trust in the masons to work on the Abbey autonomously and without close supervision. Visits by the York-based ex-crafts

superintendents of works, coupled with day-to-day management from the site foreman, provided the basis for ensuring that the monument's significance was conserved. According to the masons, this hierarchy was based on a fundamental and mutually held understanding of conservation technique, which meant that there was no need for the ancient monuments inspector or the architect to visit the site more regularly.

Although none of the masons ever explicitly said that the professionalisation of conservation had influenced standards, a number of their recollections shows that it was important for an 'ex-craftsperson' to oversee their work. Maloney talked about a superintendent coming to site wearing 'a beautiful white mac with a trilby on and all that. 'E looked like John Wayne [ ]. Walked across an 'e says "My name's Mr Ferrar, I'm area superintendent of works" 'e says, introduced 'isself'. Farrer then asked "Can I just look in your tool bag?" and after '[going] through every tool in my bag' he saw that "them chisels are blunt". This was reported to Tommy Young, who gave the senior stonemason on site 'a right rocketin' because he 'shoulda sharpened them chisels at blacksmith's the other week'. Ferrar's knowledge and skill was such that ''e knew what 'e were talkin' about. 'E picked chisels up an 'e knew exactly what 'e were talkin'… 'cos 'e were a stonemason, wan 'e?' In an environment of discipline and under the sharp eye of their ex-crafts superintendents of works, the masons learnt the important routine of workmanship identified by Pye (2015). They were taught to 'care because we trained at places, cos [ ] we were trained at places like Fountains'. Their care for the monument is one reason why HBMC could trust them to work on Fountains, as well as other monuments like it. However, they also thought that their 'care' made them less competitive today in the private sector.

The craftspeople generally agreed that architects and engineers, lacking in experiential knowledge of building and conservation, were less able to understand and take responsibility for the works as effectively as ex-craftspeople could. Rumbold felt that the overseeing role had been '[taken] away an give[n] to the architects [who were] incapable a doin' that job because they 'aven't got the skills. They never been brought up through the tools. It's the biggest mistake we've ever done [ ] in the construction industry'. The 'good architects [ ] genuinely under[stood] that, and they sort of pick[ed] people for their tender list' in a search for not just a skilled and careful craftsperson, but an individual they could trust. Maloney said that 'all the architects I deal with would rather deal with such as me [ ] small firms, because they're dealin' with you [ ], the person who's gonna lose money, an also t person who's in charge. Problem is when it goes through contracts managers [ ], the information's lost to the man on the job'. So, not only is there a lack of ex-crafts knowledge, this description shows that, despite the growth in the use of drawings and specifications, there are barriers preventing communication with craftspeople on site. The masons reported that this problem also occurred between craftspeople, where there might be similar misunderstandings. More broadly, there was a

sense among the focus group that they were forced by modern organisational methods to rely on people who did not have the necessary craft or disciplinary skills to be efficient or effective in supervising conservation as it happened on site.

Although the masons did spend some time criticising the 'signing off [of atrocious] work', they generally agreed that the change in their working conditions was due to many external factors. Their predecessors had been self sufficient undertaking tasks, which 'today you'd be in court' for. In interview, Rumbold used the repair of the chapter house wall (Figure 3r) 'to give [me] an instance here of what we could do then. The abbot's fireplace above there [ ] is unique it is. Now when I first come here, this here, this structure wasn't up straight, [ ] it was on the lean like that' [and] we had to straighten it. So I remember, the first thing [the masons] did here they put a complete raking shore up at [both sides]. And then [ ] they dug [several holes] here. [ ] Can you see where the grass isn't quite growing here look? So [ ] underneath [there] is a metre of concrete [ ] with a metal rod in with an eye on it. And two were done over the same over there. And I can remember, we had to pull it up straight. So you had to pull here, and to give at the other side. [ ] I can remember the day we did this, it bloody poured down. We waited all day to wait for these lot to come from London to see it, be stood here five minutes. [ ] Now can you imagine [ ] today what would happen? You'd have engineers coming out…engineers? What do we need engineers for? Eh?' Rumbold went on to say that 'that is the biggest thing that I have against today, [ ] you've gotta give [craftspeople] the opportunity. They've got brains to use it. [ ] You just get on, don't ya? And that's the trouble today. We have some phenomenal kids today. We've got to give them their [head] and let them get on. They don't have to be mollycoddled by architects and engineers. These, these kids are [very talented] …they can do it. And you can see by this'.

Figure 3r: The chapter house wall that Rumbold described being winched up by stonemasons (Author's own 2013)

The description of the chapter house being repaired, as well as being a fascinating record of works at Fountains as perceived by Rumbold, plays into a wider concern about the constraints currently affecting the masons. They are reliant on supervisors who do not fully understand their work, instead of being autonomous in designing and implementing structural solutions to repair buildings, which once offered rich opportunities for training. The focus group participants perceived this as a depressing decline in stonemasonry, which related to the fact that 'nobody' really cared about it.

Since 2008, the stonemasons have endured economic circumstances that mean they might have grievances to air, which makes accepting their accounts and views fully problematic. Nevertheless, the fact that only one focus group participant talked about being 'trusted' to work in his current employment is striking considering that this was such a dominant theme in the archival material from the 1920s to the 1960s. The decline highlighted no doubt relates to the economic downturn, but issues of organisational change, non-craft and non-specialist supervisors and diminishing independence speak of a more serious, embedded regression. Beyond concern for their own livelihoods, the masons think that monuments such as Fountains, are at risk because 'that's the ultimate thing in it? If it's not done properly they won't last'. The impact on technical conservation of the increasingly fragmented management structure in the heritage sector will be revisited in Chapter

Four, after a summary of findings from this chapter that relate to the thesis' main research questions, and a critical reflection on the methodology.

3.4 Conclusion

3.4.1 Research questions

In the methodology set out in Chapter One, I explained that this important case study made a unique contribution to the thesis because its spanning much of the 20th century would give a historical and thematic context to the later research. It has addressed three of the main research questions underpinning the study, which, as set out in section 1.2, seek to explore the social reality of craft in conservation (RQ2), the organisational structure of craft practice in conservation (RQ3) and craftspeople's recognition of academic interpretations such as the 'inalienable relationship' (RQ4). The content of this chapter responds to all of these to some degree, as discussed below.

One of the most striking things about the findings is the intimate archival information about the first foreman of works in charge of the Abbey's conservation. The Office of Works described needing a careful, responsible, trustworthy and presentable man, which they later found in William Robertson, who was competent, excellent and capable of sound, A1 work. Both the Studley Estate and the Office gave assiduous consideration to employing the right person, which, while corresponding to research on Estate workers in general (Williamson 2004), also reflects contemporary best practice in conservation. Powys outlined in 1995 that 'works of repair demand the constant supervision of a competent directing head' 'trained in a tradition of sane repair such as is provided by the SPAB, or by the Ancient Monuments department of His Majesty's Office of Works', the approach to which was established in 1911 (Fry 2014). In fact, so much attention was given to the employment of the first foreman that in archive there is more information about Robertson than his successor Tommy Young. Robertson's comparatively overt presence in archive likely reflects the need for the MPBW to 'control' craft production on the unusual site set-up within its own 'hierarchy of power and knowledge' (Marchand 2012). As well as the differences between Robertson and Young's roles on site, there were also similarities that warrant consideration.

The account of Robertson and Young's work at Fountains shows that both acted as an intermediary between the people directing works and their masons, who would undertake it. Robertson, who worked with both the Studley Estate and the Office of Works, was in the perhaps difficult position of sometimes working on and around the Abbey without the Office's exacting approval. Superintendent of Works Black therefore sought to find out more by asking Robertson for fortnightly reports of works on the Abbey. These reports are the first written record of work by a craftsperson at Fountains, and it is notable that they provide retrospective information, rather than record a senior officer's

instructions. It seems that Robertson continued to receive instruction from both the Estate and the Office (later MPBW) via unrecorded oral communication until Young, an existing member of MPBW staff, came to Fountains in the 1960s. It is significant that he is remembered as a 'disciplinarian', as his main role was to ensure that the vastly increased scope of work would meet MPBW's exacting standards. Few detailed instructions were written down, but the lack of individual marks on the main Abbey ruins is testament to his effectiveness at bringing MPBW's desire for invisible and indistinguishable repair into reality. The success of the MPBW hierarchy at achieving this is evident in the standing fabric, where the techniques of the different groups (led by Robertson, Young and then the MTC) are discernible (Figures 3i and 3o). That the consolidation work is otherwise fairly consistent obscures the scale of masonry work (Appendix Four); in the process of conserving, the masons' craftsmanship 'disappeared from view' (Adamson 2018a), not only on the monument but also in archive where there are many photos of the period but few featuring masons (Figure 3s).

Figure 3s: Stonemasonry is evident in the photographic record of the 1960s, which sometimes include stonemasons' tools but rarely the craftspeople

(Reproduced with kind permission of the English Heritage Trust).

Early on in Young's term as foreman, in 1966, reporting procedures changed when he started creating written records of verbal instructions he had received, which were then scrutinised and monitored in MPBW's London office. This distinction between a retrospective record of works and a report containing instructions is significant, because the proliferation of paper recordings and their different uses has led to confusion. Young's role recording verbally communicated instructions as he interpreted them is important. During the late 1980s and 1990s, when Rumbold, Young's successor, began to receive written instruction, there was little opportunity for craftspeople to record anything technical. This seems to represent a growing perception, reinforced by the archival mistake favouring Robinson over Robertson, that the masons would manually work with the material of their

craft, while producing paper instructions and records was the realm of decision-making professionals in offices. It was the first time that craftspeople's work had been positioned overtly as labour only, and perceived as controlled to such an extent that there was no value in their writing anything down. The detailed architectural drawings provided to the masons during the 1990s, which employed terminology and described technique that masons at Fountains had been familiar with since the 1930s, was intended to replace their expertise-based autonomy. The use of such drawings therefore reflects a new juncture between the thought-based and motor-based work of professionals and craftspeople, which effectively separated the roles and failed to account for the embodied cognitive intelligence that the craftspeople drew upon to make decisions while on site and crafting. Prior to this, the two types of expertise – thought-based and motor-based – had been loosely associated with concept and detail, as evidenced by the focus of MPBW's biannual visits: while priorities for conservation would be discussed very broadly, details of engineering, timescales and risk management would be left to the masons and ex-crafts superintendents who had significant experience of working with the building over many years.

Although the focus group participants directed much frustration at 'unused' architects, their discontent really came from the overlap of responsibilities that had grown since the late 1980s. None questioned the importance of Gilyard-Beer, who, like Heasman during the 1930s, supervised from a distance, but they saw the detailed drawings intended to direct their work as unnecessary. They were trained and expected to plan and complete works themselves with the ex-crafts superintendent's input, and saw unnecessary instruction as creating further friction in complex situations. Like the apprenticeship project in Chapter Five, this case study has shown that the overlap of responsibilities and the communication between different groups are, more than the struggle for power identified in Chapter Two, the cause of tension in practical conservation. Such tension was exacerbated and improved through the various organisational structures in place at Fountains throughout the 20th century.

As already discussed, masons employed by the Studley Estate worked quasi-autonomously with limited advice from the Ancient Monument Branch until MPBW came to site during the 1960s. MPBW brought not only a team of masons, led by Young, but also new procedures for giving and receiving instructions, which were captured in regular 'visiting officers' reports'. While at the beginning of this thesis I would have deduced in this change a loss of freedom for the masons, I now consider that the new, transparent, system could have been positive. It offered clarification over who was giving instruction, where the monument's priority areas were, as well as, through Young himself, the methods and materials to be used. This is viewed as important by the masons who participated in the focus group, who believe that there is a 'good' way of working to sustain the monument on

behalf of the public, in accordance with the context of their training. The ability to differentiate between right and wrong was a critical skill at Fountains, which was learned over years of working for MPBW. It not only gave the masons purpose but also assured their harmony with others in a hierarchy similar to that found in Yemen (Marchand 2012) and Sennett's (2013, 150) 'military experience'. However, MPBW's commonality was based on values that today would be seen as overly simplistic because they did not account for multiple stakeholder interpretations of cultural heritage conservation. Douglas-Jones et al (2016) has not found such harmony in contemporary conservation, which is complicated by different groups' discordance over the heritage's significance.

The masons investigated as part of this study, including Robertson, Young and all the focus group participants, all experienced training in conservation in a very particular context. Not only was it influenced by the dire skills shortages and military discipline of war but also by the positivist interpretation of heritage that existed during much of the 20th century. International guidelines outlined fixed ideas about the value of heritage, which infiltrated Fountains and produced certainty in conservation such as rarely exists now. In reality, the masons' own distinct stakeholder values emerged when they identified a weakness in their training because of a lack of banker work, but they were unable to articulate this in a theoretical framework dominated by the archaeology of the heritage 'as document' (Gilyard-Beer 1974). Masonry was 'just a job' to them and they were cynical about those who saw it as a 'vocation', and, while they cared about 'good' work to historic buildings typologically, they did not see their skills or connection with fabric as part of an 'inalienable relationship' with the heritage (Jones and Yarrow 2013). However, as this is arguably a sign of the persistence of MPBW's principles in the masons' work, it demonstrates how effective it was in establishing a vibrant and sustainable network of conservation masons. Unfortunately, it seems that, while evolving heritage and conservation theory has continued to influence policy, the organisational disjuncture between it and practice means that the latter has lagged behind. Other than the great cathedrals, few large-scale projects such as Fountains, where professionals and craftspeople can co-exist over a number of years, testing the relationship between conservation theory and practice, exist. Through discussing a very specific training project, Chapter Five reviews the function of sites such as Fountains, which was dominated by a culture of education. This will be grounded in an understanding of the conservation craft sector more recently, which is established in Chapter Four.

3.4.2 Reflection on the methodology

The findings in this chapter are based on archival and qualitative methods that generated data that is overwhelmingly similar in content. This comparative assessment – a form of methodological triangulation – is evidence of the detail of conservation and craftsmanship at Fountains, while some of the broader issues raised will be revisited in the next two case studies. Already this chapter's

chronological narrative has demonstrated the changing nature of the masons' status as conservation practice increasingly separated from decision-making in a false dichotomy of thought-based and motor-based work. This resulted in masons losing control of decisions about the minutiae of practical conservation, which compared uneasily with Jones and Yarrow's (2013) argument about the authenticity of the masons' tacit decisions and several writers' views of the essence of craft as cognitive (Adamson 2018b; Pye 2015; Risatti 2007). It also revealed how, when stonemasons had committed knowledge and understanding to paper (such as Robertson's report or the archive of stonemasons' drawings), they were either misattributed or destroyed altogether. Although accidental, these occurrences served to diminish the prominence of the stonemasons' presence at Fountains in the enduring documentary archive. Indeed, the masons' palpable and continuing attendance observing, recording and conserving the site has been obscured, as has their informal position as an authority on understanding the condition of the building and employing their knowledge and skills to choose practical conservation methods.

Although the isolated findings in the data that cannot be substantiated (the use of 'cow crap' and several practical jokes), illustrate the risks of over-relying on one research method, especially as my familiar relationship with Rumbold encouraged teasing. However, the rigorous use of archival sources, interview and focus group has overall been authoritatively revealing: without the archive, Robertson's role would have been indiscernible, and reading the later reports without the qualitative findings would have suggested that masons began to play a lesser role. Rather than this being the case, however, they continued to retain significant expertise and autonomy until the 1980s although they were not recognised for it in the increasingly complex world of commercial construction. Through interviews with several craft firms, the next chapter shows that this anomaly is common in conservation craftsmanship, particularly because of the 'unknowns' that make the repair and refurbishment of older buildings 'almost impossible to effectively plan in advance or manage at a distance' (Thiel 2012a, 10).

The archive showed that Robertson's knowledge of the monument earned more respect as he gained experience. In 1929, he was advised by the architect Heasman to work according to structural condition and heritage significance, but, over time, the Office of Works consulted his expertise on the site's needs. We can see this is the paperwork, an audit that captures the Office's aim to 'preserve as found' the archaeology of 'monuments as documents' (Emerick 2014, 65; Gilyard-Beer 1974). Such a scientific interpretation has endured and grown, so much so that it now necessitates a highly technical and planned approach to conservation, which has come to 'displace' not just the dialogic skills of the masons (Jones and Yarrow 2013) but also the military-style hierarchy of shared values and craft production (Marchand 2012; Sennett 2013). This point, about

the bureaucratic record of archaeology and conservation instruction coming to eclipse their physical and performative manifestations, is revisited in the conclusion to this thesis, when I argue that craft expertise can be utilised and protected on the basis of heritage values.

The final point to take from this exploration of the Fountains Abbey stonemasons is the enduring nature of the masons' skills, which were based on the potency of messages passed down through MPBW's strict hierarchy. Stakeholders' shared understanding, rather than paperwork, assured the monument's conservation throughout most of the 20th century. This knowledge was enabled by the quality of their education – a 'tribute' to the masons who trained them – and meant that many of the people who worked there 'with minor exceptions, is still in the job'. The strength of their network was evident throughout the research for this case study, which was snowball sampled on the basis of their relationships. It then became clear in the focus group and the interviews for Chapter Four that, while mainly self-employed, their continued preference for 'doing a lot a jobs together' (Firm12GB) was recognised outside their subsection of the craft community (see Figure 1f for explanation of interviewee participant ID). In addition, many Fountains masons (beyond the focus group participants) were active in conservation crafts throughout Yorkshire, utilising their skills to manufacture clay finials (Firm13Ro), maintain historic properties (Firm15SM) and conserve churches (Firm12GB). This model of sustainable skill activity, based on their shared codes of practice learnt within MPBW's strict hierarchy, was a finding that only qualitative inquiry could reveal.

• Chapter Four •

• Craft Firms in Yorkshire in 2011/12 •

4.1 Introduction

4.1.1 From Fountains stonemasons to Yorkshire craftspeople

So far this thesis has shown how changes in the discipline of historic environment conservation impacted a specific group of conservation craftspeople. In a reversal of the circumstances experienced by the Fountains stonemasons, the interviewees discussed in this chapter were drawn from a broad and dispersed group of craftspeople based across Yorkshire, working independently and beyond it, during the period November 2011 to April 2012. These interviewees were part of a complex sector in which the interplay between public and private organisations in the historic environment had evolved considerably, in tandem with interpretations of 'heritage' and the 'historic environment' discussed in Chapter Two. The craftspeople discussed here also practised a much broader range of craft disciplines than the Fountains stonemasons, which contributed to their collective experience of the sector as complex and multifaceted. This chapter therefore continues with the inductive, qualitative approach set out in Chapter One and employed in Chapter Three, in its exploration of the heritage conservation sector's development on the conservation crafts more recently. Taking place early on in the project, the findings in these interviews steered the later research in a way that accords with the grounded approach set out in section 1.2 The themes discussed here therefore bridge the more focused case studies in Chapters Three and Five.

Many of the sector-wide initiatives and trends that formed the backdrop to the decade prior to 2012, such as the holistic interpretation of heritage, managing its 'public value', the increasing influence of the Heritage Lottery Fund (HLF) and the creation of the National Heritage Training Group (NHTG), were discussed in Chapter Two. They are important because they paved the way for the ill-fated Heritage Protection Reform Bill 2008, the publication of Planning Policy Statement 5 (PPS5) (2010), and its replacement with the National Planning Policy Framework [NPPF] (2012). These events therefore set the context for the interviews in this chapter. Occurring during the short-lived tenure of PPS5, the craftspeople's accounts discussed here reflected on another period of politically provoked instability within the sector, which can be seen as a continuation of an increasing emphasis on heritage as a community resource (Lennox 2016). As this arguably took hold during the final and most critical decade for the Fountains stonemasons, the parallels between the periods that most closely connect the two groups of subjects – the years leading up to 1993 for the stonemasons and up to 2012 for the Yorkshire craftspeople – are compelling: one interviewee even identified this, saying 'this isn't new. In you know, '89, what was it '87, '88, there was a really bad recession in the building trade'. Therefore, this chapter will show that, despite their differences, the two groups of

participants were predisposed to respond to volatility within the sector similarly by developing trusting relationships within a close-knit network.

4.1.2 The heritage construction sector in 2011/12

Chapter Two of this thesis demonstrated that the principles of value-based heritage and conservation support a theoretical framework for sustaining craftsmanship as a form of intangible heritage. Despite this, however, the UK had failed to keep pace with an international move towards protecting intangible heritage (UNESCO 2003), and decisions that prioritised traditional heritage values over intangible or living heritage persisted (Walter 2017). It was this status quo within the heritage sector, as well as the sharp economic decline of 2008, that prompted the research questions that underpin the semi-structured qualitative interviews for this chapter (set out in sections 1.2.1 and Figure 1d). This was the first severe economic crash experienced by the conservation crafts community since the stonemasons moved from the public to the private sector in the 1990s. Like Everill's archaeologists (2009), the trajectory from one to the other was one of post-war public sector stability, ending in privatisation, followed by adjusting to the private sector, before the unexpected collapse in 2008. Overwhelmingly destabilising the UK economy, this brought about a severe dissipation in the market for heritage work, which led to the closure of some of the biggest and most revered heritage conservation companies in England such as Linfords and Quibbels (*Construction Enquirer* 2010a; 2010b). This caused further volatility and rendered the labour market intelligence forecasts for skills shortages obsolete (NHTG 2005; 2008b; 2013).

Chapter Two also explained that the inconsistent definitions for different craft skills and heritage limited the application of the NHTG's surveys. Their all-encompassing interpretation of the historic environment (pre-1919) contradicted unhelpfully with a predisposition towards the significance of fabric's evidential value. It meant that the NHTG used the holistic value system to make a case for a future need for works to historic buildings, but, in deciding that these works would all require conservation craft skills, it accounted for just one set of values while unintentionally overlooking the others, including any communal value in the craft itself. This illustrates how difficult navigating the complex web of value systems that underpinned decision-making in heritage and conservation had become in practice (Yarrow 2017; 2018a), which is surely exacerbated by the sector's concurrent 'frequent' reorganisation (Lennox 2016, 126) (Figure 4a). Together, the two trends have had an unexpected effect: more buildings than ever can be defined as heritage, but reorganisation has generated such disassociation of strategy from craft practitioners that policymakers have proportionately much less involvement with and influence on the practical conservation of what we now define as the historic environment.

Comparing the roles of organisational stakeholders during the Fountains era to those during the 2010s (Figures 5a and 5b) goes some way towards illustrating how wide a chasm between strategic and practical conservation has emerged. When Fountains was recorded, monitored, repaired and conserved by the MPBW, strategy, policy and practice were very clearly intertwined. Nowadays, MPBW's equivalent government department is advised by Historic England (HE) on a much broader range of heritage assets, which are conserved by organisations with very different strategic aims. HE publishes technical conservation advice (HE 2012a; 2012b, for example), but there is no underlying policy base for conservation solutions that prioritises fabric and traditional craftsmanship. So, while the places and assets that we interpret as part of the historic environment have ballooned, the degree to which practical conservation policy, research and best practice is actually disseminated to and implemented by craftspeople is relatively unknown. That there is a fundamental divergence between HE's general policy direction of interpreting significance in order to underpin conservation, and the NHTG's position that all pre-1919 buildings require conservation craftsmanship applied to 'appropriate standards' (see section 2.3.2) signifies further separation. This chapter therefore explores the effects of the separation from the interviewees' perspective, considers how far it derived from occurrences at Fountains, and whether the reduced recognition for decision-making that affected the stonemasons continued in 2011/12 to influence craftspeople's roles.

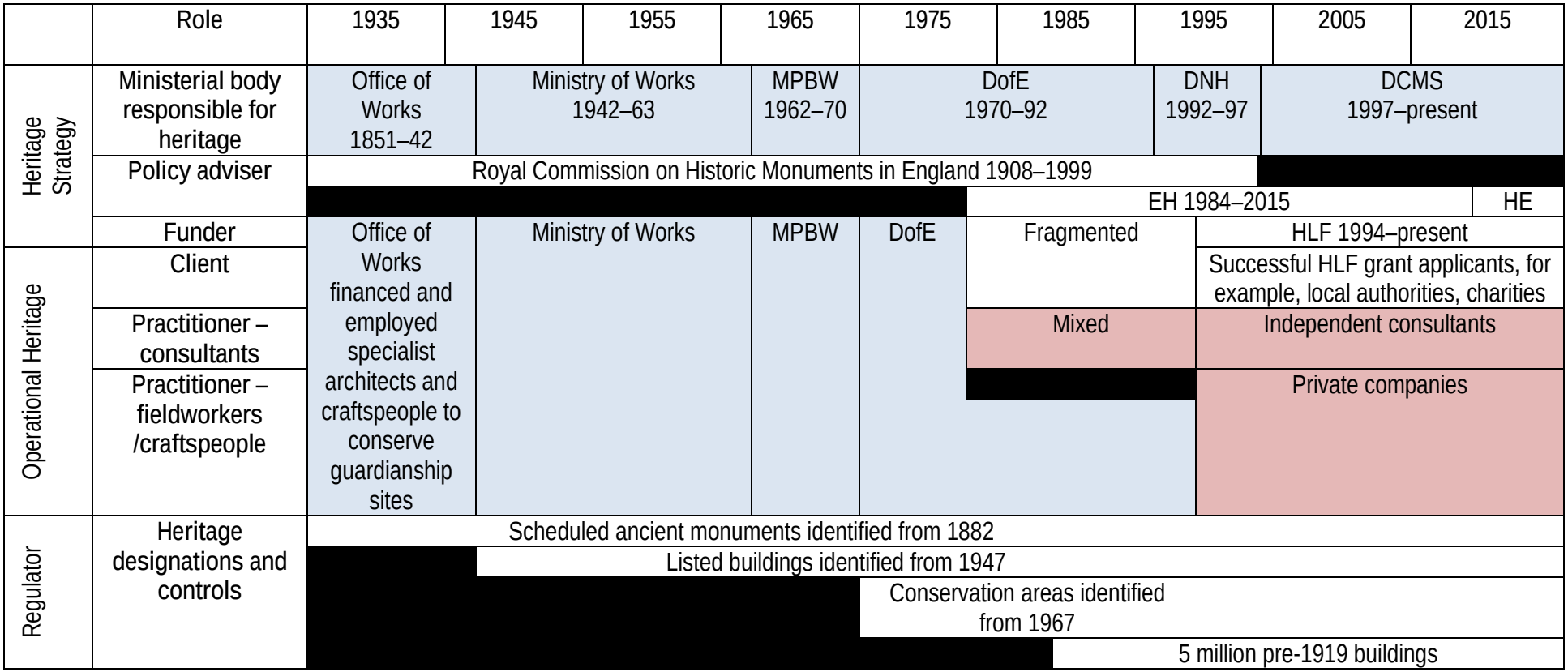


Figure 4a: Craftspeople's organisational detachment from heritage and conservation policymakers

(Red highlights a tier of management without conservation expertise) (Author's own 2018)

Key

DCMS	Department for Culture Media and Sport	HE	Historic England
DNH	Department of National Heritage	HLF	Heritage Lottery Fund
DofE	Department of the Environment	MPBW	Ministry of Public Buildings and Works
EH	English Heritage		

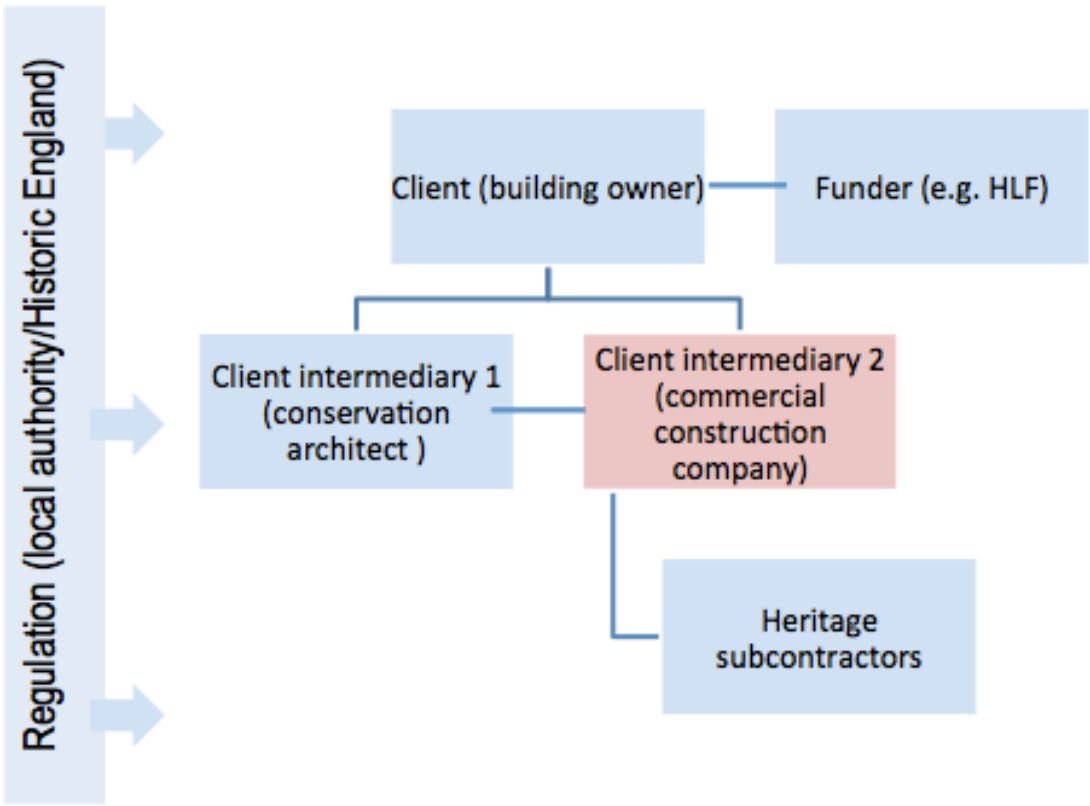


Figure 4b: The organisational fragmentation of conservation in 2011/12

(Red highlights a tier of management without conservation expertise)

(after Thiel 2012a)

4.1.2.1 The Heritage Lottery Fund (HLF)

The complex nature of funding historic environment conservation means that the findings of this chapter will be considered in relation to the practices of the Heritage Lottery Fund (HLF), which by 2011 had become the biggest sponsor of conservation projects in England. Unlike previous public sector organisations that had funded heritage conservation either directly (such as the Ministry of Public Buildings and Works [MPBW] or fragmentarily (such as local authorities), the HLF operated a large spending profile at a distance (Figures 4a and 4b). Its approach of providing very large grants for third parties to commission works meant that commercial construction contractors became, for the time, typical competitors in the realm of heritage conservation. At the time of the interviews, HLF stipulated that grant recipients appointed a conservation accredited architect to oversee funded projects, but this mechanism only really ensured that conservation was fully 'informed' in the first five steps of the BC's process, which all took place before they reached site (Figure 4c). After agreeing to an architect's conceptual plan for conservation, the grant recipient would advertise the project's second stage of practical works so that commercial companies could bid for them in a process of 'competitive tender'.

Figure 4c: The Burra Charter's process puts overwhelming emphasis on understanding significance before implementing action in step six (Burra Charter [BC] 2013)

The introduction of commercial companies into heritage conservation elicited two main considerations, which the qualitative methods of this thesis are well placed to investigate. Chapter Two has already subscribed to Hanson's (2003a) view that, by the 19th century, societal detachment from buildings crafts was influencing their modernisation and reorganisation. Unadopted by MBPW,

'contracting by gross' was essentially unusual in publicly funded heritage conservation until the 1990s. Its suitability for the 'pre-industrial' process of refurbishing a building on site, which requires a multi-sensorial understanding, is still unclear (Lyon 2013; Thiel 2007; 2012a). This chapter therefore looks at the reaction to it by the craft firms interviewed, and considers its potential impact on both heritage conservation as a discipline and the sustainability of conservation crafts themselves.

4.1.3 The methodological approach

The rest of this chapter is based on prearranged, semi-structured qualitative interviews, as outlined in section 1.4.2, which detailed the approach to interpreting and analysing the mass of textual data generated. After each interview was transcribed, the text was uploaded into the qualitative research software Dedoose (2017), where excerpts were highlighted and coded (see Figure 1e for code list) so that they could be systematically compared. The assignment of 'descriptors' to each transcript, such as the firm's size and craft specialism, meant that coding patterns could also be identified according to those characteristics.

The other main consideration of semi-structured interviewing relates to my presence and the formality of the interview setting, which both influenced the interviewees. My non-native insider status meant that conversations often turned to our shared or comparative experiences, where there were similarities or differences to discuss such as the organisational framework we worked within. This chapter therefore responds to all three main research questions: it builds on the findings from Fountains by adding longitudinal depth to the discussions about the profile of conservation craftspeople (RQ2), addressed in section 4.2, and illuminating their expertise. It shows throughout the chapter that craftspeople's views do resonate with academic and policy-based interpretations of heritage value (RQ4), but that this is threatened by the sector's organisational structure and approach to project planning (RQ3), addressed in sections 4.3, 4.4 and 4.5. The final section (4.6) critiques the sustainability of the current model, before ending like Chapter Three in a reflection on the methodology employed.

4.2 Being a conservation craftsperson

The next sections derive grounded findings from the interviews that illustrate the way in which the sector operated during the turbulent period of 2011/12. As well as showing that some typical construction sector functions challenged the firms, the transcripts contain interesting findings about the implication of their interpretation of heritage significance on their work. Issues around the cost and effort of developing and deploying high levels of craft expertise, and whether further education and private sector models could promote this, also surfaced. In fact, many of the craftspeople spoke negatively about and seemed disinclined to consider the bureaucratic context of the job (see section

4.3 for examples). They almost all took pleasure in being craftspeople or their contact with craft, to the extent that a recurring theme in this chapter is a willingness to work for insufficient remuneration for several key craft activities (see sections 4.4 and 4.5). Early on, this provoked the question that, if financial reward was not a major incentive to gain craft experience, what might be? Coded excerpts from the interviews provided a clear steer. Smaller firms of fewer than 20 employees (indicating less emphasis on growth) were more likely to recount experiences that could be interpreted as 'individually motivating' (see Figure 1e for code groups), while larger firms discussed taking 'pride' in their work. It was therefore logical to mine the data for any inverse relationship between motivations and income or profit.

4.2.1 Becoming a conservation craftsperson

Loader and I began each interview by asking participants about their own education and experience, as well as that of typical employees. Their collective responses provide a representation of routes to becoming a conservation craftsperson, which is quite varied, considering the small size of the sample, and reflects the fact that builders often follow 'no common route' into work (Bilbrough and Moir 2004; Thiel 2012a, 84). However, they could still be broadly grouped into five discrete categories (Figure 4d):

- 'Company Apprentices' includes employees who had completed an apprenticeship or similar with the company they still worked with (CA)
- 'External Apprentices' includes those who had completed an apprenticeship or similar elsewhere (EA)
- 'Mature Trainees' had moved laterally into conservation crafts, often from another building trade (MT)
- 'Career Changers' had completed initial training, and sometimes experience, in something completely different (CC)
- 'Creatives' were people with a formal arts background (Cr)

Participant ID	Craft	Employees	Craft Employees	Educational Trajectory*					Company Apprentices
				CA	EA	MT	CC	Cr	
Firm01Pl	Plastering	1 –5	4		3			1	No
Firm02CJ	Carpentry and joinery	1–5	2				1†		No
Firm03SM	Stonemasonry	6–20	8	7	1†				Yes
Firm04Ro	Roofing	>20	17	17					Yes
Firm05CJ	Carpentry and joinery	6 –20	6	1	5†				Not at time of interview
Firm06CJ	Carpentry and joinery	6–20	11	11					Not at time of interview
Firm07GB	General building	6–20	11		8	3†			No
Firm08BS	Blacksmithing	6–20	10		8		1†	1	No
Firm09Ro	Roofing	>20	20	10	10†				Yes
Firm10SM	Stonemasonry	1–5	1				1†		No
Firm11SM	Stonemasonry	6–20	8	6	2†				Yes
Firm12GB	General building	6–20	9	1†	7	1			No
Firm13Ro	Roofing	>20	Unknown		1	20**			No
Firm14PD	Painting and decorating	1–5	1					1†	No
Firm15SM	Stonemasonry	>20	47	23**	24**				Not at time of interview
Firm16GB	General building	>20	78	39**	39**				Yes
Firm17SM	Stonemasonry	1–5	1		1†				No
Firm18PD	Painting and decorating	1–5	1					1†	No
			Total	115	109	24	3	4	

Figure 4d: The training profile of the employees at each interviewee's firm

(Author's own 2018)

* The educational trajectory of some employees was unknown, which is why the totals in the 'Employee Trajectory' column do not always equal the figure for 'Craft Employees'.

** Where the breakdown of trainees is unknown, an estimate is given.

† Denotes the classification of the interviewee (if they were a craftsperson).

Even without the potentially skewing data from the two largest firms (Firm15SM and Firm16GB), the above table overwhelmingly demonstrates that the principal means of entering the conservation crafts had, until 2011, been through an apprenticeship with a specialist company. This was concerning given the context of apprenticeship decline among specialist firms (EH 2012) and more generally in construction, especially amongst subcontractors (Lynch 2013; Moore 2013, 62) Thiel 2012a). Indeed, the ability of firms to train apprentices at the time of interview reflected this trend because only five participants indicated recent or future intentions to recruit apprentices. Those able to were insistent about their value: Firm04Ro tried 'every year [to] take an apprentice on' because

imminent retirees, ‘people that’ve worked for us for 30 years [ ] have got a wealth of knowledge [and] experience’ that they needed to transfer. Succession planning also seemed important to Firm16GB, which ‘placed’ apprentices with ‘a sort of mentor’ for a period of time ‘so that there’s someone who’s tryin’ to keep ‘em under their wing and look after ‘em and develop them as they go…’. Firm06CJ suggested that restricting apprentice recruitment obliged ‘previous apprentices’ to do tasks that were ‘a bit beneath them, and ‘oldin’ their skills back’ in a portrayal reminiscent of the Yemeni hierarchy (Marchand 2012). A lacking business justification to recruit apprentices was also felt by Firm15SM and Firm08BS, who said ‘we just couldn’t afford to [incorporate one young person into the workforce]’ every year ‘now[adays]’, and it was perhaps significant that the largest two firms employed an even number of company and external apprentices. Contraction of company apprentices had for Firm06CJ and Firm15SM been a fairly recent trend, but for Firm08BS it was much more longstanding.

As the only blacksmith interviewed, Firm08BS’s view of apprenticeship and business capacity was specifically unique but relevant on a general level. For example, the fact that ‘no blacksmith would be [apprenticeship trained] today’ (Firm08BS) was distinct to the absence of an apprenticeship standard for blacksmiths. However, the cause of this was directly linked to a lack of demand from the blacksmithing sector, which was largely comprised of ‘one-man bands’ unable to support an apprentice. Firm08BS even reflected on a case where a blacksmith had been sent a trainee ‘completely free of charge. And he had to give it up [because] he was spending too much time teaching them [and] couldn’t get his [own] work done’. This supposition, that sole craftspeople have such limited capacity to train because of their very size, was reinforced by the sample of interviewees; none of the five micro companies represented employed apprentices.

Capacity in the sector was undoubtedly a serious barrier preventing many interviewees from offering apprenticeships. Firm03SM explained that after Linford’s had gone ‘bust [we had] e-mails from the Stone Federation asking if there’s any way we could take over any of their [five or six part trained] apprentices [who were] left high and dry’. In addition to capacity issues, many interviewees expressed cynicism about apprenticeship training, particularly the National Vocational Qualification (NVQ) qualification available. Many preferred previous models for cultivating ‘properly trained decorators [that had done] apprenticeships’ (Firm14PD) or felt they were ‘lucky enough [to have] worked under plenty of people who [ ] ‘ave experienced a 7-year apprenticeship….’ (Firm15SM). Several referred fondly to the City and Guilds apprenticeship qualifications (Firm04Ro; Firm05CJ; Firm06CJ; Firm07GB; Firm10SM; Firm14PD; Firm17SM), and as having been ‘fortunate enough’ to complete them (Firm15SM). By contrast, the current system of NVQ training was ‘crap’ (Firm05CJ) and ‘[not] up to what they were 30 years ago’ (Firm07GB). Craftspeople’s lament of the brevity of

NVQs reinforces the critique of specialist heritage NVQs in section 2.3.2 above and is further explored in Chapters Five and Six.

Given the pessimism about apprenticeships available to interviewees, it is unsurprising that some had developed alternative ways of transferring their skills. Firm05CJ had taken on European trainees via funded exchange programmes, and found their skills to be 'better' than their English counterparts. Firm08BS regularly hosted students from the French 'compagnons de devoirs' and in general felt that more 'bursaries [were] available erm, in Europe'. Other firms also concluded that both the education systems and recruits to craft in Europe were superior: 'in Germany, to actually employ an apprentice, you have to have the master craftsmen exams' (Firm14PD), and international recruits were 'keener to work' (Firm09Ro). However, while this view existed among interviewees, it was by no means a key tendency. It was just one solution to the challenges of selecting trainees in whom to invest time, knowledge and skill.

Before looking at the characteristics of conservation craftspeople, it is useful to reflect on the educational backgrounds of the interviewees themselves, as current managers of their firms. Figure 4d shows that, while most crafts employees were trained through an apprenticeship, most of the 12 craftspeople-turned-managers had arrived at their profession in an alternative way, as a mature trainee, career changer or creative. As 'vocational migrants' (Marchand 2007), most people in these groups presented as extremely knowledgeable – by referencing archival findings, for example (Firm10SM) – and had self directed their education 'outside the mainstream vocational training system' (Bilbrough and Moir 2004). Firm07GB was too 'late' for a subsidised apprenticeship, so had 'knock[ed] on people's doors and sen[t] letters' to find a bricklaying position in a modern construction firm. The interviewee had then 'paid for myself to go back to [stonemasonry] college', as well as attend many non-accredited short courses at 'Essex Council, [ ] Charlestown, West Dean. [ ] To try and gel everything off all the different opinions into a, what I think we are now as such' (Firm07GB). All three career changers had completed degrees or qualifications in different subjects, before pursuing craft and undertaking informal training with relevant companies. Firm02CJ's six weeks working with a window restorer on 'my own windows' was enabled by 'resettlement income' from recently departing the 'armed forces'. This individual saw himself as having entered the craft 'by accident'. The final group of vocational migrants generally had a creative background as fine artists before choosing craft. After '4 years at art school' Firm14PD had become 'distracted by [ ] the business of finishing', while Firm18PD had wanted to learn 'grainin' and marbling'' to the extent that he attended a 'City and Guilds class' for two years for informal 'tuition' from a 'painting and decorating [ ] master'. This interviewee reflected on an extraordinary commitment to and 'obsess[ion]

in' the craft, describing visiting museums to 'study [and trace] the grain [of all the different woods from around the world]', which 'doesn't 'alf teach y'ow to draw and mix colour' (Firm18PD).

The interviewees' education is surprising in two ways: a high proportion shared unconventional backgrounds, and of them several seemed to have reached their crafts almost by chance. Coincidence was a recurring theme in many of the accounts of joining the profession. Firm03SM 'happened to be going through Lincoln' and decided to pursue stonemasonry after seeing a 'really interesting exhibition about the various crafts'. An employee of Firm01Pl felt that it was 'pure chance' that he realised his arts education could be used in plastering, and another said that their work wasn't 'anything special' until 'we happened to get a [renovation] job [on] a listed building', which 'the conservation officer just sort of liked' and so it led to further heritage work (Firm05CJ).

The relative success of unconventional entrants to the sector at leading their own firms prompts questions about recruitment, progression and company sustainability. The sample's suggestion that few apprentice-trained craftspeople went on to lead the firms they trained with implies that either companies discontinue each generation or that craftspeople cannot progress within them. One interviewee was already grappling with this conundrum because, in the face of imminent retirement, it 'would be difficult' to replace his skills among existing staff (Firm06CJ). Indeed, of the 18 firms interviewed, only six had existed for more than one generation, and only one of these was managed by a craftsperson: the single company apprentice who had risen through the ranks. Altogether, these findings suggest that the widespread apprenticeship routes recruited insufficient people able to manage a business, or that apprenticeship training and recruitment were limited (Lynch 2013). The fact that companies managed by former apprentices (Firm03SM; Firm05CJ; Firm09Ro; Firm11SM) had often expanded into bigger concerns than those run by vocational migrants suggested that this was problematic. With recruitment in mind, the next section will explore the personal attributes of conservation craftspeople, by analysing what the interviewees thought of their own occupations and characteristics of people they tried to recruit.

4.2.2 Morris' 'joy in labour'

Several of the arguments in the sections that follow (4.3 onwards) are based on interviewees' negative perception of the fragmented organisational framework for conservation practice (see Figures 4a and 4b). As such, many of the craftspeople employed a defensive narrative, sometimes validating a particular perspective as not 'sour grapes' (Firm03SM; Firm17SM). There was some indication that 'good jobs' could be tainted by having 'to do it through a contractor' (Firm01Pl) or that 'the work would be fantastic if it would come in and you could get on there and do what you're

supposed to do' rather than succumb to '[construction side] timeframes' (Firm02CJ), but the interviewees remained overwhelmingly positive about conservation craftsmanship.

The language and vocabulary employed to describe craft was consistently very upbeat. Passion (Firm01Pl; Firm08BS; Firm11SM; Firm12SM; Firm17SM) for work was the only theme that the interviewees agreed on almost unanimously, with motivating factors described variously as 'satisfying' (Firm02CJ; Firm15SM), 'enjoyable' (Firm04Ro; Firm06CJ; Firm12GB; Firm14PD), 'interesting' (Firm04Ro; Firm05CJ; Firm07GB; Firm18PD), 'hit[ting] me with a real buzz' (Firm07GB), 'stimulating' (Firm10SM), 'fascinating' (Firm17SM), 'fun' (Firm14PD; Firm18PD), and even 'sexy' (Firm18PD). In reasoning why they enjoyed the work, distinctions between the decorative and structural crafts began to surface, with the former group more likely to exalt its 'artistic' (Firm01Pl) or 'creative' (Firm14PD; Firm18PD) nature, and the opportunity to produce 'art' (Firm05CJ) or a 'brand new idea', albeit with 'a 30s look about it' (Firm18PD). Interviewees from the structural crafts were more diverse in their explanations for finding the work motivating, but one person was very clear that satisfaction was derived in part from the mental challenge of designing sensitive conservation for heritage sites:

> 'The thing about conservation of anything is that it's a broader thing, or it broadens your horizons you hope, and your skills are part of that. That your skills are more than just putting a stone in. It's…
> [ ]
> …really understanding whether you should be putting that stone in, or taking a new one out, or restoring, or what…to what level you go, or you clean, whatever. And you need to understand the importance of the building in order to do that right'.
>
> (Firm10SM)

The distinction between the thought-based and motor-based aspects of their work was rarely made so explicitly, but others did intimate it. Some liked 'challenges' because more 'straightforward' jobs were 'boring' (Firm11SM), and others took 'a lot a pleasure' from 'chop[ping] away as little as possible of the original fabric, y'know, so ya can keep the original' (Firm17SM). Both of these excerpts suggest an engagement with craft beyond the 'satisfaction [of] be[ing] able to turn out a piece a work' (Firm15M), which might apply to any physically creative job. Although these quotes read in isolation do not demonstrate a particular correlation between the interviewees' capacity to interpret heritage and take decisions accordingly, further analysis of the transcripts suggests that conservation work in the historic environment could be uniquely motivating, which in part related to the challenges it presented.

4.2.2.1 Motivations for becoming a heritage specialist

All of the craftspeople enjoyed and felt stimulated by working with historic buildings in particular, and they gave three main reasons for this. Firstly, and in common with the Fountains stonemasons, interviewees viewed the places themselves as special: They 'lik[ed]' (Firm02CJ; Firm05CJ) or 'lov[ed]' (Firm12GB) them, and referred to them as 'fabulous' (Firm01Pl), 'lovely' (Firm01Pl), 'amazing' (Firm01Pl; Firm03SM; Firm15SM), 'wonderful' (Firm03SM), 'fascinating' (Firm14PD), and 'beautiful' (Firm18PD). One interviewee recounted having 'learnt' from certain buildings, and described listing the projects their firm had worked on as 'namedropp[ing]' (Firm15SM). The managerial interviewee from Firm13Ro explained that when he presented his workforce with 'more and more difficult jobs every time' he would be asked 'why can't we do summit simple?', but then 'when they start doin' it they say "oh, I quite like doin' this"', appreciating the fact that they were working on 'some famous buildin's'. Of working on a celebrated heritage asset in London, Firm11SM said: 'I mean when you lay there and take your templates and you think, yeah like…, I don't know how many kings and [there have been], 30 or 40, and they've all been sitting there [ ]. It's something…. you can't, not everybody can do…'. This rather meditative statement is different in tone to the delighted accounts of other interviewees, but is equally suggestive of a privileged exclusivity not recreatable elsewhere. They also illustrate the intimacy with which craftspeople experienced heritage's finite resource (Lyon 2013), and the value they attached to this.

The second heritage-related motive given by interviewees was that projects often presented unusual challenges requiring bespoke solutions that, almost as a byproduct, helped develop their company's expertise. Firm07GB chose 'awkward jobs' because they allowed him to 'think things out for a long time', in a selection process that had helped build the company a 'different skillset' from its competitors. Firm18PD described 'replac[ing] and recreat[ing]' with the same 'touch and feel' some water damaged 'very beautiful early water colour graining' as a 'lovely challenge' at 'a time when I was really into my grainin''. Talking about the importance of learning through doing in a similar way, Firm13Ro said that a recent recruit had become a 'craftsman now' because he was 'bothered about what 'e made', asked 'questions' and 'takin' [what 'e's learnin'] over to the next job'. By comparison, modern construction practices and new build were 'hated' because there was 'no challenge in it particularly. You're orderin' product codes rather than, er, trying to get hold of the traditional material' (Firm09Ro). Firm07GB said you could 'get to a point where you get a little brain dead just wallin' the same brick all day, everyday', because you are paid by 'how much you can do in a day to a reasonable standard, compared to with the stonemasonry [where] it's how good a quality you can do'. Rather than finding inspiration in the heritage itself, these interviewees were enthused by the mental challenges it posed, whether that was site access, sourcing an unusual material, producing

something of a high quality or attempting a technique for the first time. It was the opportunity to apply their embodied cognitive expertise.

The interviewees' final motivation for working within the heritage sector was less predictable, because it was far more nuanced. As an impalpable satisfaction that they took from working either where previous craftspeople had worked or in a historical craft tradition that they had established (Yarrow 2018b), it related to a hope that 'the knowledge of the traditional building trade will transcend not only individuals, but time' (Marchand 2012, 121). Although material-focused heritage research in the UK has rarely articulated craft as intangible or living heritage, the resonance was clear in several quotes: Firm10SM talked about 'delight in seeing the sort of bodges and things that people used to do', whereas Firm11SM described 'get[ting] something back' from 'be[ing] part of something, part of the history and the chain… [ ] The long chain of maintenance of a building':

> 'When I take a stone out of a building what's 800 years old, and I see the tool marks inside and I think 800 years ago a stonemason chiseled them out.
> [ ]
> And nobody's seen it since, and then you take it out and…'

Others explained their role in 'keep[ing] the craft' (Firm17SM), 'not of making a big thing of yourself but being part of a tradition' (Firm14PD) or that there was value in the fact that 'the only person who will see [your work] again is the mason who go[es] up there in 50 years in 100 years…' (Firm11SM). Firm10SM said that earning a 'stake in that building, because they've done something. [ ] Really did motivate' people who went 'away excited very often, or inspired by different things'. For this interviewee, conservation projects offered a 'full package' of motivation, because part of their 'stake' would relate to 'understand[ing]' a building, and 'engag[ing] with it on that level as well as on the skills level' (Firm10SM). The tripartite 'package' (Figure 4e) that Firm10SM explicated here effectively encapsulates the findings from across the transcripts: working in the historic environment was often an honour inspiring in itself; that the challenges it presented required mental and physical problem-solving ability as part of craft skill; and that in working on them the craftsperson interpreted and became part of an evolving tradition of craftsmanship, whether they retained their predecessors' work (as with the stonemasons) or recreated it (as with the painters). The interviewees joy in their work evoked the early ideals of the Arts and Crafts movement reviewed in section 2.2.2.3 more than the strict fabric-based direction of early international conservation guidelines. None of these reflections fit easily into the binary definitions of tangible and intangible heritage.

Motivations for working as a Conservation Craftsperson		
1. Honour of working on revered historic buildings	2. Intellectual challenges posed by bespoke conservation of significance	3. Contributing to an evolving tradition of craftsmanship

Figure 4e: The tripartite package of motivations for working as a conservation craftsperson

(Author's own 2018)

For most interviewees, an interest in at least one aspect of this motivational 'package' was an essential part of working for their company. Firm09Ro said that 'it matters a lot' that employees enjoyed the challenge of heritage work because it meant they would join in the 'great debates on site about how we think this should be done'. Firm07GB agreed, saying 'everyone that's come to work for me 'ave joined in on the enthusiasm, [they] 'ave an interest. Even the joiners, even though they're subcontractors, when I tell them, "right, well we'll do this, we'll use draw pegs" and so on like. They're keen to do it as well. They like doing this work'. Firm10SM felt that the skills of people who didn't take the 'same interest [were] diminished', and for Firm11SM it was 'common sense' to hire the 'weird' people that 'love what they do'. For the interviewees cited here (Firm07GB, Firm09Ro, Firm10SM and Firm11SM), having the inspiration to work in heritage set people apart from others who might be 'a good craftsman' for 'taking pride in doing it right' (Firm05CJ) because of their ability and willingness to engage in on-site discourse, and they often felt that this employee attribute was a core business requirement. The contrast with the stonemasons' insistence that that their work was not a 'vocation' is returned to in section 6.2.3.

Throughout the interviews, the ability to make a profit and maintain operations was really only mentioned in conversations about the motivations to be a conservation craftsperson. This indispensable characteristic was mentioned several times: Firm07GB thought that 'if they're interested they'll try and do a better job. Than just doing something they're not bothered about', while Firm11SM employed people that 'love what [they] do, [ ] get paid for what they love to do. So [they would make] some sacrifice…', which was important in the 'tough' (Firm15SM) world of stonemasonry, which required 'clambering up and down the scaffolding and getting covered in muck and rubbish, banging your fingers and scraping your knuckles' (Firm03SM). The blacksmith agreed that passion was important and went even further, saying that an 'aspiration' to 'work with' and 'spark off one another' meant that employees were more likely to produce quality work efficiently, and thus play a role in the business's success despite it being 'very easy to lose money' at blacksmithing (Firm08BS). Interviewees' descriptions of the physical or commercial adversity faced in conservation crafts counterbalanced the clear pleasure that many took in their work. Like other physical

professions (Everill 2009), they took pride in such adverse conditions that opposed but rarely outweighed more idealistic views of craftsmanship.

4.2.3 Conflicting motives: the business model for conservation craftsmanship

Close analysis of the interview transcripts shows that few interviewees were interested in business expansion. Firm08BS thought that 'craft industries' were 'a bit different to, to common run of industry' because most people 'start[ed] with an interest in the job'. It manifested in several ways, such as Firm05CJ's rejection of work that 'wasn't interesting', and concentrating any advertising on gaining 'more interesting stuff' rather than increasing volume. Firm14PD recounted an occasion where getting the 'job up and running and working was more important than anything else. Certainly more important than money. [ ] It was too important a job culturally to get wrong', and another time where he had 'just wanted to do a nice job. So I did it basically half price'. Even though these statements suggest a tension between the interviewee's craft practice and commercial viability, there was recognition that being motivated by 'quality of life' (Firm01PI) and 'mak[ing] a decent living doing something they like to do' (Firm08BS), rather than being 'very money orientated' (Firm11SM), could have positive business outcomes.

Firm11SM was most assured that his employees' shared motivations gave them a competitive advantage, especially within the community of close relationships described in section 4.5. He acknowledged that the company 'ha[d] to make money', but said that financial ambitions were 'probably second' to 'a passion [ ] to work on old buildings', 'otherwise you wouldn't do it' (Firm11SM). He then said that those who were not motivated in this way, who 'coulda sold bread, [ ] coulda made cars' (Firm11SM), would struggle to compete. 'Big firms [ ] run by quantity surveyors' and who 'have [had] management buyouts over the years, they [are] just looking at numbers… But [that] doesn't work' (Firm11SM). Similarly, Firm08BS had become a blacksmith 'because it seemed like an attractive thing to do', not for 'a good career path' or 'a way of making a living', but careful direction of that passion had 'worked out reasonably well'. This he said was 'all down to [ ] the speed and the competency of the people who are on the shop floor', buoyed by their competitive 'spark[ing] off each other' (Firm08BS). What Firm08BS articulated that Firm11SM did not, was that, while producing quality work was important, it must also be done efficiently in order for the business to survive.

The careful balance between sustaining craft through limited expansion is signalled in Figure 1f, which shows most firms' growth as stable. Those that saw it as elusive reflected that it had not 'pa[id] to be a perfectionist… I coulda made a lot more money and 'ad a totally different life, but I chose to do what I do because I enjoy it, and that's the way I think it should be done' (Firm17SM). For

Firm07GB, a growing company that employed people that 'like[d] doing this work', there was a conflict between pursuing personal interest and perfectionism, which meant that 'nobody ever's gonna make a big profit in conservation work. [ ] You just get carried away with things', which he mitigated by employing 'tradesmen' rather than those that were 'arty farty about lime'. As the largest employer, Firm13Ro was unique among the interviewees for distinguishing between people who worked quickly and those with a 'bit more finesse, [ ] a bit more of an eye' even though they were 'steadier, [ ] a bit slower…'. This was probably due to their 'subdivided' (Thiel 2012a, 41) industrial manufacturing processes that focused more on manufacture and 'assembly' than on the 'individual initiative' of the craftsperson (Lynch 2013, 11). The sole trader craftspeople did not benefit from the demand to sustain such activity, and one firm found that the intermittent nature of work caused problems:

> 'The economics of it are very important, because if there isn't sufficient demand there's no point in sort of trying to supply it. [ ] I mean I just enjoy doing all these things, and so I have a business life that's not particularly economic in the sense that to make money you do the same thing again and again, you get very good and efficient at it, you get known for it, and you have demand for it. [ ] Trying to find work, and doing whatever comes up and keeping the clients happy, which means I have…I cover basically three [fairly broad] areas of [ ] activity. [ ] I do all the figurative work of mural painting and stuff like that, I then do, I do the full range of building work. Er, and, erm, I do a full range of decorating, 'cos I even do straight decorating at times depending on what, where the demand is'.
>
> (Firm14PD)

Most of the interviewees agreed with the excerpts above, that an interest and inspiration to do high-quality work were valuable characteristics of craftspeople, so long as they were managed flexibly and alongside more mainstream work according to business requirements and the sector's intermittent demand. Others had a slightly different take on the compatibility of motivated craftspeople and the business' performance.

Firm16GB's view was particularly interesting, because this firm had in recent years undergone a management buyout of the kind that Firm11SM said 'didn't work'. Speaking from a managerial role and without craft experience, the interviewee said:

> 'Sometimes I think there is an inclination that y'know all that sort of craft stuff, and all that kind of engagement an' passion an' all the rest of it is quite special, and is important to people, and does genuinely make a difference to how [craftspeople] operate and what they do. I also think that sometimes [ ] it's a complete loada heritage bullshit… [ ] but y'know, we've had stonemasons who

> live an' sleep an' breathe being stonemasons, and they're fantastically interested, and y'know they've got their own library of stone samples, and they're interested in mortar mixes, and they dabble on the web in…y'know, or are reading books about y'know English Heritage projects and all the rest of it. And we've other guys who've been at least as good who really don't care at all, and who are just fast and good, and it's how they earn they money'.
>
> (Firm16GB)

Other firms expressed this experience less deliberately, such as Firm05CJ, who had personally 'pulled [reclaimed wood] out of a Victorian house. [ ] I kept it 'cos I liked the l…it just had stencil painted on it but it was quite old'. Storing this in the firm's workshop, he had had to 'rescue [ ] it twice from the skip 'cos [the others] want to chuck it out! Workmen have a less romantic idea of the past than other people' (Firm05CJ). So here, even though the interviewee himself had an interest in the 'romance' of heritage, he did not think it was important for everyone who worked in the company. However, the same interviewee also described the craft workforce solving technical problems, so it is likely that they were inspired by the second of the tripartite package of motivations (Figure 4e) because all of the interviewees at least recognised interest and passion in the craft among themselves or their colleagues. Overall, the range of craftspeople portrayed indicates that there are roles for various identities in conservation craftsmanship, but that there are two problems with the current system of apprenticeship: not only are opportunities diminishing rapidly (particularly among this sample since Firm16GB's closure) but there is also a barrier preventing apprentices from progressing to lead the firms they train with. This role required not just identification with the tripartite package but also commercial business sense (sections 4.3 and 4.4) and an ability to build cooperative relationships with third parties (section 4.5). However, heavy influence of the commercial environment created tension for some, and indeed sat uneasily with the concept of sustainable conservation.

4.2.3.1 The tripartite package and sustainability

Despite a handful of exceptions, most interviewees thought motivation for the craft itself an essential attribute, without which firms should not be able to compete. Firm03SM said that those with 'no real expertise and no real interest' should not be given work, and it 'really upset' Firm17SM when competitors did not execute work to a certain standard or do 'a proper job' because it showed that they did not share his 'passion'. Some of their portrayals illustrate how their expert technical knowledge could enhance conservation practice: Firm14PD described gaining a '[wonderful] sharpness [and] crispness' from a 'proper traditional' burning technique to remove paint, and Firm06CJ felt that 'the basics [of hand working with wood] are still the same' in that they involved 'machining to section, and then, y'know, form your joints' and, although they could be done in a 'more modern, cost-effective way, [ ] it [was] maybe to the detriment of the final product'. Firm02CJ

explained that there ‘was a lot more to [the detail of sash windows] than some people actually know’. Describing a ‘rounded head, with a lovely patina on and a nice shape’ that he had wanted to conserve, Firm17SM illustrated how his craft-based delight in the material might help conserve significance (Figure 4f).

Figure 4f: Repairs to a boundary wall, which Firm17SM felt could have conserved the ‘rounded head’ (Top: before; Bottom: after)

(Author’s own 2018)

It is clear, then, that the craftspeople’s expertise, both explicit and tacit, as observed by Jones and Yarrow (2013), can help conserve evidential and aesthetic significance, despite it not always making

obvious business sense. This conundrum was especially true for Firm08BS, who 'insist they use [certain techniques that are] not the cheapest' in order that 'the people on the shop floor [improve]', even though it 'very often' created tension with his business partner who 'thought [they] were supposed to be makin' money out of this job'. Developing expertise was costly, but one firm felt that the interest and passion it ignited could transform people into 'moral agents' (Marchand 2009, 23) that helped promote the craft to clients: 'mak[ing] them very excited, I talk to [clients] and say to them why we do it. [Our craftspeople] talk to the churchwarden for two hours and make them very happy' (Firm11SM). Although Firm15SM admitted that it was 'amazing' and 'rewarding' that people had an 'interest' in their work, he found opening sites to the public caused inefficiencies and other problems, This view not only contrasted with the process of building minarets in Yemen, which became a 'focus of public interest' (Marchand 2012, 123), its divergence from inclusive and public value objectives for heritage conservation reinforces the point that conservation practice has lagged behind heritage policy in this area.

Inclusivity and engagement in conservation practice were interesting themes for the craftspeople, more familiar with 'largely expert, professional domain[s]' of 'specialist practitioners' (Chitty 2017, 3). As such, while they enjoyed the craft, conserving heritage and valued their place in the intergenerational community of craftsmanship, they did not consider this in relation to wider concerns. Indeed, while they naturally celebrated heritage, and often lauded their colleagues and other craftspeople as 'cerebral' and 'very clever' (Firm01Pl) for example, they rarely discussed sharing this beyond their professional community. Except for occasional teaching and several limited online presences, their relationship with the wider world seemed undeveloped, reminiscent of historically 'mysterious' craft practices (Adamson 2018b) and clashed with heritage conservation as an inclusive outward facing discipline. Interviewees weren't overtly protectionist but their unconscious inclination to work within their own community of practice seemed to be rooted in their need for a shared idea about conservation, which was so important at Fountains.

Interviewees' perceptions of working with non-specialists is discussed in section 4.3.1.2, when I consider the impact of commercial construction on craftspeople's freedom to perform high-quality work of which they were proud. For now it is important to note that, despite craft motivations enabling conservation, they caused friction in a commercial environment that had to be carefully managed.

4.2.4 Belief in work

Although the interviewees' clear pride was often linked to the above heritage-led motivations (Figure 4e), it could also be distinct. When Firm13Ro's employee 'took 'is son to see a job' on a celebrated historic building, their pride was an almost incidental outcome of their employment. Similarly, when

Firm07GB described a previous employer as ‘an old company’ that had ‘built the piers for the [Victorian] valley bridge’, he was expressing pride in the firm’s age and stature, even though he had had no bearing on it. Pride was evident in the staff of Firm11SM who were ‘always taking photos, [because they’re] very proud of what they do. So they be going home and showing their [family]’, in a similar use of social media found among the apprentices in Chapter Five. Firm11SM also talked about his employees as being comparatively ‘weird’ for their ambition, so for these aspirational craftspeople their pride was more deliberate. Regardless, it is unlikely that they would aspire to the entire tripartite package of motivations identified above at the outset of their careers. In particular, the motivation to contribute to an evolving craft tradition would perhaps only develop through a tacit and experiential knowledge of that craft.

Much of the narrative around pride revealed almost as much about individuals’ characteristics as their motivation to practise conservation crafts. For example, the statements ‘no disrespect but I know how good I am’ (Firm02CJ) and ‘if [a job] can be done properly, it should be done properly. [ ] You know, it’s gotta be done well or don’t bother doin’ it’ (Firm17SM) indicate a perfectionism driven not by conservation but by ‘job satisfaction’ (Yarrow 2019, 197) and ‘belief in their work’ (Sennett 2008, 145). Both of these interviewees worked independently or, on occasion, with one other person, and were quite negative about scaling up their operation or cooperating with other crafts firms: ‘I like to work on every job. I like to oversee it. I like to make sure I’m there at the start of it and I’m there at the finish of it. There’s nothin’ that goes through my books, that I invoice, that I ‘aven’t worked on’ (Firm17SM). This need for control – an advantage in conservation because of the close ‘deal[ings] with’ client intermediaries (Maloney) – related to the great pride taken in their work, but conflicted notably with the historical growth of remote styles of management identified in section 2.2.

The second of the tripartite package of motivations (Figure 4e) showed that conservation craftspeople liked to engage with the complex and bespoke challenges posed by heritage work. Several excerpts showed that pride strengthened their ability to meet these challenges in a manner that would conserve heritage significance, as agreed with the client intermediary. Again, the role of this person was key for one firm because, as well as ‘enjoy[ing] that challenge to a certain extent’ and preferring ‘better materials’, the workforce would ‘much rather do something where their work is appreciated’, as opposed to the culture on more commercial contracts where ‘as soon as you roll on to site they want you off site’ (Firm04Ro). Firm06CJ similarly related that, even though an oak altar hadn’t ‘necessarily gone to plan’, any problems caused were less important than it having been ‘something nice to make’ that ‘you [could] tell Didier’s enjoyed makin’’ (Firm06CJ). And this was an attribute for all the firm’s craftspeople: ‘whether it be bookcases or windows or… I like to think they all take a lot of pride in how it’s finished’ (Firm06CJ). Far from being uniquely optimistic about all of

the craftspeople in his firm being proud of their work, Firm06CJ was articulating an opinion that most of the interviewees seemed to share. Their employees' pride in work and interest in heritage was of fundamental importance because it was often a reflection of the company's culture and could influence its practices and reputation.

4.2.4.1 Company pride

None of the interviewees overtly acknowledged pride in the company itself, but several inferred it in their accounts of recent accolades, such as employees 'hav[ing] received skills awards from the college' (Firm04Ro). In addition to this, descriptions of efforts to 'keep a database [that] will always be active' so that the firm's work could be identified 'in 50 years' (Firm13Ro), dating work with individual 'masons marks' (Firm11SM), and 'labelling [ ] work in secret places' (Firm14PD) suggested a level of pride in finished work. Furthermore, these actions all signified the individuals' and company's need for external recognition, whether on site, through regional and national awards or future craftspeople. Pride in work and being driven to achieve such recognition were so important that they became an essential consideration in the recruitment of craftspeople.

4.2.5 Recruiting a conservation craftsperson

Interviewees regularly discussed the disposition of their employees as a priority for recruitment, to the extent that it prevailed over more traditional concerns such as accredited training, certification or previous work. Firm08BS was the staunchest in this regard, saying that 'an 18 year old could get a job here if he was really motivated' and could 'solve problems', because 'an ounce of intelligence [was] worth a tonne of experience', in order that they could competently 'apply' the skill once learnt. Part of the test of a potential recruit's motivation was 'actually [demonstrating that they had] what it takes to make the grade' by 'going on a weekend course or whatever' 'because [blacksmithing's] not an easy thing to do. And we do need people who are very motivated' (Firm08BS). Firm09Ro agreed that they 'look for, for a passion for the job' which 'runs through everything really. Y'know, how they'll look after their tools, how they'll stand, how they hold themselves' so they could represent the company to external stakeholders. And although it could be 'difficult to find somebody who is very passionate about it', who would 'always [attempt] challenging things', the effort ensured that new staff would be 'perfect' for assimilating to the company ethos of 'coming early [ ] stay[ing long[er]], and work[ing] through [ ] breaks' (Firm11SM). For Firm04Ro there was an additional benefit, in that people who 'like[d] to work in the style that we do' would stay and 'work [ ] for us a lot of years', whereas those of a different nature didn't 'like the way we work' and would move on.

While the interviewees above inferred that the core attribute of a new craftsperson was their drive, others felt that some people had an innate 'artistic' quality that gave them a 'feel for it' and the ability

to ‘see it ya head, [ ] to mark it out on the stone, and you’ve gotta be able to do it’ (Firm17SM). Without this, someone ‘could be doing the job for 100 years and they’d still never be able to letter cut. You can either do it or you can’t do it’ (Firm17SM). Firm13Ro agreed with this entirely, saying that it was ‘challengin’ sometimes getting’ the right people [ ] who are a bit artistic in their sorta temperament. They need to be able to imag[ine] how something needs to look, especially some a the carvin’ that we do [ ] where we’ll make a bespoke finial [ ] by hand’. So important was this inclination that one fine art trained interviewee, felt that ‘art students, who are very creative individuals obviously, need to be directed into decorative arts and conservation’ (Firm18PD). The interviewee went on to say that ‘decorative arts [was] a shocking label really, because it’s all er… it’s all creativity. The decorative arts need [ ] some kind of, higher status, [ ] to be given a boost’ (Firm18PD). This sentiment echoed Ruskin’s experiments (section 2.2.2.2.1) and reinforced the finding in section 4.2.1 that the appeal and content of traditional apprenticeships was not broad enough for heritage conservation.

When taken together, the impressive attributes identified as important in craftspeople – passionate and creative with the intelligence to solve problems – mean that it is perhaps unsurprising that many found it difficult to recruit. As a solution, most of the firms preferred to recruit on the basis of personal attributes rather than skillset or qualifications, and offer people on-the-job training. Accordingly, most interviewees expressed a desire to provide extensive mentoring to any new recruit: as ‘the best way really [is] to train your own’, give ‘your own input’ in order to prepare them for that firm’s work ‘at the moment’ (Firm11SM). Firm13Ro talked about taking on an ‘apprentice who would, would pick up’ the work through ‘shadow[ing]’, being ‘hands on’ and giving it a ‘try’, but that this would take place ‘over years, say a decade or so’. Firm18PD remembered during the 1980s being ‘inundated with people coming from the decorating schools of France and Belgium. The big ones. They’re really, really good schools. And they teach you basically grainin’ and marblin’, and the trompe d’oeil mouldings. That’s what they teach, and they teach it by rote. But it’s brilliant. [ ] But they could only do those [and]…it got quite annoyin’ after a while. These students show the most exquisite panels, which I was jealous of, but, come to doing a job, ya never asked to do those particular marbles, particular woods, in quantity’. Eventually, Firm18PD decided that it was better to mentor ‘people who hadn’t done much before and wanted training up or to untrain skilled apprentices’. The intermittent nature of specialised conservation work (noted above) did not seem to implicate the smaller firms’ approach to recruitment. Their preference for highly skilled people throughout the company reflected the hierarchical base at Fountains, but was arguably more ambitious because they wanted employees to perform an advocacy role.

Two interviewees acknowledged the challenges of such intense on-the-job mentoring for the crafts sector. It would be impossible for Firm14PD to 'train anybody up to do all the different things' he did because he 'covered such a wide area'. As 'most blacksmiths [were] art based, [ ] really very creative people who [were] making things out of metal' independently, this was an outlook with which Firm08BS sympathised, and even recognised that this blacksmithing norm could have an effect on recruiting to his own 'more industrial' enterprise. This is because, in areas where recruitment was informally based on passion and aptitude, it was difficult for candidates to develop the requisite passion and prove their competence. One option was to 'find [a blacksmith to] work with. Although it's very difficult to do that now, because most blacksmiths were 'one-man bands'' and so it was 'not very easy for them to give training to anybody' (Firm08BS). Even if candidates were able to develop and convince someone of their passion, the 'five-years. Minimum [of working diligently] was a big investment [ ] to learn skills which are not then marketable' (Firm08BS).

The 'chicken and egg' scenario created, whereby potential recruits, unable to recognise their own passion, could never prove it as an attribute, was not lost on the interviewee. He felt that this was not a commercial problem for the industry though, because at that moment there was 'a huge number of very, very keen young people out there who want to do it' but 'a 'shortage of work' (Firm08BS). A higher demand for positions than could be met was also reported by Firm15SM, who had 'an in-tray with probably about 35 CVs of people who've probably 'phoned or contacted and said "I'd love to be a stonemason"' but market conditions meant that they were not recruiting. In May and June each year, Firm06CJ received 'a lot of letters [ ] from kids at school sayin' 'I'm lookin' to be a joiner' but at that point there was no 'workload' to justify taking them on. 'Loads of people applied' for a training position with Firm11SM, and already we've seen how Firm18PD had been 'inundated' with applicants in the 1980s. Not only do these statements indicate a mismatch with the NHTG's economically based forecasts for new entrants to the sector, the suggestion that an oversupply of applicants was undesirable conflicted with the want to recruit quite a rare sort of person. Logic would suggest that in such instances it would be advantageous to cast the net as widely as possible, but in actual fact the interviewees preferred to control recruitment very closely.

4.2.5.1 Recruitment practices

As well as demonstrating the interviewees' own commitment to craft, this section has so far shown how carefully they recruited future conservation craftspeople to train extensively, over a period of years that far outstretched typical vocation training routes in England mentioned in Chapter Two and detailed in Chapter Five. They found the current system inferior (as in section 4.2.1) and were sceptical about young people, generally preferring to recruit more 'mature' (Firm03SM) and 'older' (Firm12GB) people of up to 25 years old (who were still eligible for apprenticeship funding). Often,

these people had a ‘good academic background’ (Firm03SM) or some ‘informal’ experience (Firm09Ro), which set them apart from school leavers for whom further (as opposed to higher) education was often a ‘fallback’ (Thiel 2012a, 89). Firm09Ro compared the culture among young apprentices in 2011 to the people he had started working with in 1969, ‘reasonable men’ who, like the Fountains stonemasons’ mentors, ‘had done national service or had seen active service’. On encountering such systematic problems to recruitment, the interviewees adopted an approach similar to Thiel’s (2012a, 25) builders, looking inwardly to personal and professional networks for a solution. This ultimately led to some quite exclusive recruitment practices.

Most interviewees cited a preference for assessing future employees’ commitment through visiting them in college (Firm11SM) or engaging them for trial periods (Firm03SM; Firm08BS; Firm13Ro). This was important because it was ‘all very well sitting in an interview’ (Firm03SM), but their enthusiasm in ‘tough’ on-site or workshop conditions also had to be tested, which ‘some of them succeed[ed at] and some of them fail[ed]’ (Firm08BS). Two companies employed simpler observational methods: asking applicants to model ‘a lump of clay [from] a picture’ (Firm01Pl) or to ‘work a draft [ ] on a piece of stone. Mark a line and pitch it in first with a pitchin’ tool, then go along with a chisel. And work a draft along the edge of the stone. And I can tell by watching whether they’re capable of doin’ the job properly or not’ (Firm17SM). Both of these firms chose to observe craft ability rather than test commitment, even though both intimated elsewhere that this was important. Most interviewees preferred to assess a potential employee’s commitment as well as ability before recruiting, which meant having known people for long periods. This led to a highly selective approach that perhaps had some unintended consequences.

All but one of the firms had previously recruited from within staff members’ families, so much so that two described themselves as ‘family’ run businesses (Firm04Ro; Firm06CJ), while couples had either jointly established or ran several (Firm01Pl; Firm02CJ; Firm11SM; Firm12GB; Firm17GB; Firm18PD). It was more interesting that there was a definite trend for hiring craftspeople from within one family, normally a father and son and in one case two brothers. There was little evidence that the size or craft speciality of the company influenced this inclination. Firm04Ro had ‘had some two, if not three generation families that have worked for us’, Firm06CJ had ‘recently taken on [two] apprentices’ that were sons of existing craftspeople and Firm12GB worked with his nephew. One company’s ‘unfortunate problems with trainees’ that ‘start[ed], you interview them, they seem fine, they’re all enthusiastic, er, and they last, you know, three or four months’ had been resolved when they had offered one of the manager’s sons an apprenticeship (Firm03SM). Where family connections were absent, interviewees reported employing people they knew, either through previous work (Firm01Pl; Firm02CJ; Firm06CJ) or by reputation and ‘word of mouth’ (Firm09Ro).

Although this did not prevent firms from recruiting internationally (at least five interviewees reported having hired from abroad), the regularity with which these recruitment practices took place did risk making the sector difficult to enter for those without personal ties or a pre-existing passion, as discussed in section 4.2.4. Furthermore, although the practices assured employers that trainees had the correct temperament and commitment for their business, it often meant that they were recruiting on the basis of familiarity and in 'their own image', which could pose future risks to the functioning of flexible, broad and reactive craft networks.

4.2.6 The 'image' of a conservation craftsperson

In some ways, the recruitment preferences of the interviewees make perfect sense. The excerpts deployed in section 4.2.2.1 demonstrated that in the past their own commitment had driven them to work on challenging jobs that had expanded their skillset, a form of self-directed on-the-job training. It therefore follows that they might consider high levels of investment in future advocates of the specific craft tradition appropriate. Conversely, it created a 'big fear' (Firm03SM) of people leaving the company once fully trained, so much so that a steadfast desire to retain people characterised many of the firms. This, coupled with the firms' regular reliance on longstanding relationships within the sector, explains recruiting from within a familiar professional or personal cohort. Indeed, if the reason for these recruitment habits was employee retention, they could be seen as successful: Firm08BS's employees did not 'tend to leave', Firm04Ro's longest serving employee had worked with them for '30 years', and Firm06CJ had just recruited the son of an employee who was in ''is mid-50s [and had] worked with us since 'e was 15'. Although Firm16GB had changed since the management buyout, the previous culture of a 'traditional firm where [ ] lots a people stayed for loadsa years' endured among 'a significant number who are, you know, long-term employees [ ] at, y'know, 15, 20, 25 years'.

In reality, employee retention was only one reason for the interviewees' selective recruitment practices. The second rationale was quite elusive but related back to the third of the tripartite package of motivating factors (Figure 4e), which recognised value in the continuous craft tradition. The interviewees were generally proud of their place in the chain, describing not only their mentors in great detail but also their ancestral ties. Firm07GB said 'my dad, as I say, was a builder, my nephew's a builder, I'm a builder, and we've at least two generations that were quarry workers, so again, the granddad's told me dad things, [it's me dad that got me into lime works], and they were passed on to us, so I think we're quite privileged that we 'ave that sort of descendance, that I've 'ad that knowledge…some would say it's no…it's only a builder, but I'm proud of the ancestry as such'.

Other interviewees were similarly proud of family connections, recounting that ‘my father’s a sculptor, my brother’s a stonemason, my uncle’s a stonemason, my grandfather was an artist sculptor, so there it was like in the family, so I grew up in some of the stone workshops’ (Firm11SM), and ‘I’m 6th generation family joiner’ (Firm06CJ). Multigenerational craftspeople were also represented by the interviewees, such as the ‘three first and second generation craftsmen [who had] learnt at their grandfathers’ knee’ employed by Firm01Pl, and even the managerial interviewee from Firm16GB who had ‘had in mind the family business stuff’ throughout his training. Evoking pride in the ‘tough’ nature of the work, they also emphasised training on site rather than in a formal educational setting. Instead of attending college, the interviewee from Firm12GB ‘worked for my father, so straight on to the sites, and then straight on to the churches’ and instead of doing an apprenticeship was ‘just given a book and learned from there. [ ] The old method’.

All the excerpts used in the paragraphs above suggested that traditional craft knowledge passed most fluidly between close-knit individuals; a reality that is possibly informed by the shared performance and co-practice of corporeal learning identified by Marchand (2010). It also resonates with Donovan’s description of Fountains as ‘like a family’. Firm04Ro spoke about the development of the company’s acclaimed ‘skills and expertise’ and having ‘two, if not three generation[s of] families that have worked for us’ as interdependent. The significance of intergenerational learning was not just apparent in the discourse of those representing multigenerational craftspeople but also for those who had enjoyed similar lineage as an outsider. Firm17SM had been unrelated to his first boss, but the firm itself ‘‘ad been goin’ since 1927’ and ‘my old boss was the son’. The company that Firm03SM had trained with was run by a ‘very idiosyncratic old boy whose family had had the business for seven generations’. These two interviewees were not unusual in having entered the craft without pre-existing family ties, which is inconsistent with this attribution’s importance at the time of interview. It is likely that the economically challenging recession had further compelled the firms to invest in trusted individuals who would absorb the craft and remain with the company, especially when it could be justified as valuable multigenerational knowledge transfer.

It was two of the larger firms that were able to reconcile an ambition for high-quality craft skills with a more progressive approach to recruitment. Both Firm15SM and Firm13Ro talked about craft knowledge being transmitted intergenerationally outside family units, and felt that a broad recruitment pool enabled more diverse skillsets. Indeed, a recently stagnant workforce had meant that Firm15SM could not recruit ‘young blood’ to reignite the company’s ‘average age [which was] probably in excess of 40’. As a manufacturer of both modern and historic materials, Firm13Ro’s perspective was also useful because they felt that being able to temporarily draw craftspeople into their heritage section from the main manufactory as necessary suited the intermittent demand of the

heritage sector. The efficacy of this model for Firm13Ro is interesting because, while it is at odds with the much more traditional recruiting methods of the smaller firms, it seemed appropriate to a field where 'ebbing and flowing' sometimes meant 'recruit[ing]a few more staff' only to 'make a small number redundant again' (Firm16GB).

Although this ostensibly contrasts dramatically with the stability at Fountains, it actually correlates with the masons' activities after privatisation (section 3.4.2), when they continued to work together in response to demand. Networked models for building and craftsmanship have functioned informally (Thiel 2012a, 84) for sites such as the post-fire reconstruction of Windsor Castle, where a 'hybrid' (Nicolson 1997, 198) of contracted and directly employed woodcarvers were brought together. Practical ways of establishing such a network, from which craftspeople could be mustered in response to demand, are revisited in Chapters Five and Six. As a solution, this would suit interviewees leaning towards trusted individuals but the latent skill required in the sector would present a challenge in the current context of specialist private firms competing for work. However, as Morris and Diderot foresaw, work towards a wider engagement in craftsmanship remains a priority: as Robertson's experience at Fountains showed, respected craft expertise is earned through consistent practice, which is threatened by the intermittency of the sector.

4.3 The organisation of conservation craftsmanship in 2011/12

The third of the research questions outlined in Chapter Two aimed to investigate the way in which craftspeople perceived the organisational structure behind conservation craftsmanship. We know that the stonemasons' experience of privatisation was indicative of a national trend, but this is the first time I have explored its effects on the heritage sector's ability to sustain craft. In contrast to the situation at Fountains, craftspeople interacted with professionals from many different organisations in a much more fragmented sector, which both influenced and was influenced by the established gulf between thought-based and motor-based workers.

4.3.1 A staged approach to conservation

The HLF's adoption of value-led heritage processes is important. Not only were conservation management planning procedures being widely tested in England for the first time (section 4.1.2.1) but also in the context of vastly increased expenditure via a new system of indirect grants. Several firms had been aware of the change to large 'grant-based' (Firm04Ro) projects, because the augmented complexity affected their negotiation of the two stages of project conception and then being on site, as well as the process of competitive tender that linked them. Most craft firms were now too small to deal with HLF projects so they were increasingly subcontracting to main contractors who could absorb the financial risk (Figure 4b). One interviewee's expansion into the role of main

contractor ‘was definitely led by the funder’s size of their funding package’ because ‘if our total turnover was £3 million and the HLF are giving out their money in million pound lumps, [ ] we weren’t gonna be acceptable and our risk was gonna be far too high. So we had to grow the business, and [ ] that was really sorta what led to the change. So, much bigger jobs, and much more management, and using far more subcontractors [and comparatively few directly employed] people’.

The above paragraph illustrates how a staged approach to conceiving design and then building it on site operates within the construction industry. It synchronised very easily with the HLF’s informed conservation process (see Figure 4g for a comparison of the BC’s sequence with the RIBA plan of works) because interpreting significance and resolving its conservation could be conceived in a management plan. An architect would then specify this and award a fixed contract to a private company through a process of competitive tender. Only then would conservation be put into practice on site. The perception that this approach was more objective and inclusive led to Clark (2001) arguing that the full and holistic understanding of a conservation management plan should underpin all public investment in heritage. Although this was based on the ‘fundamental assumption’ that assessing heritage should be dynamic and continue ‘throughout [ ] a project’ (Clark 2001), practically achieving that now was difficult on large, expensive and indirectly funded building sites. This is because the core principle of understanding before conservation was flawed, and it inhibited craftspeople using their substantial embodied cognition in a dialogic approach to interpreting significance through conservation practice.

Stages	Stage one: concept					Stage two: material	In-use
RIBA plan of work 2013	Strategic Definition Identify score requirements and project programme	Preparation and Brief Develop objectives, outcomes, budget	Concept Design Outline structural designs and building service systems. Consider risk assessments and health and safety.	Developed Design Refine architectural structural and building design for cost information	Technical Design Programme design, including specialist subcontractors	Construction Offsite manufacturing and on-site construction. Resolve design queries as they arise	Handover and Close out Conclusion of building contract
BC process 2013	Understand the place Understand all aspects of significance without emphasising one value over another	Assess cultural significance Written statements that precede work should establish cultural significance	Identify all factors and issues A sequence of collecting and analysing information before decisions are made	Develop policy Groups should participate in identifying and understanding cultural significance, as it relates to use, location, setting, archaeology, aesthetics	Prepare a management plan Ensure change does not reduce cultural significance	Implement the management plan Conservation Practice: groups should be able to participate, but disturbance to fabric should be minimised	Monitor the results and review the plan Statements of significance should be periodically reviewed
Craft input		To help investigate the condition of a site		To use experiential knowledge to advise on cultural significance	To plan site logistics, such as access	To employ motor-based expertise to interpret and conserve heritage	

Figure 4g: Royal Institute of British Architects (RIBA) plan of works as compared to the Burra Charter (BC) process

(Both refer to cyclicality as the continuing need to understand and redefine strategic aims but in essence they are overwhelmingly linear and phase physical intervention [stage one] in isolation from and subsequent to the information gathering and design exercises [stage two]. The redline denotes the point of competitive tender)

4.3.1.1 Mutual understanding with the client intermediary

Early on, the pattern in the coded transcript data suggested a lack of clarity between the different organisations' roles. There was an atypical clustering of code co-occurrences between the six codes that formed part of the broader 'external factors' coding group ('Administrative Restrictions', 'Client', 'Professionals', 'Economy', 'Heritage Sector Influence' and 'Other Firms'). Explained in detail in section 1.4.2.1, this essentially meant that interviewees regularly discussed their interactions with sector stakeholders and other 'external factors' synonymously. This suggested some ambiguity over the various roles within the organisational framework behind a conservation project, which at its most basic could involve just a client and the firm itself, but grew increasingly complex as projects expanded in size. For several interviewees, there was one clear priority that emerged irrespective of the size of the project, and this was their ability to agree with the client or their intermediary on 'good' conservation.

The co-occurrence in coding was most acute where interviewees were discussing professionals and clients. This is because they often perceived professionals representing and acting as the client, even though they may not be the project's funder, the building's owner, or even agree with the person that was: 'let's say our client's the architect, for want of a better term' (Firm15SM), and 'there is always a battle because the conservation officer [like the architect, an intermediary] wants it doing in a proper way with proper materials, whereas [the owner's] looking at trying to do it for as cheap as she can' (Firm04Ro). Often, as in these two quotes, the interviewees preferred working with a specialist client intermediary because their shared heritage values enabled conservation in the face of client resistance. Close working relationships with individuals could function very satisfactorily in this vein, and this will be explored in section 4.5.1.

Conversely, interviewees sometimes criticised third-party interventions that did not properly respond to the heritage significance of an asset, particularly when that client employed heritage professionals such as local authority conservation officers. In one case, a craftsperson reflected on a project to conserve a listed church boundary wall, which he thought had been executed poorly because of unnecessary damage to the stonework (Figure 4f). Ecclesiastical exemption had released it from listed building consent and normal conservation officer input, but the local authority was involved as the paying client. In a typical scenario, they 'got an independent architect in [to draw up plans and specifications], then they went out to tender to the [craft] firms they wanted' (Firm17SM). The project had not been executed according to the specifications, and Firm17SM reasoned that this was due to the local authority 'employ[ing] an architect [as intermediary] that didn't even know what, what was happenin'', and who had subsequently 'los[t control of] the job'.

It is concerning that something so simple could be perceived as a failure because of its organisation, but the flawed outcome in this example did illustrate the critical role of intermediary in linking the conceptual planning and physical on-site stages of a project (Figure 4g). Indeed, this interviewee was particularly negative because he felt let down by the local authority deferring to a non-specialist architect despite his '40-years' experience in the town' (Firm17SM), which contrasted starkly to Robertson's increasingly respected authority. Some of the other interviewees also inferred their dependence on the intermediary's quality assurance role, with statements like 'really the architects are at fault if they then try and bring, shall we say, a general commercial contractor to tender for something' (Firm04Ro). Another talked about 'a job [having] been an absolute nightmare [ ]. Because, you know, it's been underpriced and they haven't got enough money to resource [quality work] properly. And you think, well if they can't [ ] manage these sort of things [ ], what hope is there for us?' (Firm03SM). Inferring that the firm's fate relied upon the intermediary's insistence on 'quality', this interviewee highlighted not just a need for sympathy towards craftsmanship but also some mutual understanding of 'quality'.

Companies generally viewed having 'quite good, erm, relationship wiv a lot of architects' as positive, especially 'on the heritage side' (Firm13Ro). Speaking from the perspective of a materials manufacturer, it is notable that even this interviewee saw the role of conservation architects as important. This viewpoint was not unique: Firm04Ro also spoke of architects being 'more clued up [ ] with heritage work than [ ] normal commercial. [ ] The architect will check round a lot more. To make sure he's getting what he expects and to the quality that he wants'. These excerpts generate two main points for discussion. The first is that, in choosing examples to illustrate the interplay between clients, intermediaries and craftspeople, I inadvertently selected quotes from interviewees representing just two craft types: stonemasons and roofers (Firm04Ro, Firm13Ro, Firm15SM and Firm17SM). Because they had little else in common, it seemed that their interest in the architect as intermediary must correlate with their work on the major structural elements of historic buildings; often the larger parts of conservation projects. Indeed, the second point relates to the effect that the organisational model itself could have on conservation, and specifically the craftspeople's consistent need to agree with an intermediary on what constitutes 'good' conservation.

The narrative of the excerpts deployed above deserves further exploration because much of it contains the same positivist and deferential attitude towards historic fabric evident in the NHTG surveys and implied by the Fountains stonemasons. It relates directly to this craft group's interpretation of heritage significance, which is further explored in section 4.3.1.3. For now, it is important to note that, when reflecting on how work was agreed on site, or even resolving conflict,

the interviewees differentiated between doing something ‘properly’ (Firm04Ro; Firm17SM) and a ‘cheap, in, out and away, couldn’t care less type of a job’ (Firm04Ro). An organisational structure that did not nurture a ‘proper’ job was a failure, and it was the client intermediary’s role to prevent this by drawing on their expert view of heritage values, which they shared with the firms. In the one clear case where practical conservation had differed from the craftsperson’s proposal, the intermediary overseeing the work ‘didn’t even know what was happenin’’ (Firm17SM). Here (Figure 4f), the interviewee was certain that more of the church wall’s evidential and aesthetic values could have been conserved for a similar financial cost, and that any other option was not ‘proper’ conservation.

We cannot know whether the interviewee was correct in this position, but it is clear that, without a fuller appraisal of the heritage values, the foundation for it was more reminiscent of the positivist fabric and materials-based conservation approaches that evolved during the 19th century. It shows that this interviewee was not only grappling with an organisational structure that displaced him from the people he shared a dialogue and a professional understanding with (Figures 5a and 5b) but also with locating his values within the complex and multifarious framework used to debate decisions about conservation today. It seems likely that these are interrelated and that the organisational fragmentation of conservation has thwarted craft engagement with more complex and fluid theories of significance. It is also possible that the continued decline in numbers of conservation officers (HE 2017), a key client intermediary, has worsened this by further impeding their ability to gain heritage-based consensus and appreciation for their work.

This section has so far shown that achieving consensus with client intermediaries over on-site conservation decisions emerged as extremely important within the structural crafts. Their authoritative narrative suggests that they felt that their own expertise and experience was sufficient to inform such decisions. This reflects Jones and Yarrow’s (2013) findings about decision-making ‘on the scaffold’, and the autonomy found by several researchers (Lyon 2013, 24; Marchand 2009; 2012; Thiel 2012a; Yarrow 2019, 199) and among the Fountains stonemasons. It is therefore difficult to reconcile this reality of craft autonomy with the pre-site emphasis on informed conservation and project planning. At Fountains, the stages were linked by two factors: the hierarchy based on shared conservation values, and an unspoken flexibility to adapt according to unknown significance, which I have called autonomous collaboration. By 2011, these had been replaced by a liberal but fragmented mix of specialist and non-specialist regulators, funders and commercial providers, operating in a more rigid two-stage model of conservation planning and practice (Figure 5g).

These two important developments had both assumed the thought-based and motor-based distinctions that did not fully appear at Fountains until the 1970s. As a result, they had marginalised craftspeople who dealt with the large, structural elements of buildings from autonomously deploying their on-site expertise because they now needed the agreement of a client intermediary to deviate from the conceptual plan. The specific challenges of working on site were less problematic for the craftspeople working in the decorative crafts, but they still relied on client intermediaries to a certain extent. In particular, most interviewees highlighted the tendering process as being an essential part of linking the conceptual and on-site stages of a project, which should therefore be overseen by a heritage conservation specialist.

4.3.1.2 Non-specialist contract managers

Section 4.3.1 explained the broad impact that larger and more complex conservation projects had had on interviewees, in part because 'projects [ ] direct with the architect and the client' had been replaced by 'grant-based' projects that often involved 'other aspects, so [ ] we become a subcontractor [or] the main contractor on a job' (Firm04Ro). The small size of many craft firms (Figure 4d) meant that they often had to acquiesce their position of working directly with the client intermediary, and were instead obliged to subcontract to larger companies that would perform that cooperative role (Figure 4b). The narrative around this new stakeholder was notably generalist in predominantly referring to 'main contractors' (Firm06CJ), 'building contractors' (Firm01Pl) or 'management companies' (Firm07GB), which intimated their comparative lack of heritage conservation expertise. Where this became a barrier between the craft firm and the like-minded intermediary, it could prevent interviewees from engaging in both the tender process and the on-site dialogue, which were critical to their utilising their embodied cognitive expertise.

Several firms wondered why management companies that removed them from direct contact with conservation professionals were necessary. They saw it as a redundant link in the 'chain of supply' when 'masons themselves should just talk to the architect' (Firm07GB), which increased the risk of 'not get[ing] paid' (Firm01Pl; Firm03SM). It also prevented several of the smaller craft firms from considering the 'prestigious' and celebrated heritage projects that section 4.2.2.1 showed motivated them considerably. Firm03SM said 'there are certain jobs that we, we wouldn't be able to do. Because they involve subcontracting. [ ]. Because what [ ] those sort of main contractors want is [ ] all the benefits of having a company like ours that can produce the method statements [ ], risk assessments, [quality work], and have got the trained workforce, [ ] but they actually want the same price that they'd pay to a couple of labour only guys, you know, who just turn up and do what they're told'. Here, the interviewee was saying that his firm could not subcontract to a non-specialist because their ignorance of 'quality' meant that they supressed space and resource so much that

craftspeople were unable to utilise their expertise on site. The concept's contractual fixity meant that they must 'do as they're told' in their provision of 'labour only'.

Others were more moderate in that they could subcontract to a management company, but were similarly shocked by its function in practice: Firm07GB queried the appropriateness of 'an ex-joiner, shop fitter, workin' on a castle ruin? [Because] 'e's got no control, [ ] no heritage, [ ] 'e just 'as no knowledge of it. But that's 'cos the management company's come in and put that chap in charge of it'. Firm10SM thought that it was 'a ridiculous, bizarre idea' that 'this project manager [whose] background [ ] prior to running this conservation project on a historic building was layin' Tarmac and paving, and that sorta thing'. Firm04Ro attempted to explain the incompatibility of commercial contractors with heritage work, saying 'general contractors can't get their head round heritage. They just think they can treat it as a commercial contract and just blaze away, and you can't do that. It was done in a way, a style, that was done many years ago, and people want to preserve that'.

The excerpts above reflect the interviewees' steadfast, intergenerational understanding that there are right and wrong approaches to working on historic buildings. As well as wanting to utilise their knowledge and skills to conserve heritage to a craft 'quality', they also sought to 'preserve' the 'way' things were 'done many years ago' by recreating 'the same' use of materials and manufacturing processes (Firm08BS). This objective transcended any focus on appearance and related more to the third of the tripartite package of motivations (Figure 4e) because it meant that they could deploy their intimate knowledge of the craft and its development over time, 'the basics of hand working with wood' (Firm06CJ) or 'certain [blacksmithing] techniques' (Firm08BS) in conservation that was not fabric based. It was unlike the doctrine of invisible repair to preserve ancient fabric at Fountains, and represented the move in international policy to conserve 'more modest' heritage with 'traditional techniques', although it is slightly at odds with the need to have 'respect for original material and authentic documents' (Venice Charter [VC] 1964).

The interviewees' emphasis on process resonates with the want to conserve a 'craft tradition' (Asquith and Vellinga 2006) or, as Reichensperger saw it in 19th-century Germany, a process of building (Lewis 1993, 47), and was woven into the third of the tripartite package of motivations found in section 4.2.2.1 (Figure 4e). Although the community found it difficult to articulate this as a heritage value, its symbiosis with the act of working on previous craftspeople's work and in the same on-site setting has both evidential and communal value (EH 2008). However, if in future this craft interest is relegated to historic communal interest, while aesthetic decisions distinguish between works that were directly created by a designer and those 'created through detailed instructions' (HE 2018), HE's fundamental guidance will overlook the scholastic and instrumental interaction that craftspeople have

(and have had) with historic fabric. HE's (2018) suggested position therefore further consolidates the mistaken view that interpreting the historic environment's significance can be conceived by professionals and before projects reach site.

At the time of the interviews, the perception of on-site work as a 'labour only' manual function had led to such an apathy towards craftsmanship in conservation that non-specialist management companies were overseeing many of the interviewees' work (Figure 4b). There was one exception to this: Firm16GB was 'a bit different' among the sample as being both the oldest firm and employing a range of different craft specialisms. Their expansion into main contracting (explained in section 4.3.1) had made them a relative rarity in Yorkshire as a heritage specialist able to manage increasingly large and complex projects, but this position was unfortunately short-lived. The company's liquidation in 2016 legitimised Firm11SM's view that 'big firm [management] doesn't work' in conservation, and prompted questions about the very compatibility of conservation craftsmanship and the recent growth of 'contracting by gross' to management companies. Indeed, both this experience and those of the smaller firms being overseen by non-specialists, suggested that the system was inadequate because it placed more importance on completing projects within a fixed budget and price than on conserving the heritage significance and the historic environment.

4.3.1.3 Managing craft values

Given the importance of professionals' and craftspeople's mutual understanding of heritage conservation – the backbone of MPBW's hierarchy at Fountains Abbey – it is unsurprising that working for a non-specialist was difficult. However, the above two sections have shown that firms experienced this issue in one of two different ways: the non-specialist could be an obstacle that prevented them from getting on site by ignoring quality in the assessment of competing tenders; or, once on site, overlooking craft expertise in responding to unknowns. Of being on site, one interviewee (Firm06CJ) even said 'I don't mind' working for management companies because, even though 'it could pose a financial risk', it was positive for drawing less of the firm's management resources. This view contrasts with the other interviewees because the prevailing conservation-led position had been replaced by a more flexible need to progress a job and maintain client relations.

In unpacking the reason for this view, it is useful to consider both the interviewee and the specificity of the craft he represented. Firstly, the interviewee was speaking as an individual who did not train primarily as a craftsperson. He 'went off to college, did buildin' studies [ ]. I was trained in the workshop [alongside my granddad for three years] but never did an apprenticeship. [ ] Then I worked my way into the office' (Firm06CJ). So, even though he was sympathetic to craft and craft tradition, he primarily spoke from the perspective of a manager, which could explain his tolerance of non-

specialist management companies. However, comparison of this view with other firms shows that it more likely relates to the predominant values around the aesthetic qualities of fine joinery, the firm's specialism.

Other intermediaries also had a non-craft educational background and agreed that once on site the expertise of the client intermediary was trivial. Firm01Pl said 'we do have to dance to their tune. [But] it is helpful in some ways that they organise [other crafts]' if 'they know when it is going to be clear for you to go'. As with Firm06CJ, the client intermediary was less important once the project was on site because they often worked even more independently than the structural crafts. While Firm01Pl was able to challenge assumptions made at the concept stage of conservation, win a tender and then conserve something according to their own knowledge and skill, Firm04Ro needed to be able to agree similar changes with the client intermediary. They therefore preferred to be 'brought into the decision-making' to help solve technical problems prompted by the site, rather than take delivery of 'commercial decision[s made] between [the main contractor] and the architect' (Firm04Ro).

Like Firm 06CJ, the interviewees from both Firm01Pl and Firm04Ro shared a similarly non-craft background. It is therefore likely that the contrasting view of the on-site role of client intermediaries related to the values and practicalities associated with their craft. Indeed, while all three firms expressed a need for on-site autonomy, only Firm04Ro relied on their relationship with the intermediary for it. Firm01Pl felt that 'communication', including with the intermediary, was 'everything', but this was in the pre-contract tendering situation, before work on site had started. The tendering process was also more important to the only blacksmith interviewed, who said 'once it's got to the point of the main contractor [ ] you've lost it. Because they're not interested in quality, they're interested in price' (Firm08BS). He thought that this happened because of the comparatively 'tiny' scale of blacksmithing work on historic buildings, but it also relates to the predominant value associated with their craft and the specific craft process.

The narrative in the transcripts demonstrated that craft firms were conversant of the values associated with their craft. One group of interviewees – representatives of the smaller-scale decorative crafts of blacksmithing, painting and decorating, plastering and joinery – recognised their crafts for their primarily aesthetic value. Completed projects should appear 'barely [ ] any differen[t]' (Firm01Pl), 'replac[ed] and recreat[ed] [ ] back as it was' (Firm18PD), or 'look[ing] the same' (Firm08BS). The plausibility of agreeing the final aesthetic appearance as a concept meant that, once they had won a tender, these craftspeople would work extremely autonomously. However, without the preservation of historic fabric as a point of reference or the opportunity to deliberate values with the client intermediary, it was possible for aesthetic values to become overly dominant.

This perhaps explains the endemic ‘lack of deep understanding of [early] plaster techniques’ identified by Gaches (2016, 20).

For the structural crafts – the masons, roofers and carpenters – most value was attached to the historic fabric of the existing building. This meant that they wanted the flexibility to respond on site to unknown information about the value and condition of that fabric; costly deviations from the conceptual plan that normally required the approval of a specialist intermediary, who should therefore be ‘a little bit more relaxed, not as bureaucratic’ (Firm04Ro). Firm16GB likewise felt that, despite the tender process, it was not until ‘the pre-start meeting [where] we will do our damnedest to understand what the client and the architect are actually expecting out of the words that they’ve written’. Their need for flexibility required an intermediary who was sympathetic to their value system at both the tender stage and throughout the project, whereas the need for the interviewees discussing more decorative crafts was slightly different. While they agreed that the tender process was inadequate and required a specialist to oversee it, they were less concerned about the ongoing need for a sympathetic client intermediary.

This section has highlighted the incompatibility of craft with commercial construction throughout the conceptual and material stages of conservation. A non-specialist intermediary overseeing the pre-site tendering process would choose cheapest cost over quality, while, once on site, they would prevent plans being altered according to ‘unknowns’ (section 4.4.2). Indeed, if a client intermediary would not agree to a craft firm’s on-site deviations, the craft firm would either have to compromise its standards or subsidise the cost. This is why non-specialist management firms that based decisions ‘entirely on price’ (Firm06CJ) were unsuited to heritage conservation. Although many interviewees were recounting unsuccessful attempts to gain work, they insisted that any discontent was not ‘sour grapes’ (Firm03SM; Firm17SM); it related to an inherent conflict between competing for work according to a conceptual but fixed plan for conservation and performing that through dialogic and expert practice. It was therefore discouraging that the process of interpreting significance to inform conservation had synchronised so uncritically with the commercial construction sector’s two dichotomatic conceptual and material stages (Figure 4g).

Interviewees’ attempts to reconcile these disparate stages were discussed regularly, and are reviewed for the remainder of this chapter. However, first it is useful to note that the separation of conservation into the stages of thought-based conception and motor-based materiality had nominally removed craftspeople from decision-making. As such, they had developed insular ways of interpreting their craft, which had more in common with outdated values relating to fabric and appearance than the more holistic approaches reviewed in Chapter Two. This exposed detail in the

historic environment – such as early plaster work (Gaches 2016, 20) and decorative carvings (Morrison 2017) – to conservation solutions that aggrandised a single value, which is internationally discouraged (BC 2013). This is important because it demonstrates that the two-stage process not only marginalises craft expertise but also threatens the communal, evidential and historical heritage values that it aspires to conserve.

4.4 Navigating the sector

4.4.1 The fixity of paperwork

As with the section on organisational structure above, and in keeping with the inductive nature of this research, the discussion here is directed by the contents of the interview transcripts and the coding applied to them in analysis. The codes' 'specification' and 'drawing' signify an interviewee's reference to paper-based materials but the two types of paperwork actually had quite different typical uses for the craft firms. Drawings were generally made by those expert craftspeople who claimed control of their work after the stage-one point of tendering, and as such are discussed in section 4.5, which focuses on craft expertise. Specifications, however, were of the upmost importance in guiding that tender process: when detailed, they could create a level playing field for firms to tender to, but a poorly written specification could prevent interviewees from even providing a price because 'you can usually tell at the point of receiving the [information in the] tender whether or not it's gonna be worth bothering' (Firm08BS). The important early role of specification documents means that their usage is discussed here first, followed by the limitations of applying them in the context of unknowns on heritage conservation sites.

4.4.1.1 Craft-based specifications

All but four of the participants mentioned the use of specifications during interview. There was no particular correlation to craft specialism or size of firm, but they were less important to firms that tended to work directly for homeowners, outside the two stages of a mental concept and manual practice within the commercial construction sector. For the majority of firms that did, several agreed that 'crucially you [need] a very detailed specification' (Firm10SM) to prevent problems once on site. Specifications that were too 'generic' or didn't 'apply to specific sites' (Firm07GB), weren't sufficiently 'thorough' (Firm10SM) or 'tight' (Firm14PD) or contained 'dark' areas (Firm17SM) were 'inadequate' (Firm10SM). Although few interviewees articulated a reason for their inadequacy, their solutions seemed to support Firm10SM's view that it was because '[the specifications] don't understand the materials enough' or from the perspective of the 'craftsman', because this could only be achieved through the experience of 'actually [doing] the job' (Firm17SM).

Firms' analytical search for detail in specification was so important that it helped them to decide whether or not to tender for work in the first place. It was impossible to tender to a specification that lacked detail because 'what I'll do and what somebody else'll do [will be different]' and therefore not equally comparable in a tender situation where 'you gotta be like for like' (Firm17SM). To overcome the problem of unbalanced tenders based on under-detailed specifications, several firms had applied their experiential craft knowledge to writing or advising on specifications. Firm08BS said that a client had acted 'properly' in 'commissioning' his firm to 'write [a report and] the spec', and Firm10SM had '[accidentally] moved in [to the architect's role of] actually writing the condition surveys [ ] and the specifications and I'm getting the tenders in'. The fact that Firm10SM, a university educated career changer, was the only 'non-architect' on 'a list of recommended people to do these management plans' for a significant national client raises questions about the discourse underpinning advancement in the sector, especially as such progression had occurred with comparative ease at Fountains.

The two career changers cited above were unusual for taking responsibility for writing specifications altogether. Other interviewees' involvement in designing detail was limited to 'suggest[ing]' ideas, as they did not have the appropriate professional indemnity insurance to formally design something structural (Firm09Ro). Examples demonstrating an interviewee's input to an architect's specification were more commonplace, with Firm12GB 'do[ing] quite a lot of [ ] inspections for [architects] before they put a tender package out', Firm11SM 'go[ing] quite often with architects and give them advice on how to specify and how I think it should be done, or how a crack could develop in the stone' and Firm09Ro helping architects 'open up the roof and see what size the rafters are, the battens are, how the ceilings are attached to the underside a the church for instance'. Of the three accounts, the first was subtly different because it described an activity whereby the firm was purely providing access for a specifier. Firm11SM and Firm09Ro were involved in a different way: as well as providing access, they had advised on the detail of the specification. Even though they were not remunerated for expertise – Firm09Ro 'charge[d] for puttin' up a tower scaffold, and [ ] a nominal amount for labour', while Firm11SM didn't charge even when 'offer[ed]' – both firms were aware of, and broadly comfortable with, the arrangement. When Firm03SM 'protect[ed] ourselves' by 'commission[ing the advice] of a geologist' despite having 'extensive [in-house] knowledge of [stones] available and what would match with what', it similarly enabled a system that did not reward their expertise. All of these actions add weight to the finding in section 4.2 that, rather than remuneration, the primary motivation for many of the craftspeople was attaining and being recognised for their craft expertise.

Although the events recollected here were cleverly navigated by the craft firms so that they could benefit from an early, exploratory, involvement in a project, they also served to demonstrate how deeply embedded was the notion that conservation is conceived in the mind and then practised manually. Despite this falsity, which Thiel (2007, 414) has refuted by pointing out that, because buildings are 'big and non-standard', they 'veer from plans' when on site, it still had an impact on several interviewees. Those who had not devised ways to navigate this context effectively had been made to 'feel like an absolute idiot when I've given away my professional knowledge, then I don't get the work' (Firm14PD).

Another interviewee gave a more specific example of having visited a site while an architect was 'do[ing] their initial work [ ], drawing, elevations and that' and having been 'called over to look [at the] turf toppin's and the walls', and 'spen[ding' three hours [ ] tellin' 'er to do the core work, and 'ow to do the arches, so… free of charge, I 'elped 'er to the specifications for the masons to come in. I didn't get paid a penny for [the advice]' (Firm07GB). The interviewee went on to say that the firm was eventually remunerated because 'luckily [ ] we [won] the turf toppin's' at the tender stage and were able to undertake that practical aspect of the conservation work, but their position as practical craftspeople precluded them from being paid for their expertise. In another account, an 'architect [had been] very pleased' with Firm03SM's first phase of works to a church, but through the competitive tendering process had awarded the second phase to another company that 'couldn't get the rendering right'. Asking Firm03SM for the mix used previously then showed the architect's lack of appreciation for the firm's expertise, reflecting their predisposition towards the idea that knowledge was the domain of thought-based professionals. For the interviewee, any presumption that labour devoid of expertise would be provided by all craft firms equally, even when it was technically more informed than a specialist intermediary's specification, was at the crux of why competitive tendering could not guarantee 'a level playing field' (Firm03SM).

In both of the cases given above, the craftspeople lost out because of the unsuitability of an architect's written document for specifying detailed craftwork. For Firm03SM, ambiguity in a specification had allowed a competitor without the requisite expertise to compete for and win work, whereas Firm07GB had had to advise on a specification without charge in order to establish a level playing field on which to tender. Therefore, some of the craftspeople can be seen as being caught in a cycle that demands their free advice on specifying detail, so that they can fairly compete for stage-two practical work. It is telling that the interviewee who had most clearly been able to overcome this cycle was the university educated blacksmith, who cited a specific instance where he had formally written a specification, which was used by the client to create a fair tender situation for his firm to participate in. Had the specification for the ironwork been less detailed or even missing 'we [would

have] just put it on one side, 'cos there's no, you know, we're against cheap Jack' (Firm08BS). This interviewee was one of the most academic in the group, which perhaps suggests a confidence and ability to convey his expertise that those without 'the privilege of a great education' lacked (Firm01Pl). Together with the experience of other vocational migrants, who were managing their firms and specifying work, this suggests that an academic education endowed the craftspeople with an advantageous ability to engage in a discourse of conservation. By flaunting their expertise through dialogue – the realm of the professional – rather than their perceived domain of practice, two of the most highly educated craftspeople were able to gain authorisation, and ultimately remuneration, for their skill *and* expertise.

So far, all of the interviewees quoted in this section represented smaller firms. Their almost unanimous agreement that the content of a specification should be detailed and bespoke reflected both their firm's size and specific area of expertise. Conversely, interviewees representing larger firms typically felt that the content of the specification was less important than its concision and accessibility so that the firm's estimator could price it efficiently. This is because the size or complexity of their work was such that detail and 'quality [were] very hard to [fix, convey and} measure at tender stage' (Firm04Ro). These interviewees expressed a feeling of frustration at the amount of paperwork produced before a job reached site. Firm16GB even produced tender documentation at interview to highlight how their unwieldy nature could pose an 'unbelievable risk' to the company completing the work within the agreed budget (Firm16GB). The risk identified contrasted with those found by the smaller firms because it did not relate to the specific aim of applying their fuller and more detailed 'understanding [of] the materials' and craft (Firm10SM) to conservation. Both risks do however relate to the same fundamental issue, which is that the specification was insufficiently clear to be interpreted equally. The specification's critical role in taking a project from its first conceptual stage, via the competitive tendering process, to a second stage of on-site practice meant that this was a significant problem for the craftspeople. It forced smaller firms to compete with 'cheap Jack', while larger firms had to provide a fixed price without knowing the full extent of a site's condition or significance. This meant that their fixed price carried risk in the event that they uncovered unknowns when on site, which in conservation seemed fairly inevitable.

4.4.2 Allowing for 'unknowns'

Section 4.4.1.1 showed how specialist client intermediaries sought craft advice to mitigate the risk of inaccurate or unclear specification detail. However, many of the firms interviewed were accustomed to managing unpredicted on-site 'imponderables' (Firm04Ro) because sometimes even inspections by craftspeople could 'only scratch the surface' (Firm12GB). These usually related either to discovering something about the building's condition or uncovering something of heritage

significance. With the exception of Firm06CJ, who thought 'it can 'appen in any particular sector', all the interviewees agreed that they were far less likely to 'know what to expect' (Firm02CJ) when working on heritage sites where 'you can look and 'ave everythin' planned out in ya head, but as soon as you uncover something, it's a whole can a worms' (Firm12GB). The comparative 'ambiguity in [ ] build specifications' for renovation, repair and refurbishment (as opposed to new-build) was illustrated by the refurbishment project at the 19th-century Keyworker House (Thiel 2007, 29), which escalated by 23% from initial specifications to the final cost (Thiel 2012a, 9).

Unknowns and the disruption they caused were recognised across a broad range of crafts: once on site a stone folly became 'an absolute can of works' (Firm03SM), a specification to repair a lathe and plaster pendant had 'missed the main problem' (Firm01Pl), and it was typical to 'strip a [painted shut] window down' and find that an estimation of 'five hours' for restoration 'could turn out to be nine' (Firm02CJ). In their cases, Firm03SM and Firm01Pl were able to reach what they saw as satisfactory outcomes, with the former completing roofing works themselves to prevent disruption to their programme, while Firm01Pl convinced the client's intermediary of the need to open up the pendants before agreeing a fixed cost for their repair. However, in the final account, Firm02CJ thought that, while his firm was well equipped to undertake the craft element of the project, the impracticality of giving a fixed timescale for such a large number of windows of unknown condition would prevent them from winning any tender. Furthermore, programming such a large number of windows (the 32 windows Firm02CJ was discussing actually formed part of a 2,500-window project) into a large project was so unfeasible within a construction industry model that the interviewee doubted it could even be achieved because he didn't 'know any restoration companies within Yorkshire that could cope with 2,500 windows'.

The analysis of the three quotes above again highlights the inadequacy of the current two-stage approach to conservation. Firm02CJ's view that any conservation craft company would be precluded from giving a fixed price for repairing 2,500 windows on a single project was unambiguous. It contrasted with Firm03SM's experience of negotiating 'unknowns' by repairing the folly roof without requiring additional funds or time. However, Firm03SM had actually 'improvised' (Sennett 2008, 235) repairs to carpentry; a craft in which they were non-specialists because they could 'do the maths and work it all out' in house, which was justified when 'it's not high class, it's not quality joinery'. However, Firm03SM's judgement that the timber roof structure was not significant could have overlooked the expertise and values of a vernacular building, carpentry or roofing specialist. This so starkly contrasts with Firm02CJ's approach, which was entirely led by the evidential values they attached to the material of their craft, that it deserves further thought: is it realistic to create specifications for large, multi-craft projects? This is revisited in section 4.6.2 in the conclusion to this chapter.

The transcript coding data shows that, although unknowns were not mentioned frequently, they were referred to by all but four participants. Whereas specifications were less important to those working directly for homeowners and outside the two-stage construction sector management model, unknowns were less relevant to those working at the periphery of the second on-site stage: the painter decorators and one materials manufacturer. The coding shows that interviewees referred to unknowns synonymously with 'specification', 'client' and 'professional', which reflected the need for cooperation when unforeseen scenarios arose. Such a need was explained easily by the unsuitability of a fixed conceptual plan for the following circumstances: Firm07GB said a project 'could easily go up to another half million if they find problems', and Firm10SM recalled being on site and discovering 'how important [and extensive the surviving] historic fabric' was, but that cooperation with the client intermediary was not forthcoming. Rather than disrupt the 'specifications and schedules' to inform conservation, the intermediary would react to unknown 'earth plasters [ ] and [historic windows]' by responding 'oh bloody hell, let's cover that up again quick'. As this opposed the need to assess heritage 'throughout' a project (BC 2013), which Firm10SM agreed was how 'you should work on a historic building', the firm had undertaken 'extra [eventually unpaid] work'. The interviewee concluded that 'specify[ing] a historic building repair [ ] where the building 'ad been empty for a long time, it's virtually impossible to do, because [ ] there's so many unknowns' (Firm10SM). This again invokes Thiel's (2007, 414) argument that building work is perhaps too 'big and non-standard' to be planned and subdivided according to industrial organisational processes.

By the interviewee's own admission, the example above is drawn from a very 'recent' and apparently raw experience, which clearly played a part in the account. As already shown in section 4.2.3 above, working in the context of unknowns could often motivate interviewees. Firm07GB was content that even though an 'interested workforce [getting] carried away with things' prevented making 'a big profit in conservation work', he considered it a worthwhile pursuit because 'at least with the heritage work it is very interestin', that there's always an unknown that you may find somewhere. That's [what] we work for'. Apart from the interviewees' contrasting tones, the most notable difference was in the way in which they perceived their own role in relation to the heritage sites they were discussing. Firm07GB discussed heritage value and significance in terms of a personal interest, whereas Firm10SM utilised language more akin to the Fountains stonemasons' and the authorised heritage discourse. Neither interviewee referred to the four heritage values then set out by English Heritage (EH) (2008), and instead relied on cooperation with a client intermediary to conserve unknowns, which led to mixed results. While Firm07GB had agreed with an archaeologist on conservation solutions that incurred a two-week delay, Firm10SM's experience ended in conflict and without the conservation project being completed. These cases showed that the fixed ideas about

heritage and conservation that had functioned at Fountains no longer exercised authority, but that their replacement with the inclusive value-based model required cooperation and debate (BC 2013). The problems of achieving that within a planned and inflexible programme were clear.

Most accounts of unknowns on conservation projects referred to unexpected structural condition in a building. Firm03SM recounted having to report ‘all sorts of horrors [ ] to the architect’ after dismantling a watermill, while Firm12GB talked about ‘uncover[ing] a whole can of worms’ that ‘always’ led to an ‘unbelievable [amount of extra work] on conservation projects’. These firms had different views on how deviations from the plan should be dealt with: Firm03SM thought that there were two approaches: either ‘omit[ting works that were] not really necessary’ or ‘add[ing] it all back in, [ ] a bit more besides, and [increasing] the final account’. Firm12GB, however, felt that a site’s condition had made it so unstable that its repair and conservation had grown into ‘a completely different job’ and so required extra funding. Flexibility to depart from plans was even acknowledged by companies involved in specifying, such as Firm11SM, who admitted you could ‘never [estimate] an exact price’, although it was more likely if specifications were based on craft ‘advice on [how a project] should be done’. A balance between a detailed specification and a level of on-site flexibility was therefore always necessary.

Achieving the balance was more straightforward when craftspeople had played a pre-site advisory role. Firm09Ro recounted a case where ‘a specialist timber company [had] identified the ends of two trusses [as] rotten [but] once we’d opened it up, it was all the ends of all the trusses that were rotten. So, I think that was about another £28,000 to put that work right. So nobody was happy’ (Firm09Ro). The interviewee felt that this could have been avoided with the sort of craft-based advice that they were involved in, as per section 4.4.1.1 above. Other interviewees agreed that the risk of uncovering impactful unknowns on site could be reduced with craft input at the specifying stage. Firm17SM thought that it was problematic that ‘the [client intermediaries] who are giving the work out ‘aven’t got the knowledge, [ ] they’ll pay for consultancy for this, that and the other, but they won’t pay for specialist knowledge’ of a craftsperson. Firm08BS agreed that an ‘architect wouldn’t be able to specify [ironwork] properly’ and should refer to a craftsperson who could write a ‘proper report’ and specification.

Both Firm17SM and Firm08BS were extremely knowledgeable craftspeople with more than 30 years’ experience, but had entered their craft by different routes. The former apprentice, Firm17SM, felt that writing specifications and then tendering for the practical work created a conflict of interest. Firm08BS did not share this concern and was able to justify his firm’s involvement in both stages of conservation on the basis of aesthetic and communal heritage values (although this terminology was

not employed). This interviewee had even successfully ‘take[n] people to court’ when work was not executed according to a specification because ‘this is not a fair tender’. Firm08BS’s legal action adds weight to the supposition that vocational migrants were more adept than former apprentices to engage in the discourse of colleagues external to the craft, which was an important part of conservation.

All of the interviewees quoted above (Firm08BS, Firm09Ro, Firm11SM and Firm17SM) indicated that a specification based on craft advice could provide sufficient safeguard from unknowns. However, there was also recognition that heritage conservation benefitted from ‘a lot more scope to be sensitive towards everybody’s needs’, unlike the ‘heavily controlled [ ] contracts’ of the construction sector (Firm09Ro). The interviewee’s reasoning related to a central tenet for subsidising conservation, which is that heritage has more than economic and utility value. As such, charitable clients that had been awarded funding had broad and altruistic aims that needed to be achieved for a fixed budget. Firm11SM agreed with this and was the only interviewee who recognised the reversal of ‘extras’ in a flexible approach, which was that less work could save clients money. Even though it might be ‘crazy’, he was happy for funds to be ‘divert[ed]’ to ‘something what’s more urgent. [ ] give it to a glazier or…’. For Firm11SM, therefore, the requirement for on-site flexibility was at the heart of why conservation ‘was not the enterprise to make money’, especially because he disliked the practice of repeatedly charging ‘extras’ for unknowns when it appeared to ‘rip [ ] off’ an intermediary and threaten a valuable relationship.

This chapter has so far shown that several factors supplanted profitability for the interviewees: interesting, quality work finished to a high standard was more important than volume; conserving heritage values was more important than predetermined timescales; and maintaining client relations was sometimes more important than income. Large and complex projects were therefore not just complicated by the two-stage approach to thought-based conception and motor-based practice, but the very idea of a competitive marketplace based on something so indeterminate.

4.4.2.1 Scaling up conservation

The above sections have shown that there is a substantial tension around the scalability of indirectly funded conservation projects, which have grown in prevalence since the establishment of the HLF in 1994. Not only did the complexity of large, multi-craft projects mean that craftspeople were less likely to be consulted on the specifications involving their craft but also that there was a greater probability that they would be working with a non-conservation specialist (Figure 4b). For Firm02CJ, a construction sector context made it impossible to resolve the oft-found unknowns in conservation by flexing the project on site, because ‘it’s all down to time frames when you’re working on the

construction side'. This meant that, in comparison to a 'domestic home [where] if I get any problems I can always turn around and say to the customer "oh I need to be back tomorrow"', the programme of a commercial construction site was unfeasibly rigid (Firm02CJ). This lack of flexibility meant that firms would have to compromise their standards for the sake of timescales, which was unacceptable to the majority of proud and expert interviewees.

Apart from the need for craft advice in the specification and the difficulties scaling up conservation projects, the most interesting finding to arise from conversations about reconciling project planning with the unknowns lay in interviewees' preference for a very thorough specification or more flexibility once on site. While most acknowledged that a balance was useful, those who preferred thorough specifications generally involved extremely experienced craftspeople in pricing for projects. Conversely, the larger firms, and the general builders that employed several crafts and sometimes acted as a main contractor, found pricing for their larger projects more difficult and preferred instead to rely on flexibility and 'extras' once on site. This was especially true of the firms that hired non-craft estimators to price for works, with one even suggesting that, if they challenged the details of a 'wrong' specification, an architect might not 'wanna send me another one' because the 'subjective' nature of the interpretation undermined the basis of the dispute (Firm15SM).

The unusual word to note here is 'subjective', and the fact that the interviewee went on to say that 'you can only come on your past experiences' (Firm15SM). This could not contrast more with the transcripts of some of the other interviewees, who felt that, with a thorough specification for a discrete package of work, the tendering process could be appropriately objective. It is likely that, because the interviewee from Firm15SM was a contracts manager in a large firm who had not worked 'on the tools' for a number of years, this contrast is itself indicative of a greater need for craft input at the specification stage. The same interviewee also reflected that 'some jobs you look back and think, "we should've made a lot more money there" [and others where you think] "we got through that one far quicker than we thought"' (Firm15SM). This shows an uncertainty that reinforces a lesser confidence about understanding the complex sites he dealt with, forecasting necessary works and specifying projects than those with more recent practical craft experience.

Like Firm16GB, this larger company had capacity to manage high-value contracts, which established a conceptual office-based tier within the firm itself. For these companies, the option of providing informal and unremunerated craft advice to specifiers seemed unavailable. Instead they – with others – looked to familiar and trusted intermediaries to ensure that an equitable tender process was achieved, not through the specification, but by limiting the pool of tendering firms. Building

relationships with intermediaries was therefore fundamental to the interviewees, but this activity took place outside the project planning process, as part of efforts to navigate the sector more broadly.

4.4.3 The importance of relationships

Chapter Four has so far shown the great variability of conservation projects, in terms of both the interpretation of heritage value and in each project's organisation. Section 4.2 found that the key motivation for gaining expertise empowered conservation craftspeople with an authoritative view of heritage, which they wanted to utilise to make autonomous decisions about conserving the fabric, appearance or manufacture of craft objects. Much of the content in section 4.3 reflected on the tension around values being managed within an inflexible two-stage process, while section 4.4 has so far investigated the two main methods used to make that functional: thorough specifications and allowing for unknowns. Making either of these methods work relied on close cooperation with specialist and regionally-based client intermediaries, such as conservation officers and architects, with whom interviewees often shared very positive relationships.

The weight interviewees attached to sharing a mutual understanding of heritage significance with intermediaries has already been made clear in section 4.3.1.1 because they relied on these allies in the 'battle [for] doing it in a proper way' (Firm04Ro). Further analysis of the transcript excerpts that had the code 'Professionals' applied to them revealed that the interviewees were often talking about the 'good working relationships' (Yarrow 2019, 199) that could be formed over a number of years; a familiar practice within the construction industry (Thiel 2007, 31). Interview participants often preferred working alongside them to the paying client, whose uninformed interest might be 'sticking their nose in…' (Firm04Ro). Although this makes logical sense for those interviewees guided primarily by heritage values, it is clear that this position might cause conflict with clients or intermediaries who valued other factors such as cost or timescales.

A key aspect on which interviewees based their opinion about conservation professionals was their ability to recognise 'quality' craftwork. Firm14PD had worked with 'a poor architect, in terms of craft skills' because 'he passed a lot [of] very low quality work', who had been replaced by 'a younger architect, [whose] father had been a builder [ ] so he was aware of the craft, and the tradition of craft, and it interested him'. This excerpt is interesting because it demonstrates that the ancestral ties that bonded individuals to craft practice (section 4.3.6) could also influence their cooperation with intermediaries. In this example, craft ancestry had endowed the 'younger architect' with the desire to conserve quality craftsmanship through craft tradition. Like ex-crafts superintendents at Fountains, close ties to craft could give intermediaries an 'empathetic' (Sennett 2013) appreciation of craft detail

as heritage, which meant that they made space for craftspeople to interpret and recreate craftwork in a way that corresponded with the elusive third motivation (Figure 4e).

Interviewees' view that intermediaries should understand and accommodate craft tradition was so emphatic that they felt firms with different expertise should be prohibited from competing for heritage work. The intermediary's policing of the tender process, and specifically the firms invited to tender, was therefore a core measure of their competence. Firm04Ro felt that 'really the architects are at fault if they [ ] try and bring, shall we say, a general commercial contractor to tender' for heritage work, and Firm07GB similarly reported that '[the architect]'ll 'ave a short list of say six or eight builders that they [ ] would like to see tenderin''. Firm05CJ even attributed the company's heritage specialism to a conservation officer who had 'just sort of liked our work and said "you can go on the list"'. The 'list' was beneficial to both parties because 'once they know that they get a contractor that they don't have to sort of chase, that they can trust, it's easy for them isn't it?' (Firm05CJ). There was a negative side to the intermediary's control of the tender process if a non-specialist firm 'persuade[d] an architect to get their name on the tender list', but most firms agreed with Firm05CJ that such arrangements were mutually beneficial and were based on 'trust'. So strong was the reliance on longstanding relationships that the framework for a network of cooperation described in section 4.2.5 seemed to exist informally within the 'close-knit' community (Firm12GB).

Several interviewees talked about longstanding and 'good working relationship[s] with [various client intermediaries], so that they will come to us' (Firm01Pl), but in the main it was most important to 'have a relationship with' (Firm09Ro) architects. It was commonplace to have worked with a named architect frequently, 'previously, when she was part of another practice' (Firm06CJ), because 'if an architect can trust the person working and have a good enough relationship they're going to go back to you' (Firm01Pl). For Firm11SM, the issue of trust in the firm's craftsmanship seemed more important that the working relationship, when the interview participant said 'it's a trust thing, [ ] it's not just who you know, you have to be trusted'. And when trust had been established, interviewees felt that architects 'really rel[ied] on us quite a lot actually' (Firm12GB) for a whole range of activities, from 'rely[ing] on somebody when you tell them to do a certain style of work' (Firm14PD) to working autonomously on site so 'they don't 'ave to be 'ere every two minutes and some' (Firm12GB) and even photographing 'mock ups [of detail or trial works], what we think' for approval (Firm12GB). Ultimately, a good relationship with an architect could lead to the firm being 'recommended' to another client intermediary, which was 'always a good…to get the recommendation of the architect is really good' (Firm01Pl).

Interestingly, while many agreed that intermediaries ‘have to trust the craftsman’ (Firm10SM), only one firm expressed a desire for this trust to be reciprocated. Firm10SM thought that the flexibility necessitated by heritage sites required confidence that the intermediary would help resolve on-site problems. In practice, this enabled the craftsperson to work autonomously, making decisions based on the two parties’ shared understanding of significance. Where this incurred an ’extra’ cost, the craftsperson would trust the architect to approve it. This makes sense in the context of craft firms having been selected for their expertise and mutual heritage-based values, but it is also evident that tension could arise. For instance, Firm03SM described how a ‘clever’ architect had claimed that two ‘1200mm long moulded bits of [solid oak] beam’ had been inferred in a fairly vague specification, which led to a dispute over liability for the extra cost. The ease with which such disagreement could arise again highlighted the need for cooperative and trusting relationships between intermediary and craft firm.

Analysing the narrative of the interviewees’ conversations reveals that they attached most importance to relationships with individuals, rather than organisations. Firm05CJ spoke of a ‘she’ who had ‘liked our work’, while Firm01Pl thought that ‘a good relationship’ based on ‘trust’ and being ‘honest with people [ ] counts for everything’. Firm12GB recounted how a particular architect ‘who we’re workin’ for now, they were quite impressed [when a craftsperson had] come on board’ (Firm12GB), illustrating that such relationships could be longstanding and transcend employing organisations. For some, trust was less important than a mutual understanding that despite the need for ‘quite a few discussions [ ] we eventually end up at a compromise to how it needs to be done’ (Firm04Ro). This was one of the few times that an interviewee accepted that an architect could intervene over detail. Accounts mostly described situations where craftspeople directed conservation in the detail, so much so that the company manager of Firm01Pl would call on ‘one of the craftsmen because he [could answer architect’s questions] in detail’. Similarly, Firm06CJ had customary independent craft techniques, which they could deviate from ‘if it’s specified by an architect as such’.

In all of the instances quoted above, the interviewees’ willingness to answer questions, reach compromise and adapt methods revealed respect for individual client intermediaries as well as their role, which contrasted to the stonemason’s questioning ‘why do we need ‘em?’ The accounts showed that this respect was reciprocated, with intermediaries asking questions about how something was made, or being struck by the recruitment of an individual craftsperson. Experiences that were recounted most positively usually involved a working relationship with specific architects that could foster an agreement on the detail and extent of conservation works without involving a third party (usually the paying client). Past experience meant that the craftspeople were confident that the architect would agree, and it was usually their responsibility to communicate any departures

from the original project specification with the client. Because of the difficulty with specifying unknowns in conservation work, Firm11SM sympathised with this part of the architect's role, saying 'the architect is always in the middle of the…I don't want to be [the] architect' and have to 'explain it to the client' when 'something goes wrong'.

Although this sentiment was fairly unique, it does serve to illustrate cooperation between intermediary and craftsperson throughout a project. The intermediary would rely on a craftsperson's expertise when drawing up a specification, but then the craftsperson would look to the intermediary to control the tender process. They would then jointly agree on solutions to unknowns on site, and, if necessary, the intermediary would inform the client of the need for extras. Because in practice each of these stages was progressed by all parties cooperatively, a simple organisational set-up involving just an architect and craft firm was advantageous because it provided 'a lot more scope to be sensitive towards everybody's needs' (Firm09Ro). However, the long-term effort of establishing the trust such cooperation was founded on was difficult to reconcile with a commercial construction sector model of competitive tendering and its intermittency of work.

Most of the interviewees accepted that their positive external relationships would be replicated by other firms and intermediaries. When intermediaries ''ave their own favourites anyway, that always get on the tender list' (Firm07GB), it could create a barrier to them winning work. Firm12GB thought that 'a good architect' would 'help' you win work by 'point[ng] you in the right direction', so much so that the interviewee inferred that 'maybe the architect's got in mind who they would like to do it, depending on what the job is'. While an objective outsider might perceive collusion in this arrangement, which essentially circumvents the competitive tendering process, interviewees preferred it to situations where less skilled or specialist competitors gained heritage work because of an imperfect and ambiguous tendering process. There were multiple accounts of 'architects, sendin' you out jobs that they don't know themselves' (Firm17SM), and allowing unqualified firms to 'slip [ ] through the net for whatever reason' (Firm03SM). In these circumstances, there was a real feeling of recent change: cooperative relationships 'were gone' (Firm03SM) because the 'focus' had 'gone on to sorta modern methods where it's rushed' (Firm12GB). This had led to a loss of trust, where 'everyone starts to hide behind everyone else' (Firm03SM) to the extent that there could be animosity between all parties, intermediaries and other craft firms. The reliance on cooperation in heritage conservation again highlighted its incompatibility with mainstream construction. Where commerciality had surpassed heritage values in importance, craft firms had to be more 'ruthless', 'vicious' and 'cunning' (Firm03SM).

Given the increase in expenditure on individual heritage conservation projects, it is perhaps unsurprising that there has been more emphasis on commercial construction sector methods since the advent of the HLF. What is disappointing, even inadequate, is that the two-stage process has become increasingly inflexible without critical consideration of its effect on craftspeople, their practice and ability to conserve significance. Furthermore, the assimilation of the informed conservation process to the dichotomatic thought-based and motor-based stages has effectively excluded craftspeople from interpreting and reacting to heritage's values autonomously while on site, which section 4.2 showed was central to being a craftsperson. However, their accounts showed that it was possible to navigate the sector effectively through writing specifications, negotiating unknowns and cooperative relationships with intermediaries. In these instances, craftspeople were very able to use their expertise, which emerged in two main ways.

4.5 Exhibiting expertise

4.5.1 Drawings

Many interviewees' accounts refuted the presumption that building projects can be planned in 'whole forms in the mind without any recourse to the material' (Alberti 1988, cited in Ingold 2010, 93); in particular, the 15 firms that described producing drawings for discrete parts of buildings in the second stage of a project, once the overall tender had been awarded. Firm03SM talked about using drawings quite variously, from 'drawings made [to] sub [work] out to [a specialist, marble, granite manufacturer]', to doing 'a little sketch of [ ] a fancy sort of carved stop that stops the moulding and finishes [yay big bits of oak]' so '[the joiner] knows what to, what to price'. Here, the craftsperson made a distinction between 'drawings' used to subcontract stone manufacturing and 'sketches' illustrating the decorative element in carpentry. Although not clear-cut, the interviewee was suggesting that drawings were specific, measured and used in a technical capacity, while the latter were freer and perhaps more artistic, influencing rather than directing works as described in section 2.2.2.4. 'Drawings' contained clear and unequivocal information so that the works represented could be undertaken by anyone and 'anywhere. Doesn't really matter' (Firm03SM), whereas 'sketches' were for an individual with whom the interviewee had a relationship. Other interviewees discussed drawings and sketches in similar terms, either as a very exact and technical tool or as a guide to something decorative.

For the companies that were mainly engaged in producing features of buildings in off-site workshops, such as a window or worked pieces of stone (as in Firm03SM's marble or granite manufacturing mentioned above), technical drawings were used frequently. Firm02CJ talked about finding windows in houses that were bespoke '[for the original customer] so that when we come now, 150 years later, we have to look at it and [ ] if it's not [standard], then I need to make a slight little drawing [that shows] specific measurements of how the [lamb's tongue or ovolo] curve is, how flat it is, how deep it is'.

The interviewee, a career changer with an engineering background, would then take them to ‘the joiners shop I use [which could] manufacture anything that I give them the drawings for, to match what is actually going into the property’, and then ‘obviously [ ] as an installer we would then go back to the customer and install’ (Firm02CJ).

Both Firm03SM and Firm02CJ described applying technical drawings to construction in a very familiar way because they were incorporated into fixed specifications for small-scale works with little scope for unknowns. Conversely, the use of freehand drawings to ‘trace a path that others can follow’ (Ingold 2013, 110) is difficult to reconcile in an inflexible model because the very technique inherently allows for creativity and adaption. In actuality it was the companies that preferred working to fixed specifications that recollected these methods most. Firm01Pl explained that one member of staff, a fibrous plasterer, would ‘draw [a design] up on a ceiling, I mean that’s how it works when he makes something. Because you have to do freehand and then cast it to then have a rubber mould’. When Firm18PD described their ‘system’ of decorating a ceiling or wall, he said his role was ‘doing the drawings, er, somebody blockin’ in, gettin’ the paint layers on, and somebody doin’ the gilded mouldin’s for us if that’s needed’. Neither of these firms expressed sketching as a mere means to an end, such as communicative technical drawings, but as part of a creative process reserved for the most skilled and experienced (for Firm18PD) or talented ‘amazing. [ ] his skill is immense’ (Firm01Pl) craftspeople. Firm05CJ agreed, saying ‘‘cos design’s the most difficult part really. [ ] You know, the actual execution of it is, once you’ve got the skills, that’s sort of straightforward’. The interviewee here was also a very experienced craftsperson, who, despite never having studied drawing, ‘much to [his] regret’, ‘had always liked, you know, architecture. And, er, art I s’pose. Yeah. Questions of art’. To him, projects that involved replacing a lost historic feature were an opportunity to ‘get your reference books out’, which ‘appeals to my aesthetic senses’, even though they probably ‘didn’t charge’ for the design work (Firm05CJ).

The occasions where interviewees most assuredly associated drawing and design with high levels of skill were notable for two reasons. Firstly, in describing instances where the detail of craftsmanship was not precisely conveyed ‘in words and by drawing’, these experiences correlated with Marchand’s (2009) findings among the Djenné stonemasons that the creation of new features could exhibit great skill. On the other hand, the very design process that the interviewees were articulating could be pejoratively labelled as ‘conjecture’ (BC 2013). However, there was consensus among the very experienced decorative craft firms (Firm01Pl, Firm05CJ, Firm08BS and Firm18PD) that designing for the material of their craft was a pinnacle of achievement. Firm08BS recounted the ‘awkward’ experience of advising an architect – most of whom ‘don’t know they can’t design ironwork’ – that ‘we can do [a better ironwork design] than that’. When pressed for a reason that

necessitated the redesign, the interviewee was clear that it was not about the constructional aspects of it: ‘anything [could be] done’ in ironwork, but the designer needed to understand ‘the kind of design ethos of the medium. [ ] It is a specialist area and ironwork designs are ironwork designs. They’re not adapted woodwork designs, or it’s just a bit like some stonework you might’ve seen somewhere. [ ] They’re actually ironwork designs, and you need a specialist in order to make the most of that medium’ (Firm08BS). In articulating and reasoning why blacksmithing ‘should be recognised as a specialist area’, this vocational migrant was again able to utilise discourse familiar to heritage and conservation authoritatively.

Throughout all the interviews, this was perhaps the best illustration that the process of crafting something could be associated with a traditional heritage value. It is significant that it describes making a feature from beginning to end, employing expertise in a ‘chosen medium’ to produce rough designs and then executing a piece that displayed the properties of the material. This excerpt related to a new piece of ironwork, but, when asked about whether this would apply in a heritage context, the interviewee was confident that the skills required would be the same, and if anything more complex: heritage assets or the historic environment provided an ‘idiom[atic]’ setting requiring a ‘replica of a style’, and the only way to produce ‘convincing period ironwork [was] to be familiar with all of those techniques. So that’s to say you’ve got to be a metal worker, or have extensive experience of metalwork’ (Firm08BS). For this interviewee, any assumption against aesthetic ‘conjecture’ (VC 1964) had been replaced with a need to practise age-appropriate craft techniques. It meant that sometimes the interviewee provided his employees with ‘the drawing’ and said ‘I want it a bit like that. You know how to make ironwork [and] as long as it’s beautiful I’ll be happy’ (Firm08BS). Firm08BS went on to say that ‘very often I actually say [you sort the detail out] to them in the workshop, and they really respond to that’; illustrating again why sketches might be preferable to technical drawings. In fact, while photographs, like sketches, guided ‘how [a decorative ceiling] was going to go back’ (Firm01Pl), there was little reference to the practical use of technical drawings. This point will be revisited in Chapter Five, through analysing the apprentices’ use of project paperwork.

4.5.2 Being on site

It has already been established in section 4.3.1.1 that, like other craftspeople, the interviewees’ firms made localised decisions autonomously when on site. It is important then to note that their authoritative use of drawings did not eclipse their craft practices. Experientiality was an important theme that permeated most of the interviews, which was reflected in the regular co-occurrence of the codes ‘On-site’ and ‘Decision-making’ to transcript excerpts. Firm18PD recounted an occasion when his firm, once on site, had ‘realised [ ] that [a] space [ ] didn’t need all that colour’. They had therefore

worked with the interior designer to change the design, which had shown that an approach of 'not totally plannin' a scheme' could 'work out really well'. As a painter and decorator, this interviewee was most concerned with the aesthetic value of a finished piece, and was familiar with working to specific plans. However, this example demonstrated how important on-site flexibility could be to adjusting to the nuances of a particular space. Generally, though, it was the stonemasons, roofers and general builders who more commonly experienced accommodating flex when on site. This was usually necessitated by either discovering unknowns (section 4.4.2) or the problems posed by physically being on site.

4.5.2.1 On-site problem solving

A central theme of this thesis so far is the fact that craft skill embodies cognitive expertise. It follows then that some interviewees were very clear about the need to interpret significance and 'understand [ ] whether you should be putting that stone in' (Firm10SM) as they worked. This differed slightly from Firm05CJ's view that, once skilled, craftspeople could execute something quite 'straightforward[ly]', without having an understanding of 'architecture'. The key difference between the two accounts was setting: in the workshop craftspeople had subdivided their tasks, whereas the physicality and pre-industrial nature of being on site meant that everyone had to be cognisant of both the mental and manual aspects of conservation (Thiel 2007). The distinct motor-based knowledge that craftspeople acquired through the process of making leant them a corporeal understanding of materials, buildings and sites. Sometimes, the knowledge was 'tacit' but it could also be equal to and as explicit as academic knowledge, and as such could inform detailed specifications (section 4.4.1.1). Learnt in a different way, through 'thinking with their eyes and their [bodies]' (Ingold 2013, 111), this knowledge could be applied differently.

Two interviewees described on-site working practices that were conspicuous for not involving a client intermediary. Firm09Ro described the way in which he and his employees 'debate[d] on site' the detail in historic lead work, asking 'why 'as it failed? It's because it was too large a piece, or a joint wasn't in correctly, or somebody's done a repair and fixed it down too tight so it can't move. So there's all that debate. And we're often lookin' at, y'know, lead design. Y'know, in great detail. And there's times when we've 'ad four or five of us just, er, deciding which is the best way'. In this instance, the craftspeople's working knowledge of taking apart, repairing and building lead roofs meant that they were best placed to diagnose defects and design repair solutions that could be compliant while conserving heritage significance. When pressed about whether an architect would be involved in the decision, the interviewee said they would 'if 'e needs to be' and 'especially if it needs additional cost', but not for advice on or approval of the work itself. This is yet another example illustrating the authority exercised by skilled craftspeople, which, when on site, could

transcend decision-making convention and affect the means by which they communicated with other practitioners.

There were several occasions when interviewees portrayed themselves as responsible for the transfer of decisions to others. This was especially clear when interviews took place on site or in workshops, and participants would talk through their methods for conveying instruction to junior craftspeople. Firm07GB provided the most illustrative example of this when describing the system of taking a specification, agreeing the detail in practice with an architect and then ensuring that everyone on the site was aware of what had been agreed. After the contractor had done a 'metre of their own core work on site, [ ] the architect [will] say "yes, that's what we want"', and that 'exemplar' will become a 'standard, [ ] an example that it's got to come to all the time'. He had also produced a written mortar mix (Figure 4h) that '[h]as to stay on site so everybody that comes on site knows the… [ ] mix, yeah', which meant there would be 'no excuse' for getting it wrong because 'it's wrote up on the wall' providing 'a [ ] control [ ] for the [other craftspeople]' (Firm07GB). Here, the interviewee was expressing his role in controlling the detail of conservation across a large site. The methods used were notably effortless to digest and therefore appropriate to the tiring and corporeal world of building on site. This account was distinct for passing over the application of skills and expertise to conceptual or physical problem solving, and focusing instead on managing people's individual aptitudes and controlling quality across a large and complex site.

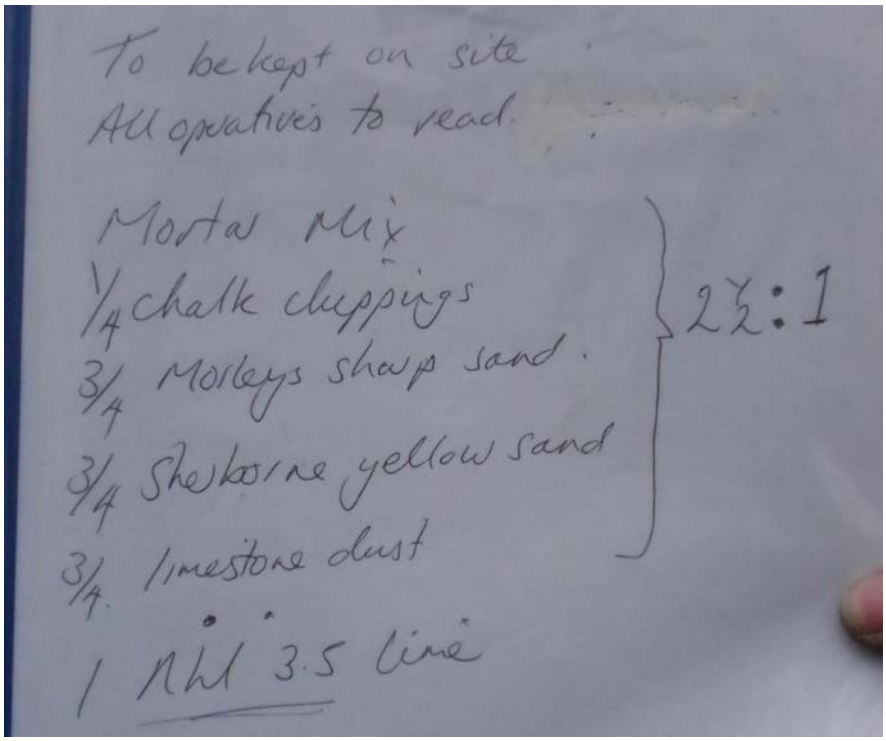


Figure 4h: A large mix used to control lime mortar composition on Firm07GB's site (Author's own 2011)

In another example, an interviewee reported that the ‘challenge’ in a job had not been in making an ‘enormous table out of stone’, but in the problem of ‘get[ting] three, four ton block through a glass door with underfloor heating, up some stairs and fix it there’ (Firm11SM). The challenge here was ‘to think about how to do it’: ‘they all be paid to use their brain’ and so ‘they all have to think by themselves’ (Firm11SM). So the craftspeople worked out how to physically transport something on to a site with limited access, while the expertise of one of the most experienced craftspeople on site was being deployed in coordinating the others.

Many experienced craftspeople performed similar roles, for which they felt that a primary understanding of the craft was ‘essential’ (Firm06CJ) or eased by a ‘practical [ ] background where you can see something from the practical point of view’ made the job ‘easier’ because you could ‘see the project in ya mind’ (Firm15SM). Not only did the role have standing but it was also described by interviewees very positively as ‘exciting’ (Firm03SM) and even ‘a life changing experience’ (Firm10SM). As an aspiration, it was equivalent to the decorative craftspeople’s sketching, although it directed some of the most expert craftspeople away from the tools and into something quite different: coordinating complex sites. It was different to the specialist intermediary’s role because it required a physical understanding of crafting, and there was little evidence of craftspeople feeling like a ‘minion who actually knows what they’re doing’ while others ‘took the credit’ (Everill 2009).

The coordinating role had changed somewhat since Fountains, where foremen oversaw a specific site and ex-crafts superintendents of works lead several projects. None of the experienced craft-based coordinators interviewed could be described as ex-crafts because they continued to perform as craftspeople at the same time, which indicates their similarities with foremen. However, like the superintendents, coordinators also performed a crossover function between office-based and site-based staff that allowed ideas and advice to permeate their firm’s conservation practice. Vocational migrants’ comparative success in the new coordinating role suggested that their engagement in professional discourse gave them an advantage: despite the need for cooperation between craftsperson, manager, intermediary and client, there was a disconnect between the academically trained stakeholders of conceptual conservation and those who had undergone apprenticeship training. This, along with all the other effects of the false dichotomy of mind from body in conservation, posed a real threat to the future of craftsmanship.

4.6 The sustainability of conservation craft skills

4.6.1 Communal craft values

This chapter began as an inductive exploration of conservation craftspeople and the context within which they worked in 2011/12. The variety of different views from within the craft community made

responding to this ambitious aim extremely complex, but several clear themes emerged. Most salient was the absolute expertise of some craftspeople, which was based on an intimate, physical and longstanding pursuit of craft. It engendered them with the authority to contribute to roles more commonly associated with conservation professionals such as writing specifications, designing detail and coordinating sites. In fact, the recent prevalence of large, grant-based conservation projects required that craftspeople do this because, otherwise, they were relegated to the second of a two-stage process that distinguished between a mental concept and manual practice.

The classification of craft activity as labour compared interestingly with Fountains, where the stonemasons were known as 'directly employed labour' but enjoyed less bureaucratic control than the interviewees. However, their comparative freedom to work autonomously was based on a hierarchy held together by a shared understanding and reverence for the significance of the monument's historic fabric. Achieving a mutual approach to conserving significance was still very important in 2011/12, but the hierarchical framework was complicated by the sector's fast-paced fragmentation (Figure 4a) and the postmodern need to understand multiple heritage values. The resulting distance between conservation professionals and craftspeople was manifested in several ways, but most notably in a systemic weakness around interpreting the significance of craft objects.

Craftspeople had extremely sophisticated approaches to interpreting the significance of objects in their 'chosen medium' (Firm08BS), which included assessing their appearance, fabric and process of manufacture. However, their casual exclusion from the informed conservation process – as practitioners rather than conceivers – meant that several craftspeople had improvised their value systems in isolation and so unlike the stonemasons, they did not correspond exactly to those set out internationally and by HE. As such, they sometimes resonated with outdated heritage values that sought to protect the fabric or appearance of an object. The consequences of this will be revisited in the participant observation study in Chapter Five, but in interview it appeared problematic for two key reasons: firstly, the aggrandisement of a particular value or material could threaten other values, which was pertinent to the 'lack of understanding' of early fibrous plaster techniques (Gaches 2016), but could be equally harmful to the appearance of a craft primarily valued for its evidential fabric (a problem caused by the Athens Charter [AC] [1931] that the VC [1964] sought to resolve). Secondly, lacking engagement in value-led systems had disadvantaged craftspeople's articulation of their own legitimate heritage values, which linked to the uniquely motivating context of the historic environment.

There were three principal reasons why conservation craftspeople valued working within the heritage sector (Figure 4e). The third of these was quite elusive because it was specific to the community of

craft, and related to the objective of contributing to an evolving tradition of craftsmanship. As a value, it was attached to the fabric and appearance of buildings because of their potential to reveal evidence about past craft activity and afford intellectual stimulation (EH 2008). However, the community's collective interest in actively contributing to a craft tradition could be easily overlooked by judgements that exaggerated evidential and aesthetic values and processes that excluded the craftspeople. Despite the Nara Document on Authenticity (NDA) (ICOMOS 1994) highlighting that authentic conservation could include 'tradition and technique', other values continued to dominate. A lesser emphasis on 'communal interest' in HE's (2018) *Conservation Principles* will reverse the move to reconcile conservation practice with critical heritage theory (Emerick 2014, 179), and there will be less opportunity for conservation to accommodate 'the creative workings of [craft] tradition' (Walter 2017, 2).

4.6.2 Conservation craft identities

Section 4.2 examined the educational trajectory of the craftspeople represented by the 18 interviewees. It showed that, while the majority entered conservation craftsmanship via an apprenticeship, vocational migrants were more successful at progressing to management positions. Indeed, funding and other bureaucratic restrictions around apprenticeship meant that this group had had to be tenacious to join the craft, and their self-directed journeys had prepared them well. University educated individuals such as Firm08BS and Firm10SM were particularly conversant with the value-led systems reviewed above, and this had allowed them to transgress into roles normally associated with professionals. However, vocational migrants' dominance did raise questions about the suitability of NVQ and mainstream apprenticeships for conservation crafts, which were viewed as 'crap' by several interviewees and regulated by an extremely selective, often nepotistic, approach to recruitment. Apprenticeship as a route to conservation craftsmanship is further explored in Chapter Five.

The overlap between professional functions and the expertise of experienced craftspeople was clear. Professionals needed craft advice to specify conservation projects, and craftspeople needed professionals to negotiate adjustments to those specifications once on site. As such, cooperation with client intermediaries was highly prized and often based on longstanding trusting relationships with individuals. Such relationships were not only valuable in a pragmatic sense in that they allowed craftspeople the autonomy they needed to practise conservation but specialist intermediaries also played a valuable part in appreciating craftspeople's work. Craftspeople viewed this recognition as very important because achieving quality, a reputation and future interesting work was generally more important to them than remuneration and excessive profit.

4.6.3 The commercialisation of conservation crafts

This chapter has shown that, despite the entrenchment of a mind-body dichotomy in a two-stage process of construction, reconnecting the two was beneficial to both craftspeople and heritage conservation. Craft advice in a specification could provide it with more certainty, while flexibility for craftspeople to interpret while on site allowed them to conserve unknown significant fabric. Although craft advice was rarely remunerated, used together with relationships it could equalise the important competitive tendering process, which bridged the two conceptual and material stages. This was important because intransigence between stages one and two of a project was improbable within the commercial construction sector, even though heritage conservation was supposed to be holistically informed throughout (BC 2013).

Although the two stages of construction were confounded by the need to conserve heritage significance, it was positive that several interviewees (most notably Firm04Ro, Firm08Bs, Firm09Ro, Firm11SM and Firm17SM) had made it workable. They were all able to give clear examples of the model of a project being specified, then tendered for by a craftsperson, and a fixed price agreed before reaching site functioning in favour of conservation. Taken together, their experiences suggested that a common set of conditions had to be achieved in order for this to work:

- A thorough specification should be based on an understanding of the condition and heritage significance of a site. On complex sites where there were lots of unknowns (for example, buildings that had been empty for a long time) a site inspection should take place.
- Projects worked better in this context when they were smaller and involved no more than three key crafts such as stonemasonry, joinery and roofing. This meant that unknowns were less likely to be discovered on site.
- From the very outset, only conservation specialists should be involved in specifications involving significant historic fabric. Specifications to any key crafts should be advised on by an experienced craftsperson who had recently worked with the tools of their craft.
- All conservation specialists should be able to verbally communicate throughout a project. It was not appropriate for a large, multi-craft project to be specified by a conservation architect and awarded to a non-specialist contract manager that created a barrier between the conservation architect and crafts specialists. Dialogue between all groups should be encouraged and enabled.
- A degree of flexibility should be allowed to change decisions on site in case of unpredicted findings of heritage significance or structural concern.

The above conditions made conservation projects possible in a construction sector business model.

‘Balance between competition and cooperation’ (Sennett 2013, 76) could only be achieved by circumventing the two-stage procedure of professionals conceiving conservation, while practitioners merely undertook the work. This was particularly problematic in conservation practice because decisions about detail, which implicated the way in which value was conserved, could only be made through autonomous craft practice.

4.6.4 Responses to change

4.6.4.1 Practical engagement in conservation theory

The effect of the false dichotomy of conceptual and material roles into separate organisations was wider reaching than the operational issues so far discussed because fragmentation had established impermeable barriers between the two groups. There was an obvious need for professionals and craftspeople to cooperate on individual projects, but broader changes such as the move to value-led conservation were more difficult to engage with. It is significant that interviewees never referred to terminology from the *Conservation Principles* (EH 2008) or Planning Policy Statement 5 (PPS5), and that their narrative instead employed personalised or positivist terms that evoked older approaches. Like Ruskin and the stonemasons more recent reflections, many were aware of a general detachment from craft expertise, which they largely attributed to living in a class-based society.

The frequency with which class or status was raised as an issue for conservation craftsmanship was unexpected. Firm06CJ referred to academic knowledge as seen as ‘higher status’, which Firm10SM thought had helped establish the ‘suppressive’ nature of the building industry. Although Thiel (2012a) has shown that class could be quite confused in construction, many interviewees reasoned that it shaped the divide and ensured that it endured. It therefore manifested in many ways from ‘know[ing] your place’ and ‘do[ing] as you’re told’ on site (Firm10SM), a lack of ‘criteria’ for conservation standards (Firm02CJ), to the deficiencies and status of further education and its ‘not particularly interested’ entrants (Firm18PD) (Lynch 2013). For interviewees, the vestiges of the mind-body dichotomy had led to a systemic failure to protect their craft on any basis, including conservation. This explained why they were so keen to defend it themselves through the self-directed development of high levels of expertise (section 2.3.2.1), positioning themselves as experts in professional literature, establishing ‘associations’ (Firm14PD) of accredited practitioners or the exclusive recruitment practices found above. Looking inward was one way of responding to the unusual position they found themselves in: as an expert without authority or influence.

4.6.4.2 A web of expertise

This chapter has fervently argued that craftspeople’s relegation to the second stage of conservation was based on the false idea that they provided labour only. Interviewees had been able to defy their

designated place to mitigate the direct impact on their craft, but any broader influence on their behaviour deserves further attention. Indeed, while their localised circumnavigation of the two-stage process allowed them to contribute their expertise, they continued to be unrewarded and unrecognised for it outside their relationships with other firms and professionals. The limited societal recognition for craft expertise, which they linked to class, established the foundation for several systemic issues around vocational education. Therefore, while exclusive recruitment practices made immediate logical sense, their effect of condensing craft expertise to even smaller groups of people was contrary to Morris' 19th-century vision of society's 'constant unconscious education' (Petts 2008). Together we seem to be regressing ever further away from that vision, despite there being good reason for a broader and more empathetic societal awareness of conservation crafts.

Craftspeople themselves realised the value of a broader network of people empathetic to their expertise and working methods. Not only did they consistently work alongside favoured client intermediaries (section 4.4.3) but they also felt that 'working regularly with' other regional craft firms created a 'kind of [relaxed] atmosphere' where they 'felt valued for being people' (Firm04Ro). Here the interviewee was indicating that craft was a personalised discipline, the performance of which could only be fully realised among those who understood it as such. Crucially, there was no compulsion on others to perform craft in the same way (as a personalised pursuit that was impractical), but to be aware of and help establish a context for crafting. Indeed, this was how Firm13Ro's company accommodated the intermittent demand of the heritage sector with a network of semi-skilled conservation craftspeople people who could be called on to support their heritage colleagues in times of high demand.

Like the stonemasons after privatisation, the firms interviewed here had established reliable networks of individuals they could work alongside to respond to the heritage sector's demand for crafts. However, the reinterpretation of heritage values and concurrent reorganisation of the sector had broken down the certainty that the stonemasons had enjoyed. The firms' immediate response to this was to protect their craft through exclusivity, but this had the contradictory impact of decreasing craft awareness more widely. Their commercial nature meant that firms were unable to reverse this trend by themselves, but that it necessitated a structural intervention that restored a semblance of the hierarchy of shared understanding at Fountains. Rather than emphasising discrete roles, conservation had to find a way of embracing and advancing integration, so that individual experts could transcend conceptual and material confines. The next case study questions whether this could be achieved at a formative stage in individuals' careers, through the participant observation of a vocational training project.

4.6.5 Reflection on the methodology

4.6.5.1 A grounded account

This chapter has carefully employed a qualitative methodology that would be familiar in social research. Semi-structured interviews were recorded, transcribed and coded to highlight issues that that the craftspeople themselves would recognise. The resulting portrayal is therefore an emic and insider view of the realities of conservation craftsmanship within the heritage sector, which identifies tensions between the craftsperson as subjective agent and the objective structure they have to function within. This acknowledgement of the 'full practical dynamic' (Murphy and Costa 2015) of conservation craftsmanship has filled a gap that previous studies of the sector's capacity issues have failed to address. It has shown that the procedure of informing conservation has unintentionally synchronised with and legitimised the mind-body dichotomy in construction, which has forced craftspeople to react increasingly protectively. This inward-looking reaction concentrated and emulated the stonemasons' response to privatisation, which suggested that the interplay between craftspeople and structure was innately dispositional.

This key finding from the research so far shows that, despite value-led theories of heritage being more able to accommodate craft expertise now than for most of the 20th century, the restrictive and fragmented structure of commercial conservation represses it. When compared, the results from the chapters so far show that craftspeople in Yorkshire reacted to disenfranchisement from the conceptual side of conservation in similar ways, by working with small groups of trusted individuals to ensure that the contents of paper-based materials could accommodate a site's unknowns. Their compulsion to act in these ways was partly exacerbated by the UK's failure to keep abreast of the international move towards protecting heritage significance (UNESCO 2003), which is a problem that may intensify in the suggested amendments to *Conservation Principles* going forward (HE 2018). We have yet to validate some of the other chapter findings through triangulation, which are tested through the exploration of conservation apprenticeships. The apprentices' inexperience of the sector means that their accounts of the structural divide will not be considered as centrally, but Chapter Five does reflect on its relevance to their on-site behaviour, and on the other grounded findings around craft motivations and values. This comparative process avoids the pitfalls of an overly subjective qualitative approach.

4.6.5.2 Researcher influence

These findings have illuminated both the strengths and weaknesses of a methodology based on the deployment of a single qualitative research tool. While they are incredibly rich and offer an entirely new perspective of craft skills shortages for conservation, they also represent the craft community at a fixed point in time. In the grips of a deep recession, the interviewees could be quite negative about

the position of their craft, and this often turned to discussions about the feasibility of sustaining the company in a commercial context. As already highlighted in Chapter One, this focus on the organisational framework – and even their coordinating role within that – was influenced by their position as managers, my presence as a conservation professional and the formal interview setting, which meant that less formal discussions about the social structure of sites – such as subverting authority through practical jokes – did not take place.

The interview encounters were incredibly valuable for anchoring the thesis developing grounded theories around structure, recruitment and class. However, when compared with Chapters Three and Five, the richness of the human experience was comparatively absent outside of interviewees' descriptions of interacting with heritage itself. This is why the next participant observation case study is so important: rather than appraise craftspeople's recollections and verbalisation of their experiences, it observes their physical relationship in a more natural on-site setting. This was where the other groups of participants (the masons during the tour of Fountains and the interviewees in their workshops) came to life.

• Chapter Five •

• Participant Observation of Apprenticeship and Apprentices •

5.1 Introduction

This thesis has so far explored two communities of conservation craftspeople as they experienced and navigated change within the heritage and conservation sectors. It has shown that various theoretical, academic and structural forces had substantial reach as they filtered down to conservation practice. Like the stonemasons during the 19th century, the craftspeople had 'felt the bad effects of the change' (Mace 1999, cited in Price 2003, 25). Although they did not always recognise the specific causes of change, they were aware of a distinction between conceptual and material work that disadvantaged their profession systemically. This final case study concentrates on the training available to craftspeople, through a distinct focus on three trainees attending further education college in Yorkshire as apprentices while employed as conservation craftspeople in the maintenance teams of traditional, vernacular, landowning estates.

In addition to attending college regularly, the apprentices worked together on distinctive conservation projects arranged especially for them. Principal among these was a six-week project conserving the 19th-century 'Stonemason's Lodge'; the name, location and other details of which have been anonymised to protect individuals' identities. The project makes a major methodological contribution to the thesis because it enabled significant participant observation of the apprentices as they worked alongside a number of other actors to conserve the building. Although some findings in this chapter – particularly about recruiting the apprentices – reflect on events from outside the six-week period, the greater part evaluates the author's observational field notes from that specific project and therefore contributes considerably to the thesis' use of social science methodologies.

5.2 Theoretical framework

So far, this thesis has subscribed to the notion that the discipline of heritage conservation has and must evolve to accommodate more inclusive practices. The argument pioneered by Smith (2006), that there is a need to understand competing values 'attributed to heritage', continues to develop through experimentation with social research methods, which in turn has led to questions about whether fixing 'different categories of value is even appropriate' for 'addressing the fluid processes of valuing the historic environment' (Jones 2017, 22). Already this project has critically deployed several social research tools to explore the sector's very particular challenge of skills capacity among conservation craftspeople themselves. This chapter continues in that methodological vein through the use of participant observation among a specific sample of apprentices, which provides focus on developing conservation craft skills within England's framework of construction

apprenticeship. Through establishing and then immersing myself at the Stonemason's Lodge project in the summer of 2013, I was able to question whether alternative models of project-based (rather than company-based) training could effectively combine the nucleus and space for developing embodied craft expertise found at Fountains Abbey, with the private firm's dynamism and resilience through networking. As well as considering this key point, which relates to the sustainability of craft practice (RQ5), the final case study continues to explore several underlying thesis themes, particularly the conceptual and material divide in the organisational structure of conservation (RQ3), and the apprentices' reflexive recognition in the value of their practice (RQ4 social realities).

Any perceived detachment of mind from hand reflects a 'poor' (Sennett 2008, 20) understanding of craftsmanship, yet belief in this divide has persisted within the construction industry for centuries (Ingold 2013, 49). It seems to have bypassed the working culture at Fountains Abbey, where, until the 1980s, professionals trusted conservation craftspeople in the same employ to make decisions, work autonomously and give structural advice. After the Fountains works team (and all others like it) was closed by the sponsoring government department, the privatisation of 'practitioners' established an organisational gulf from 'professionals' that remained within the public sector, which allowed the detachment to permeate conservation practice more typically. Its prevalence became such that the gradual adoption of an overwhelmingly linear conservation management planning process of understanding significance to inform conservation was barely questioned (Figure 4g). However, in reality it reinforced the conceptual and material divide and that in turn impeded craftspeople's dialogic methods of learning, understanding and deciding through practice. This was further exacerbated by changing modes of funding for conservation, which, during the 1990s, began to be provided in multi-million pound, indirectly funded projects that had to be overseen by large, often non-specialist, construction management companies. Adapting to heritage's unknowns had proven difficult for these companies, and conservation craftspeople had reacted by devising ways to circumnavigate their processes so that they could continue to be 'attent[ive] and responsive' to the unknowns through flexible, 'dialogic' practice (Sennett 2013, 14). The innate suitability of such practice to the frequently found unknowns that distinguished conservation projects from mainstream construction practice meant that the need for such careful navigation was unfortunately paradoxical.

As with Chapter Four, the backdrop of England's commercial construction sector in 2013 is important. Even in an equitably competitive environment, the process of tendering for projects with a fixed timescale and programme provided inherently less continuity than the stable environment of Fountains Abbey, which, as apprentices, the stonemasons had found so supportive. More than that, the illustration of the London building industry's moral economy of 'pilfering, fiddling and time-banditry' (Thiel 2012b, 420) contrasted extremely with the accounts of Chapter Four's interviewees,

who, as employers, often sought recruits who were motivated by the tripartite package (Figure 4e) to make personal sacrifice for work. This was a complete reversal of the London builders' conduct described by Thiel. So, despite the resonance of some of Thiel's findings with the conservation craftspeople – including their 'varied, skilled and autonomous' work (Lyon 2013; Thiel 2012b, 413) and exclusive recruitment practices – the overriding social culture and intermittent nature of mainstream construction seemed unsuited to nurturing the commitment required for conservation craftsmanship. Therefore, in trying to understand the conditions in which conservation craft training might succeed, both within and outside the current organisational framework depicted in Figure 4b, this chapter makes regular reference to Thiel's building site culture.

Thiel's (2012a, 2) work is also especially relevant to this chapter because of the intensely immersive nature of the author's overt participant observation, which took place over 51 weeks on an 'interrelated collection of building jobs situated in central London'. For work that adopts a similarly overt, but more physically involved (as opposed to observational) approach, we look again to Marchand (2009; 2010; 2012; 2016), who, in practising as an apprentice to 'learn about learning' in various different countries and environments, has found less formal systems of knowledge transfer, which can be compared to the place and company-based training at Fountains and in the private firms. In Yemen and Mali there was clear emphasis on the role of master-mentors, with whom apprentices were chosen 'to work closely alongside' (Marchand 2012, 74) or in 'long-term contractual arrangements' (Marchand 2009, 13), which is less noticeable in the standardised systems of the English further education system. This chapter will therefore examine whether the qualifications and documentary evidence used to assess skill in England are fully appropriate, or whether a fixed project or appointed master-mentor could provide apprentices with leadership and continuity in the uncertain world of construction.

Both researchers have cited a fundamental interest in rebalancing academic preoccupation with architecture as material culture, with an understanding of the social 'processes' of building (Marchand 2012, x; Thiel 2012a, 1). This aligns them with several heritage and conservation researchers (Jones 2010; Jones and Yarrow 2013; Madgin et al 2017), who have used social science research methods to understand the process of identifying and valuing heritage in the historic environment, but adds a significant further dimension because of the palpable and unique construction sector context. This chapter therefore adds to ongoing discussions about the use of social research methods in heritage conservation, while – like Marchand – focusing on what and how apprentices learned, and whether the conditions they needed to develop skill, and ultimately contribute to sector capacity, could be fully met in the reality found by Thiel.

5.2.1 Methodology

Chapter One has already dealt with the ethical aspects of this case study, and described how participant observation is used in a form of methodological triangulation to compare with the archival, interview and focus group findings at Fountains, and from the interviews with firms. As the 'non-native insider' researcher (described in Chapter One), a member of the programme's steering group, and the only female on site, my presence was overt but familiar to the participants, like that of other participant-observers (Jones 2010; Jones and Yarrow 2013; Thiel 2012a), but as an educational experience for both parties it offered something different. In order to 'learn about learning' craft skills for heritage conservation, I was inspired to attend the Lodge site as a building labourer to partially adopt Marchand's 'apprentice-style field method' (2009), which, as observational analysis of dialogic craft practice, partly pre-empted the recent introduction to heritage of social research methods used in parallel with participatory practice (Jones 2017). Although my vested interest in the project meant that I could not neutrally attend the site without having some impact, as set out in section 1.4.3.3, my recognition of this coupled with my focus on the social influence of professionals like myself of the craftspeople meant that the methodology remained robust (Sage 2013).

Marchand and Jones' projects are comparable because both involve using social research methods 'live' as participants engage in specific processes, so that the experience of either attaching value to heritage (Jones 2017) or learning craft skill (Marchand 2009; 2010b; 2012) could be understood and evaluated. Despite their similarities, the projects were distinct in their aims: the former expanded on a theoretical framework for archaeology and heritage by testing new methodologies, while the latter's anthropological study of building architecture led to a theory about the value of embodied cognition and the transmission of knowledge. Taking as its starting point the continual decline in conservation craft skills in England, this chapter is distinct in aim again, but methodologically it straddles both. Like Jones' work, it uses innovative social research methods to enrich our understanding about the process of craft-based conservation as a subsector of heritage, to demonstrate, like Marchand, that the transmission and development of embodied cognitive expertise is itself significant, although this is difficult for the community of practice to articulate. Throughout the chapter, the findings are considered in relation to the conservation craft sector as described by the interviewees in Chapter Four, and I argue that, while there was little in that arrangement to cultivate conservation craft skill, some reworking could (and indeed has already started to) improve this.

To conclude, the chapter builds on the thesis findings so far that international and national conservation guidelines can at present be rationalised to endorse the way in which craftspeople interact with and value historic buildings. However, because articulating craft values semantically is challenging, it has rarely happened, and is frustrated by the largely linear model of understanding

conservation. As a result, more dominant values sometimes surmount craft understanding, as demonstrated by the plastering and decorative woodwork examples referenced in Chapter Two (Gaches 2016; Morrison 2017), where one heritage value was aggrandised at the expense of others. Current proposals to relegate communal interest to a subsector of another interest could reinforce this position, and threaten the primacy of craft values even more (HE 2018).

5.2.2 Chapter structure

The private sector arrangement of the conservation craft firms interviewed, and their relationship with public sector policymakers, funders and commissioners, has already been described in some detail in Chapter Four (see also Figures 4a, 4b and 4g). It showed that larger projects being delivered in an increasingly competitive marketplace had degraded companies' and craftspeople's capacity to deliver on-the-job training, which was critical to the international examples studied by Marchand. In England, 'on site assessment and training' was also a fundamental aspect of completing the specialist heritage National Vocational Qualification (NVQ) that the National Heritage Training Group (NHTG) designed (as mentioned in Chapter Two), but many interviewees were sceptical about education and training opportunities available as part of the mainstream construction sector, favouring self-directed opportunities or the previous system of City and Guilds qualifications. Therefore, this chapter starts by setting out the training and qualification framework for construction crafts in England in 2013, before explaining the rationale for this apprenticeship training programme and the approach to recruiting the apprentices. It then introduces the Stonemason's Lodge and the project's purpose as part of the overall programme, before drawing on participant observation field notes to analyse the apprentices' interaction with the organisational structure of conservation (RQ3), and whether theories about craft and its transmission were apparent in their actions and discourse (RQ4). The chapter will finally consider whether the Stonemason's Lodge project delivered an alternative model for conservation craft training that could enhance current provision and help sustain conservation craft capacity for the future.

5.3 Construction apprenticeships in England

The thesis has already shown that, from the 1990s, several political and other externally driven factors caused the conservation craft sector to implement mainstream construction sector approaches such as competitive tendering and large-scale construction management procedures. This thesis has shown that the adoption of the construction sector's framework for vocational education actually occurred earlier, while the stonemasons worked at Fountains Abbey, where, as we have seen, apprentices were the norm throughout the 1970s and into the early 1980s. Apprenticeship positions at Fountains conformed to the official English standard. This comprised three parts that included a subject-specific core diploma, evidence that relevant work could be

executed on site (the NVQ element), and proof of proficiency in key mathematics and English (Figure 5a). Although each element could be achieved separately, trainees would only formally complete an 'apprenticeship' if they completed the diploma and NVQ in tandem, while in employment and in association with a recognised training provider. This is why some of the interviewees in Chapter Four took care to state that they had not been apprenticed to their craft, but had arrived at it via a different route.

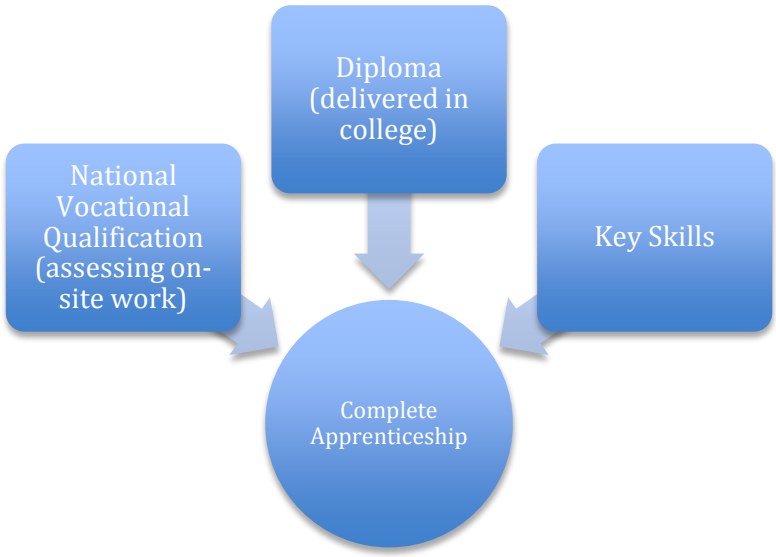


Figure 5a: The three parts of an 'apprenticeship' in England in 2011/12

(Author's own 2018)

Considering the range of conservation craftspeople interviewed in Chapter Four, the protected definition of an apprenticeship in England can be seen as being quite restrictive. The requirement to be employed while undertaking the programme presented a barrier to some, who, at over 25 years of age, were 'too late' (Firm07GB) because employers preferred to hire younger people who could be paid a lower minimum wage, and have their college fees fully met by the state. The power of these external forces was such that employers were unlikely to recruit on merit alone, instead using personal networks to find people whose long-term commitment they could trust in (Chapter Four) or who could be relied upon for their availability. Working in the mainstream construction sector, the second group of 'available' people often viewed these opportunities as something to 'fall back on' (Thiel 2012a, 89), whereas conservation craftspeople were more likely to develop their work as a pleasurable vocation, and view their positions as 'privileged', like the Yemeni and Malian stonemasonry apprentices (Marchand 2003, 32; 2008, 252; 254). However, while the international apprentices seemed to enter the craft conscious of this privilege, in England it was more likely to be learnt during the training as motivations developed and socially driven preconceptions about the value of vocational training (as compared to academic) were challenged and rebalanced in the individual.

Lane (1996) has given an historical overview of apprenticeship in England, which has evolved from a largely unregulated and sometimes exploitational agreement between two individuals to the highly controlled system of today. Uncertainty continues to afflict apprenticeship provision, however, and, in 2011, the government-commissioned *Wolf Report* recognised that since 1851 the system had failed 'to provide young people with a proper technical and practical education' (2011, 5). Marchand (2007, 26) questions the very existence of a 'system' for craft apprenticeship, arguing that the 19th-century 'institutionalisation' of craft training had a standardising effect against which Morris and Ruskin railed, and which shaped a 'divide between trade theory and practice' absent in the master-mentor apprenticeships of Yemen and Mali. Despite its shortcomings, the further education system of apprenticeship and NVQ certification provided the context for this case study because all three participants were employed for two years as building craft apprentices in the workshops of traditional landowning estates and attended further education college on 'block release' to complete an NVQ. They were brought together to collaborate on the Stonemason's Lodge in an attempt to address one of the effects of the standardisation of craft apprenticeships, which, at the time, did not test or recognise work to repair or maintain existing buildings. Recent changes to vocational qualifications, made in response to the findings of the *Wolf Report*, have addressed this and could provide opportunities for the sector, which will be discussed in the conclusion to this chapter.

5.3.1 The apprenticeship training programme

In 2010, a group of land agents from large country estates in Yorkshire recognised that they all had one problem in common: the average ages of their maintenance teams (typically comprised of joiners and stonemasons) was over 55 and they were likely to retire within ten years. Contextualised by the skills shortages described in Chapter Two, such situations were widespread and had been highlighted by the NHTG's (2005; 2008b; 2013) research. Motivated by funding and other support that was available to address the problem, the land agents established a steering group that met quarterly with representatives from English Heritage (now Historic England), the local authority, and myself as Regional Heritage Skills Coordinator. Together we were successful in winning European and charitable funding to enable the estates to help their ageing maintenance teams transmit their knowledge and skills to a new generation of craftspeople. Organisationally, the non-profit-making maintenance teams were more akin to Fountains Abbey than the private firms, but the participants' experiences of learning a conservation craft within the framework of construction sector apprenticeships nonetheless provided a rare opportunity for qualitative research. It enabled me to inductively explore the suitability of the standard qualifications to conservation craftsmanship, through observing and working alongside the apprentices as they learnt and reflected on their apprenticeships. It became clear that, although the maintenance teams' purposes might be different,

the on-site practices of ‘quasi-autonomous’ working and ‘localised’ (Jones and Yarrow 2013; Lyon 2013; Saunt 2019; Thiel 2012a; Yarrow 2019) decision-making described in Chapter Four were also a reality there.

Early on in the programme, before the apprentices were recruited, the steering group worked with local further education colleges to discuss the most appropriate NVQ qualification for each position based on the skilled craftspeople in each estate team. The three apprenticeships would be in stonemasonry (stone fixing), carpentry (site carpentry) and trowel occupations, and, taking place over two years, would lead to a Level Two diploma in the relevant subject. However, although these qualifications were the most appropriate available, the mandatory units were based on the processes of new building (Figure 5b) and did not recognise the apprentices’ work repairing and maintaining existing buildings, which comprised the bulk of the teams’ work. To acknowledge repair, maintenance and conservation work as important, and to help the apprentices to value it, the steering group supplemented their mandatory training by establishing several short courses and projects for them. As well as providing opportunities to learn and practise varied conservation techniques, such as using hot limes and conserving rural earthworks, these projects also brought the apprentices – who were normally based on geographically distanced estates – together. The most substantial of the projects was the conservation of the Stonemason’s Lodge, the observation of which forms the basis for most of this case study.

Carpentry and Joinery (site carpentry)	Stonemasonry (stone fixing)	Trowel Occupations
Conforming to general health, safety and welfare in the workplace	Conforming to general health, safety and welfare in the workplace	Conforming to general health, safety and welfare in the workplace
Conforming to productive working practices in the workplace	Conforming to productive working practices in the workplace	Conforming to productive working practices in the workplace
Moving, handling and storing resources in the workplace	Moving, handling and storing resources in the workplace	Moving, handling and storing resources in the workplace
Installing first fixing components in the workplace	Setting out basic stonemasonry structures in the workplace	Setting out masonry structures in the workplace
Installing second fixing components in the workplace	Erecting basic stonemasonry structures in the workplace	Erecting masonry structures in the workplace
Erecting structural carcassing components in the workplace		
Maintaining non-structural carpentry work in the workplace		
Setting up and using transportable cutting and shaping machines in the workplace		

Figure 5b: Mandatory units in the apprenticeship frameworks were based on building new structures, rather than repairing and maintaining England's existing building stock

(Construction Industry Training Board [CITB] 2018a; 2018b; 2018c)

5.3.2 Recruiting the apprentices

The two-year apprenticeships were anticipated to take place between April 2012 and 2014, to fit with the main funder's financial year, which meant that recruitment of the apprentices was planned at the beginning of 2012. Little preconception about recruitment existed among the steering group, and as such the strategy was to advertise the three positions quite widely. They were promoted within professional and private networks, advertised in local newspapers and through the local further education college's open days, which, overall, attracted 45 applicants spread fairly evenly across the three roles. The popularity of the positions bears out some of the findings from Chapters Three and Four that 'you had to be a bit special to get a job' (Rumbold) because there was 'a huge number of very, very keen young people out there' but 'a 'shortage of work' (Firm08BS). However, while the number of applicants was generally positive in that there was a large selection of people to choose from, there were nuances within this overall picture, suggesting that, for some applicants, heritage construction might be a 'fallback' rather than aspirational choice (Lynch 2013), particularly those applications that contained minimal information and had been submitted in response to all three positions. Stonemasonry applicants had generally achieved very good academic qualifications, while

joinery applicants were more likely to include photographs of their work. Even each apprenticeship position attracted an unexpectedly high quality and number of applications, the rationale for appointment was different in each case.

As already discussed, the criteria for funding apprenticeships in England meant that many employers sought to recruit people that were under 25 years old. In this case, the situation was made more acute because, as traditional landowning estates, the apprentices' employers were not 'in-scope to construction' and therefore ineligible for grants from ConstructionSkills (the then name of the CITB). That meant that the steering group's modest grants were the sole source of funding available to the estates, and so most were keen to reduce their direct costs by recruiting a 16-year-old apprentice and paying them the national minimum wage for that age group. Estates would be resourcing the project in other ways, in the form of staff time for both administering the positions and training the individuals, and providing materials, tools and transport to college. Although these contributions were seen as negligible by government policy that generally viewed apprenticeships as commercially advantageous, they were actually quite significant to the estates, which, in offering craft training to young people, were doing something very different to their normal business. They were particularly concerned about providing day-to-day on-site mentoring, which was so important in Marchand's international studies, to several interviewees and at Fountains where it had been Dave Sweeney's main role. Finding resources to meet this challenge had proven difficult for the private firms, who had either ceased training altogether or restricted it to an exclusive group of recruits trusted to stay with the firm and therefore realise its investment. The steering group was keen to confront this challenge deliberately, by appointing keen and receptive 16–18 year olds, who would assimilate easily into the distinct workplace culture, appreciate its stability and remain in estate employment beyond the two-year apprenticeship period.

A total 13 of the 45 applicants were shortlisted for interview; a process that was weighted according to their GCSEs, any vocational qualifications, experience and evidence of commitment to craft. Altogether, four candidates were invited to interview for the bricklaying position, three for joinery and six for stonemasonry. Sensitive to their youth and relative inexperience, the steering group wanted to ease the interview setting by limiting panel members to three, made up of two estate representatives and one further education college tutor. Interestingly, tensions between the professionals and craftspeople arose among the panel, with one member disapproving of the informal 'site' clothing that a craftsperson wore. The interview itself comprised a series of questions from the panel, followed by mandatory literacy and numeracy tests to assess the applicants' suitability for the further education college diploma element of the apprenticeship training. Each panel was able to offer the position to an interviewee, but only one appointment was based purely on the candidate's skills and

experience, which were comparatively extensive because of the person's age. In this case, the employing estate agreed to pay the costs associated with the candidate's higher apprenticeship wage.

The other interview panels felt that geographical and personal connections with the estate and its employees were also important, and recruited accordingly. One of these apprentices departed the programme early, and, although another individual replaced them, joining late disadvantaged the new apprentice and prevented them from engaging fully with the programme, which affected their performance at the Stonemason's Lodge. Recruitment was again a critical element of training in conservation craftsmanship, and it is notable how far the panels' decision-making resonated with the findings around a tendency towards exclusivity within social groups (Chapter Four; Thiel 2012a). The panels' approaches also illustrate why barriers to entering the sector through apprenticeship might exist for mature trainees, career changers and creatives, who were among the most successful of the interviewees in Chapter Five at sustaining craftsmanship by developing their career through growing small businesses. After considering their performances at the Lodge, the outcome and trajectory for these apprentices at the end of the two-year programme is discussed in section 5.5.

5.4 A live-site conservation project

As per the above introduction, the conservation of the Stonemason's Lodge took place over a six-week period during the summer of 2013, around halfway through the apprentices' two-year positions. Both the timing and location were carefully considered by the steering group, which felt that the apprentices would benefit from some experience prior to undertaking a project together. In selecting the building itself, the group sought a building constructed traditionally from vernacular materials, with relatively straightforward access, and which required works that were manageable within the timescale. Used for storage, the simple, one-and-a-half-storey 19th-century Stonemason's Lodge, built from solid stone walls with a timber roofing structure that supported pan-tiles fixed to lathes with lime sheeting, fitted the criteria well. Its vernacular materials and features (including boarded windows and door, and timber floorboards) were typical of that part of rural Yorkshire. The main disadvantage of the site was access: its location between the back end of a long, medieval burgage plot and a small stream made vehicular access impossible, but the short distance from the road was felt acceptable to transport materials by wheelbarrow, and even representative of conservation (as access to existing buildings can often be problematic).

Although it was neither scheduled nor listed, the building's heritage value was recognised in the local conservation area character appraisal (although it is not referenced here in order to preserve the building's anonymity). It highlights the 'openness' that 'lower scale' buildings make to the town by

providing a varied building line and roofscape; all values that derive from its 'evidential' and 'aesthetic' characteristics (EH 2008). Not only did it provide evidence about activity during the 19th century but a rectified photographic survey of the building also showed it to have been built in two phases. Furthermore, some of the larger stones in one of the phases were likely to have been taken from the medieval castle site across the road (although this was not identified until local craftspeople were working on the project [see 5.4.1.3 below]). This evidential information is interesting but not unique because similar interpretations can be inferred in other local sites. Correspondingly, the building's aesthetic value, which relates to its appearance and the way in which it contributes to the character of this part of the conservation area, stems from several buildings' collective character. Although the appraisal asserts that the conservation of such buildings is desirable, it also acknowledges the fact that this may not be possible when that heritage is not rare, nationally significant or sustainably reusable. The condition and lack of alternative use for the building were reasons why it was selected as a 'live-site' conservation training project for the three building craft apprentices because the steering group felt that the traditional construction and limited evidential value presented an ideal context for training. The significance of the Lodge's character is also important here, because 'character' is perhaps one of the most complex features of heritage to encapsulate in any fixed sense, and then conserve (Yarrow 2017).

The project planning stage was conducted conventionally, with the local planning authority appointing a conservation architect to draw up a simple plan and specifications for repair. The building was then rapidly recorded using detailed photographs and, together, these documents were used for reference throughout the project, forming the basis for on-site discussion and re-evaluation of the plans, which was an important part of the training process. Logistical arrangements for health and safety, access, delivery of materials and disposal of waste were then made, before the works were programmed on a Gantt chart. Only when these purportedly conceptual elements of the project were complete could the apprentices begin using their hands and tools to manually conserve the Lodge. However, as the following sections demonstrate (correlating to the findings of Chapters Three and Four), the apprentices and other craftspeople on site were very often obliged to interpret the heritage and take a view on conservation principles, techniques and processes, as well as the logistics of operating a building site.

5.4.1 Placing the apprentices in the organisational framework of conservation

5.4.1.1 Actors and their culture

Like the building sites described in other in-depth studies (Lyon 2013; Marchand 2009; 2012; Thiel 20012a), the Stonemason's Lodge became a hub of activity throughout the six weeks of its conservation. In many ways, it was also a microcosm of the building conservation projects described

by the interviewees, with frequent visitors to site readily adopting some of the key roles identified in Chapter Four, while other visitors performed other, more specific, activities that met the particular project intention of training the apprentices. My fieldwork diary records a total of 13 individuals who visited or were otherwise concerned with the site, as follows:

Recurrent stakeholders:

- The three apprentices (in fixer masonry, site joinery and trowel occupations), as described in 5.4 above. Known as 'the apprentices' or, if discussed individually, 'the masonry apprentice', 'the joinery apprentice' and 'the bricklaying apprentice'.
- The site foreman, who normally worked for a local estate: 'the foreman'.
- The builder, who normally worked for a local estate: 'the builder'.
- Myself.

Sporadic stakeholders:

- The local authority: 'the local authority' (a member of the steering group).
- An independent architect: 'the architect'.
- A surveyor, who normally worked for a local estate: 'the surveyor' (a member of the steering group).
- An independent scaffolder: 'the scaffolder'.
- An independent joinery specialist: 'the specialist joiner'.
- An independent masonry specialist: 'the specialist mason' (a former Fountains mason).
- Two independent building conservators: 'the building conservators'.

The rationale for each individual's invitation to the project had an effect on the frequency with which they visited. Apart from myself, recurrent visitors all worked for one of the partnership estates, whereas sporadic visitors tended to be engaged by the steering group to do something specific and within a fixed period. The second group tended to be heritage or conservation specialists who typically worked on designated buildings, whereas the first group were more used to the general repair and maintenance of vernacular buildings like the Lodge. As the project progressed, tensions around these two groups' bases for making decisions about materials and techniques became apparent, which is discussed in section 5.4.2 below. This section first discusses the Lodge project as a microcosm of conservation building sites in more depth and in relation to findings from Chapters Three and Four, as well as the work of Marchand and Thiel.

The first fieldwork diary entry, written after a pre-site meeting with the apprentices and before the practical conservation even began, gives some indication as to the working environment that the apprentices already inhabited, and which came to pervade the Lodge site:

> *The idea [of the meeting] was that they took a look at the project plans, met the architect, visited the site and then created a project plan, site maintenance plan and risk assessment. It was fascinating watching them negotiating the architect, and later the foreman. They were much shyer around the architect, not wanting to speak up, but deferred more easily to the foreman. One apprentice really wanted to work with oak, and the architect agreed, but when the foreman said it wasn't necessary, the apprentice agreed with that. The foreman did have good reason, but so did the architect, it's just that the apprentice didn't ask.*
>
> (08/07/2013)

In this excerpt, the apprentices' cautious reaction to the architect was very out of character (for a comparison with their normal 'banter', see below), and reflected their unfamiliarity with traversing the professional and craft divisions of their normal working culture. That the site foreman was already known to one of the apprentices did contribute to their comparative ease, but their response can also be seen as an effect of the class divide felt by Chapter Four's interviewees partly operating in reverse; experienced conservation craftspeople prized professional relationships that were based on trust, respect and mutual understanding, whereas this approach was still alien to the apprentices. As novices, they were only accustomed to working within the 'class-based' culture of building sites, where professionals were 'virtually invisible' (Thiel 2012a, 39). Later on in the project, as the apprentices became more comfortable with my presence on site, their attitude towards office workers became explicit:

> *The thing that's emerging is the perceived uselessness of office workers. 'They just work in an office', 'they don't know how to get on', even (to me) 'I thought you'd just be an office worker, but you can get your hands dirty'. There's definitely a 'them and us' feeling.*
>
> (29/07/2013)

So, even though they felt and participated in the division between conceptual and material workers, it was possible with minimal 'dirty work' (Thiel 2007) to appear a material worker and transcend the gulf, which meant being considered differently on site. Despite my hybrid non-native insider position, I was not only included in more forthright discussion about construction (like the above), their education and careers, but they started to involve me in their 'banter'.

Early on in the project, the builder advised me that the apprentices would banter to assert themselves. They did this regularly, firstly to break the 'monotony' of daily, physically tiring work and eventually to establish a small 'social hierarchy', as observed at 'Topbuild' (Thiel 2012a, 74 and 125), in Yemen (Marchand 2008, 252), Glasgow (Jones and Yarrow 2013, 18), and found at

Fountains. The following fieldwork diary entry describes my inclusion in their banter in the latter third of the project's duration:

> *The fun and games came out of the [expanding] foam. First two apprentices sprayed it around the other apprentice's toolbox, then into my gloves and water bottle. Little buggers. Fun day though.*
>
> (14/08/2013)

In this instance, the two most proficient apprentices were reinforcing the hierarchy by teasing the less adept people on site: the late-starting apprentice and myself. They were all accustomed to my presence by this point and my fieldwork suggests that, as their familiarity grew, any readiness to listen to my guidance diminished. This excerpt is taken from the very next day:

> *I was 30 minutes late to site today, and when I arrived the lads were inside chatting, or having a meeting as one put it. I asked them to start working and they refused (good humouredly!) until the youngest apprentice said to! Seriously? I had a word with another apprentice about it later. I also asked that apprentice for a method statement for a wall that the specialist mason had asked him to take down and he said 'oh I won't have time for that'!*
>
> (15/08/2013)

The above excerpt shows that, in the absence of the knowledge-based hierarchy at Fountains, the apprentices developed their own order of skill and banter. As well as this, their actions also reflected their habit of quasi-autonomous working, governing 'localised task processes' and their own 'movements in space and time' (Lyon 2013; Thiel 2012a, 39).

As with Thiel's builders (2012a), the apprentices' rebuttal of authority manifested in a range of ways, from the trivial (*they still throw fruit around despite the foreman and me telling them not to*) to the more significant, including their independent decision to use modern materials on the Lodge:

> *I was raking out (they say hacking out) a wall downstairs, when all of a sudden I spotted expanding foam! An apprentice was using it to set his window in. He'd wedged it all the proper way, but instead of packing round the windows with stones and mortar he's used the quick option that he's used to. This is fine – there isn't much modern stuff in this building – treated timber, felt and now expanding foam – but I'm a bit disappointed that they didn't even ask me. I know they need to move quickly now because of the roofing debacle, but they are taking advantage.*
>
> (14/08/2013)

Interpreting this field note entry later, it seems that the apprentice was in part performing autonomously, as was routine and to be expected. However, there was a broader matter at issue here: Chapter Two presented craft as innovative, creative engagement with objects (Adamson 2018a; 2018b; Pye 2015; Risatti 2007), which in the process of crafting become an 'extension of [their] idea' (Marchand 2008; 257). The cognitively stimulating aspects of craft were therefore missing from the physically demanding window packing, and as such the apprentice prioritised other concerns, such as working quickly. We then talked about this particular instance one week later:

> *As I was leaving, one apprentice was saying how he was coming round to the idea of conservation, but felt that there was a place for some materials, such as expanding foam. I questioned it and he said 'well we'll do it and point it up while you're not here. You'll never know!' I know that they wouldn't do that here, but it shows how easy it is to run rings around occasional visitors to site. Expanding foam isn't ideal, but as one of the few modern 'honest repairs', it's OK.*
>
> (22/08/2013)

As a case where an apprentice made a decision that subverted the architect's specification and accepted conservation standards, it illustrated the 'mystery' surrounding crafts (Adamson 2018b) and demonstrates why trust, mutual understanding and reciprocity between professionals and craftspeople should be at the heart of conservation practice. Furthermore, it also illustrates how a prevalence of imbalanced value-led projects that do not fully articulate or account for dialogic craft interest might be problematic. This is because the essential but slow, awkward, unskilled and 'tedious' jobs (Pye 2015), such as packing around a vernacular window with stones and mortar, can be offset by learning about craft tradition and the tremendous opportunities that follow, such as the recreation of the carved wood 'trophies' at Windsor Castle (Nicolson 1997) or (potentially) the dragons on the Great Pagoda at Kew (Morrison 2017).

However, the disjointedness of both conservation funding and the construction industry's private sector model meant that pathways from working on one to the other, which were carefully choreographed for the apprentices at Fountains, were unfathomable to these apprentices. This meant that the materials and techniques of conservation practice, which Chapter Four showed could eventually be very rewarding, were often superseded on site by other, competing, priorities such as embracing the extant culture, achieving timescales and plans for health and safety. The incentive to observe these cultural, practical and legal conditions – to be 'inculcated' into these 'workplace traditions' (Thiel 2012a, 85) – over those of conservation is perhaps why proportionately few of the company apprentices employed by Chapter Four's interviewees had developed into managers. Tensions between conservation values and other priorities are revisited in section 5.4.3 below, after

further discussion about the workplace environment at the Lodge, and how this compared to the other craft communities already explored.

5.4.1.2 Paperwork and professionals

Although the non-profit-making maintenance teams were organised very differently to the private firms, which relegated some of the organisational concerns about competitive tendering, several observations demonstrated that the apprentices navigated certain situations similarly to the experienced private sector craftspeople. For example, their disregard for the steering group's carefully planned project timetable and the architect's technical proposals correlated to some accounts from Chapter Four, particularly those that expressed a preference for working with specifications flexibly. Indeed, as early as the first day on site, it became clear how seemingly extraneous factors, distinct from the unknowns in conservation, affected work and further compelled the apprentices to diverge from the specification and work autonomously. Both the weather and the main on-site actors' impatience to learn meant that we worked very quickly. My first fieldwork diary entry reads as follows:

> *First day on site with the lads at the Lodge and I'm knackered! I've learnt an awful lot though. It's amazing how quickly the project plan and other paperwork is disregarded as soon as you get on site. We want to work on the roof this week, while the weather's good, so we need to change the dates that our specialist roofers come in. The truck broke down so we couldn't get rid of any waste.*
>
> (22/07/2013)

Their attitude towards paperwork continued:

I printed out the scheduled monument description. I've created a lot of paper – risk assessment, phone numbers, historic maps, emergency exit – and none of them have paid any attention to it.

(29/07/2013)

Indirectly, this signifies the feeling at Glasgow Cathedral that bureaucracy should be dealt with by professionals, so that the 'practical masons, [ ] the real fundamental base of everything, [can] get on and do their job' (Jones and Yarrow 2013, 15). It is further evidence of an active mind-body dichotomy, in which the apprentices – one year into their training – had already begun to participate. Conversely, on one occasion, an apprentice was observed making more use of the detailed rectified photographs, which guided the rebuilding of part of a collapsed wall, and the reinstatement of the roof covering. In stark comparison to their use of the plans and specifications, the apprentices pinned up the photographs inside the building for ease of use (Figure 5c).

Figure 5c: The apprentices pinned up the rectified photographs for ease of use

(Author's own 2013)

As at Topbuild (Thiel 2012a) and at Fountains where the measured term contractor 'ran amok', the unpredictable nature of the work inspired the apprentices to 'get on' and keep pace however possible, through autonomous decision-making and incorporating methods that could be adopted easily on a building site. In comparison to the intricate annotated drawings and specifications, the photographs – such as Firm07GB's lime mix and the decorative craftspeople's use of sketches – provided a useful guide rather than detailed instruction. It was important that the photographs could be interpreted without requiring close reading, which was difficult when handling tools and materials in awkward positions. Neither the drawings nor the photographs provided much detail about the process of conserving the Lodge (for example, which joints they should use, how they should set out the roof and identify stones for rebuilding), and any materials suggested by the architect were subject to great debate on site (section 5.4.2.1). Despite the physical distance from the specifications, my fieldwork diary suggests that overall '*we [were] pretty true to it',* and so it is notable that the photographic information, which suited apprentices' requirement to access abstract instructions, most satisfied their need to get on and was therefore adopted.

Barriers to 'getting on' efficiently emerged frequently, and often when conceptual professionals visited site:

> *The surveyor came to look at the job and condemned one wall, saying that we shouldn't really be using the floor joists anchored into it until they were propped.*
>
> (24/07/2013)

Such intrusions often reduced our productivity and contrasted with Rumbold's recollection of Gilyard-Beer saying 'right, you know what we'll want. [ ] You get on'. They seemed to be viewed like safety goggles and hardhats as all were imposed upon and frustrated the apprentices, often to the extent that they ignored them. Their actions were never clandestine, but the very need to reject guidance further exacerbated the gulf between them and professionals, whose occasional overlooking of seemingly small tasks could have an impact on site:

> *We still hadn't received our lime so we called the foreman who ordered it in the morning for delivery tomorrow. That's fine, but we needed it today so one apprentice and I went to collect three bags of it from the merchant.*
>
> (15/08/2013)

> *The apprentices had asked an estate to ask the scaffolding firm to get the scaffold done last week, so we hoped it would be organised for today. But when we spoke to the surveyor to check, it seemed he had forgotten.*
>
> (28/08/2013)

Although we could accommodate these setbacks, they made site operations feel very dependent. This could be due to the unique setting of our apprentice-led project, but it does reflect the need for 'localised' building site coordination (Thiel 2012a, 11), which Chapter Four shows extended to making decisions about the detail of conservation, particularly when based on the condition of features such as windows (Firm02CJ). In addition to the expanding foam episode discussed above, other events at the Lodge demonstrated why conservation craftspeople needed to be 'trusted' to make decisions and solve problems regularly.

As the works to the Lodge progressed, the apprentices became more confident about taking decisions themselves, as a comparison of the following two excerpts from my fieldwork diary – written at beginning the end of the project – demonstrates:

> *They'd left most of the spars on and were waiting for a decision on whether they should be kept or not – phew! At least they've learnt that.*
>
> (29/07/2013)

They've arranged for the scaffold to be brought down next week and are thinking about when to crack on with the guttering and repairing the door.

[ ]

The apprentice pointed the ridge, which was bedded in NHL5, the sun was much warmer than we thought, so they had some problems with cracking, but they solved it with hessian and many, many buckets of water.

(22/08/2013)

The circumstances of the two excerpts were different because the timber replacement in the roof had already been subject to much debate, which is why I was pleased that they had waited. That said, as their confidence grew, the apprentices seemed eager and more able to progress site independently by making decisions and 'getting on'. This sometimes meant having to make decisions about conservation, especially when they uncovered unknowns.

5.4.1.3 The unknowns

As described above, the Lodge was an extremely simple, traditionally constructed building. Nevertheless, hampered access to the site before the project began made it impossible to fully understand its condition and significance, which meant that unforeseen unknowns arose on two occasions while I was participating in the project. These related to the roof and the inside of the east wall:

The roof tiles are interesting. When we got up there we realised that it had been reroofed at some point in the past: all the tiles on the west elevation seem newer (although we won't know that until we remove them) and the ones on the east (facing away from the road) are a mix of machine and hand made. So it seems as if some were saved in the first re-roof and put on the reverse slope. To keep the character, we'll be doing the opposite – putting the old tiles on the front and the new on the reverse. Most of the handmade tiles are gone (with rivets, cracks and the lip missing) now.

(23/07/2013)

The unknown handmade roof tiles' condition was so poor that plans for conserving the roof in its entirety did not change to accommodate them. Each tile's newly established value, however, meant that progress was slowed by the need to handle and assess them more carefully, in order to determine whether they could be retained. After accommodating this, we were then required to respond to the unknowns a second time when rebuilding the back wall:

While the joiners were on the roof, the mason and builder were repairing the collapsed wall downstairs. The builder took one look at it and saw the two phases in the back wall. From the inside,

> *you can see that the north and south ends of the eastern wall were built separately – they are not tied in and the stone is very different. The north is random rubble, as you would expect for a vernacular shed, while the south is huge, more formally shaped, stones. The builder reckons they're from the castle [because] 'you get them all over [the town]'.*
>
> (29/07/2013)

Taken together, the two field notes above demonstrate that vernacular and empirical craft knowledge can underpin the interpretation of place during conservation, and that this process – integrated into conservation practice – is perhaps more proportionate to buildings whose character contributes to the historic environment in a very broad way. Although this would never replace detailed recordings of highly significant buildings, it could contribute to understanding the majority of pre-1919 buildings that provided the basis for the sector's capacity requirements (NHTG 2013), while making use of craftspeople's vernacular analysis skills. Furthermore, these experiences at the Lodge show that fully value-based conservation is contingent on craftspeople interpreting and responding to sites as they work autonomously, as is further demonstrated in the builder's process for conserving the back wall upon its surprising collapse:

> *The builder showed the masonry apprentice how to pile his stones so that the ones at the bottom were near him. A much less formal way of labelling (or arranging) stones than I've seen before, but probably appropriate for the building.*
>
> (29/07/2013)

This provides an insight into something that has rarely been discussed in literature about technical, fabric-based conservation: that is, the process of conservation practice. Making skilful use of the space available, the builder showed the apprentice how to assemble the stones from the bottom of the wall near to him, so that he could rebuild it similarly without the need for recording, labelling, and importantly, lots of bodily repositioning or rummaging for stones. Although this process was less precise than methods used for conserving some stone structures, it was entirely proportionate to the significance of the Lodge. Its simplicity was additionally beneficial because it enabled the craftspeople to adapt efficiently to the unforeseen collapse of the wall without derailing the project timetable.

Thus far, my participant observations at the Stonemason's Lodge have shown how site operations corresponded to some of the issues raised in the previous two case studies, including craftspeople's professional relationships, use of paperwork and responding to unknowns. It is notable how autonomously and locally they had to work in order to progress the project, from the perspective of both site management and technical decision-making. Their dismissal of the main project paperwork

and ‘office workers’ shows that, like Topbuild’s subcontractors (Thiel 2012a), they understood this as essential to craftsmanship, but they rarely found it easy. In fact, debating, making and communicating decisions unanimously were considerable challenges on site, often the cause of conflict and a barrier to getting on happily.

5.4.1.4 Communication

The need to work dialogically and instinctively meant that the craftspeople on site at the Lodge habitually made autonomous decisions. This was evident, not just in their disregard for paperwork (as above), which was quickly scattered across the floor of the building, but also in the text of the specification. Fluid instructions in the document such as ‘replace rafters where necessary’, obligated negotiation and interpretation from the craftspeople as the project progressed and the condition and significance of features became more fully understood:

> *The [foreman] wanted to replace eight of ten spars, the ridge beam and the wall plate, but we’ve decided to retain the ridge beam, four rafters, repair one rafter and replace five.*
>
> (22/07/2013)

Two factors that came to typify the site’s culture are apparent in this excerpt, which logs the first day on site. It interchanges the word ‘rafter’, employed by the professionals, and in all written and drawn communications, for ‘spar’, which was used verbally for the same timber by the site foreman and apprentices. Semantic discord arose regularly for features of the building *([my] roofing battens are tile lathes to the lads, [my] ridge beam is a ridge board to the lads)*, and this ulterior dialect was indicative of the ease with which the apprentices communicated with other local craftspeople, as opposed to the less present professionals who somehow seemed to speak a different language. It meant that the apprentices’ instinctive deference to the foreman endured throughout the project, whose opinions, values and approaches came to dominate the site (section 5.4.2.2).

The foreman’s authority increased for manifold reasons, one of which was his recurrent presence and ability to communicate clearly; an advantage on building sites where there is a dearth of this skill (Thiel 2012a, 100). As with Tommy Young’s discipline, it was the foreman’s forthright and authoritative manner, as well as his skill and experiential knowledge of building, that earned him respect from the apprentices to the extent that they were disappointed (*miffed*) when he failed to visit the site. When confronted with the difficult task of resolving debate around the detail of conservation repairs, they often looked to the foreman for a single answer. Their frustrations at having to negotiate debate were very clear in the project evaluation forms that they completed:

I understand what conservation means and what the architect wants. But no[t] sure how far you go before you replace with new.

Too many people at some point on the same jobs so to[o] many opinions running around.

They were also evident in my fieldwork diary entries, which, in addition to emphasising the importance of making and then communicating decisions, also reflected that an individual's physical and personal presence could imbue them with a status that reinforced their authority:

There's a lot of conflict on building sites, so you have to take a decision and stick to your guns.

(31/07/2013)

The issue on site about communication is such a difficult thing to resolve. We've had a few heated debates about the wall plate because the builder said it should have been in line with the building and we've done them parallel [to each other]. At first the lads were saying that the specialist joiner wanted them to do it parallel, but actually it was the foreman.

(15/08/2013)

In this example, confusion about the alignment of the wall plate had been attributed to the specialist joiner, who had by this point left the site. It illustrates how important physical presence was to maintaining on-site authority, and shows that, as well as being an occasional preference, the craftspeople's autonomous working was also a response to the transience of some stakeholders, in this case the specialist joiner, but often the professionals whose conceptual realm often equated to absence.

The 'heated' debate about the wall plate was not unique, and such disagreements frustrated the apprentices, whose search for right and wrong techniques was similar to the attitudes of the Fountains stonemasons, some interviewees and the NHTG. However, their way of resolving dispute was very different: without a fully developed heritage value code underpinning the on-site hierarchy, they found it difficult to make decisions based on significance, and instead referred to the two most physically present and therefore dominant people on site: the foreman and the builder. This was despite the fact that these individuals based their localised decisions on different values (section 5.4.2.1 below), as became increasingly clear throughout the project. The confusion and annoyance that this caused to the apprentices was clear, and lay behind their blaming the specialist joiner for the parallel wall plates. Furthermore, disagreements between the foreman, builder and any other stakeholder in the project hindered their ability to get on efficiently, which seemed to be of great importance to them as motivated and aspirational craftspeople, as well as on a practical level.

5.4.2 On-site priorities

5.4.2.1 Traditional heritage values

Perhaps in proportion to the lesser significance of the building, few stakeholders came to site with a preconceived or consistent approach to its conservation. This was beneficial because it provided the opportunity for considerable debate among those present on site, as demonstrated by the instances involving the wall plate and expanding foam. Most discussion was provoked in finalising the details of the building, as in the following examples from throughout the project's duration:

> *They were [ ] disheartened because one apprentice just cannot be happy with a roof with curves in, even though it's because we've saved the ridge. Neither I nor the other apprentices could persuade him that it was OK. I've asked a [specialist] joiner to come and help us with this, but he is not coming until next week because the programme has changed so much already. I called the foreman at the end of the day to ask him to wait to do the other roof slope until the joiner arrives, because I think that's the only way to reassure the apprentices that curves are OK in conservation. The foreman didn't get it either. He's all 'why are we conserving timbers, when they're rubbish?' It would be better to put a new roof on'. I know that the timbers aren't that special, but the point is that the lads learn to conserve, not to rebuild.*
>
> 24/07/2013

> *The specialist joiner took one look at the roof and agreed that the ridge board was OK, saying that it could be propped, if need be, at a later date. He took a look at one of the apprentice's half-lap repair to a roof spar, and explained two things. The first was that the joint length should have been calculated according to the 'rule of two thirds', which means that the length of the joint should have been three times that of the depth of the timber. The second was that it should have been a scarf joint rather than a half lap, as the half lap will have a built-in weakness. For the west roof slope, we decided to repair 2 rafters, repair 4 and replace 4.*
>
> 29/07/2013

The debate over whether the ridge board should be replaced or retained persisted for nearly a week, as exemplified in the quotes above. As a discussion framed by considerations about heritage significance – conserve the distinct curvature of the roof by retaining an old beam or replace with a new timber to achieve modern standards – this discussion seemed to lie at the heart of practising conservation in the detail. Ultimately, however, the prevailing option was not chosen for any argument based on international or national conservation principles but because of the overriding on-site presence of that opinion, through the specialist joiner and myself. Interestingly, this was one of the only occasions where there was disagreement between the two most confident apprentices.

Resolving the physical details of the building generated discussion and difference of opinion throughout the project, particularly around the roof and rainwater goods. Two building conservators who specialised in using lime were brought in to advise on the reinstatement of the lathe and lime roof, but this proved problematic when they struggled to set out the roof properly without specialist roofing expertise:

> *Two building conservators came today to help us with the reroofing (sheet, lime and lathe). The roofer that they work with was unable to come on the revised dates, since the programme changed. This meant that they had to fudge it a bit and we ended up setting the tiles out wrong (from bottom to top, rather than top to bottom). This meant that the lads were shouldering (shaping) each tile with a hacksaw as it went on. Not good practice according to the builder, who says that you should prep everything on the ground when working on a roof.*
>
> (31/07/2013)

Although the people on site were satisfied with the incorrectly set out roof, the foreman's visit one week later changed that:

> *I visited the lads today at the Stonemason's Lodge and to say they were pissed off is an understatement. The building conservators hadn't set the roof out properly, so they were left with a weird gap at the end which would fit a full tile in. The foreman isn't happy with it, so it has to be taken down and redone.*
>
> (05/08/2013)

Eventually, the incorrect setting out led to one of the slopes being reroofed three times because the battens also needed laying again. By this point, the programme was so far behind schedule that there was not sufficient time to reinstate the sheet lime roof, and the foreman, builder and apprentices instead opted for the modern equivalent of roofing felt.

The particular case of the Lodge's roof highlighted the ease with which craftsmanship can be superseded by a preoccupation with materials (Pye 2015). At the very beginning, the use of lime mortar to fix the tiles to the roof was the priority, and so the craft skill of setting out the roof was overlooked to the same extent that the 'not high class' joinery of a roof was reinstated by Firm03SM in Chapter Four. Our roof failed because of the way it looked in the foreman's eyes, even though the builder approved it as a functioning weatherproof shell. The builder's prioritisation of function was repeatedly at odds with the foreman's preference for appearance:

> *They were pissed off because [the foreman] had been past and said that the guttering [that they had erected under the tutorage of the builder] looked stupid and had to be altered. There is some truth in this – because the eaves isn't straight, the guttering looked really far away from the eaves at one end, but it worked, which is the most important thing, surely!*
>
> (28/08/2013)

Along with the relaid roof tiles, this was one of the few instances where the fortuitous heritage character of the building formed the basis for the final decision, which was to alter the detail of the guttering so that it was closer to the roof line. Both examples emphasise the importance of the foreman's presence, but the infrequency with which it occurred also highlighted the comparative regularity with which decisions were based on another important on-site consideration that is not accounted for in the value-based assessment of heritage significance, and that is getting on efficiently.

Apart from the guttering, the other two disputes discussed in this section – the roof structure and its covering – were both in part resolved by the imperative to progress the project. Negotiations over retaining rafters were also shaped by the time-consuming complexities of physically keeping them:

> *We removed the east wall plate by using a reciprocal saw to cut away the nailed in ends of rafters that we want to keep. Any other method would have destroyed the rafter ends. Really, it would be a lot quicker to just replace the lot – all the lathes are nailed to the rafters with hundreds of handmade nails, and if we're retaining the rafters then these have to be pulled out one by one so that new can go in. We also have to treat any retained timbers in situ.*
>
> (23/07/2013)

Therefore, the on-site decision to retain fewer rafters than specified was likely influenced by the need to move the project forward efficiently. This was certainly the basis for re-covering the roof with felt, even though the use of lime sheeting had not been the cause of the failure. Its importance was evident in Chapters Three and Chapter Four, particularly in the interview transcripts that referred to coordinating sites and people effectively. Its prominence in this non-commercial estate maintenance team context, together with the apprentices' characterisation of office workers as different because *'they don't know how to get on',* suggests that their desire to do this transcended values associated more traditionally with heritage conservation.

5.4.2.2 The discipline of 'getting on'

Above any commercial imperative that might influence craftspeople's desire to work efficiently, it would be reasonable to assume that this derived from a response to the 'monotonous time-dragging'

work (Thiel 2012a, 75), which many of the tasks on the Lodge undoubtedly were. Conversely, however, getting on never eclipsed the apprentices' primary aspiration of doing good work, and indeed seemed beset by this. The experience of re-laying the roof tiles demonstrated that getting on and creating good work were entwined in conservation craftsmanship: without performing the appropriate setting out stage, the process had failed and so the final roof was neither efficiently made nor conserved the original sheet lime construction. Had they set out the battens and tiles initially, they would have had time to conserve the lime sheeting effectively because they were working efficiently. As a carefully considered process that allowed heritage to be conserved in a manner proportionate to its significance, the same applied to the way in which the builder showed the apprentice how to pile and arrange the stones. When scrutinised, therefore, these examples show that getting on was not in itself a priority for the apprentices but that the processes that enabled it were a crucial aspect of the 'performative' discipline of being a craftsperson (Marchand 2003).

Marchand's (2012, 118) description of apprentices 'finding one's role within the mechanics of the system and accomplishing tasks was learned by monitoring one's colleagues and mimicking their performance' explains why getting on was so important at the Lodge. Still without a well-defined 'role' within the process, the apprentices were motivated to understand the full 'mechanics of the system' so that they could place themselves within it. Activities that omitted or even disregarded essential stages not only impeded the project's progress but also revoked a valuable opportunity for the apprentices to observe, mimic and learn from colleagues. Their trainee position perhaps explains why getting on was more important to them than to the Fountains Abbey stonemasons or the interviewees, because without it they would learn ineffective processes that did not enable them to craft efficiently. And, while some of the effects of this priority (such as expecting punctuality) reflected traces of the military, masculine and corporeal cultures of building sites in general (Lyon 2013, 31; Thiel 2007; 2012a), overall, they were driven by the fundamental desire to learn craftsmanship as a discipline rather than a 'means to an end' in making a product.

The apprentices' approach to getting on can therefore be critiqued as a reflection of their career and vocational aspirations, which were also evident throughout the project, including at the outset when one 'wanted to work with oak'. Instinctively, they seemed most candid about the future when they were most content in their work on site, which always related directly to their getting on:

> *The lads were in much better spirits today, after Thursday and Friday working alone, and then the weekend. They really got on with things – the top 3 courses of stone on the west elevation have been rebuilt and the west roof has been stripped.*

(29/07/2013)

And then later that day they discussed working on more projects like the Lodge:

> *But I know they're enjoying this project – they've already asked when they can do more.*
>
> (29/07/2013)

In another example:

> *Arrived on site today after a whole week away. Two of the apprentices were in an exceptionally good mood, having done nearly all the pointing.*
>
> (22/08/2013)

Followed by:

> *After they'd done the ridge they came down to point where I was working and we had a long chat about college. They've been very reflective this week. The apprentice enrolled on a site joinery course is thinking bench joinery might be better. He's desperate to learn to make sash windows, and he's worried that he won't get to either on his estate or in college if he does site [joinery].*
> *[ ]*
> *The stonemasonry apprentice is one of the best at banker masonry in his year. I met another student recently who'd said that, and I was surprised because (as a fixer mason) he doesn't do it every day [ ]. The apprentice wouldn't be able to complete his NVQ if he was following the banker route, so he wants to stay on fixing. But he would like to do a short period at the Minster, if possible.*
>
> *I'm really impressed by both of them, and proud to have helped them. The joiner is one of the best in his year too – he won a chamfering competition in college, and got the best mark in his year for a door.*
>
> (22/08/2013)

Contrary to this, being delayed on site or having to redo work made them feel very negative. The most pertinent instance was having to re-lay the roof tiles a third time, which, while frustrating and tiring for everyone on site, was felt most acutely by the apprentices, who were embarrassed by being seen to have failed. Unlike their general attitude to getting on, the salience of this reaction emanated directly from the masculine culture of builders and building, and this made for a very clear tension. When subservient, the masculine culture could assimilate to and even enhance the apprentices' ability to learn craft as a discipline, but when dominant it created an environment of intolerance towards mistakes and failure, which impaired their ability to learn.

5.4.2.3 Space to learn

This chapter has so far discussed the apprentices' attitudes and responses to some of the challenges faced by the other participants discussed in this thesis. Their actions and experiences replicated many of the views found in Chapters Three and Four, and also in research among builders in London (Thiel 2012a), and it is therefore concerning that this culture was not always conducive to establishing an environment of learning. Indeed, the apprentices displayed diligence and enthusiasm, achieved well in college and thought carefully about how they would learn to perform specific tasks. However, when on site, their aspiration to learn could be displaced by the 'bellicose' (Thiel 2012b) culture of banter and getting on, when in reality 'much of the learning process involves little or no verbal communication [because] the apprentice must rely on his/her eyes, ears and sense of touch to incorporate their master's skill' (Marchand 2012, 138). All of Marchand's studies (2010) have shown that developing 'motor-based understanding' takes time, and requires repeated 'physical immersion' in an activity to accomplish it, and my experience at the Lodge prompts questions about whether the dominant building site culture provides space to do so. This is especially relevant now that private companies such as those studied by Thiel dominate the conservation landscape, since directly funded works teams like Fountains were closed.

The Lodge was perhaps unusual as a training project because of the absence of a master-mentor continually on site. Although this was a deliberate choice because it meant that several craft specialists could train the apprentices in different skills, it may have diluted some of the intricate and elusive lessons for learning craft as a discipline. Apprentice mentoring was undertaken by some of the firms interviewed for Chapter Four, and at Fountains where Dave Sweeney worked with apprentices throughout the winter. Like the Lodge, the workshop at Fountains provided a 'social space' (Sennett 2008, 145) for the apprentices to repeat tasks and processes, and the stability of that location also imbued them with a sense of pride in the place that was difficult to dismiss. The apprentices displayed signs of such pride in the six short weeks at the Lodge, referring to it as 'our building' from the pre-site meeting onwards, and one even uploaded it to Facebook as the 'wallpaper' to their profile page. This sense of pride signified the first of the three tripartite package of motivations (Figure 4e), the privilege of working on a particular site, but at the Lodge there was also satisfaction in the fact that they had been selected and trusted to work independently.

Trust and pride have already surfaced as important in facilitating the practice of conservation crafts (Chapters Three and Four), but this was the first time in this case study that pride in gaining trust surfaced so explicitly. Privilege, pride and benchmarks that signify the confidence of a master-mentor were more apparent in the vernacular systems of training found in Yemen and Mali (Marchand 2009; 2012). Pride in gaining trust was also apparent in the longstanding relationships

between Chapter Four's interviewees and client intermediaries because it enabled them to take decisions and work autonomously. It is possible therefore, that the standardised systems of apprenticeship training in England, where further education colleges and tutors act as the stable figurehead of learning, have displaced the critical process of developing on-site relationships based on trust, which is key to performing craft and passing it on. Indeed, the emphasis on proving competence through paper-based evidence was very much at the forefront of the only meeting at the Lodge between a further education tutor and an apprentice:

> *One of the apprentice's tutors turned up to talk through his portfolio, and I sat with them. The work they have to do is quite challenging for someone that finds writing or maths difficult. There's lots of picture-based evidence, and writing to support the 'matrix' of criteria. I think presenting it is a challenge in itself! Anyway, the tutor had brought some text of his own for the apprentice to copy as his evidence.*
>
> (24/07/2013)

Here, the apprentice not only had to present his dialogic work in a very linear way but also the method for resolving this (showing him exactly what to write) undermined trust as a function of on-site decision-making and getting on. Furthermore, when discussing on-site communication, the tutor and myself immediately suggested technical drawings, although Chapter Four showed these being used mainly by the most experienced craftspeople, and data from them disseminated in more accessible ways such as Firm07GB's lime recipe. We were both exposing our own tendency towards imposing processes of the office on to on-site working practices, and in doing so overlooked the critical role of building's 'bodily' culture (Thiel 2012b), highlighting again the gulf between the two groups.

Although the apprentice at this meeting struggled to engage with the standardised form of assessment, the others viewed college generally as a component of their training that may or may not be useful in future (section 5.4.2.3). After the programme ended, both of these apprentices chose career paths that to some extent illuminated where the training had been beneficial to their career development: rather than being based on attainment in college, their new appointments linked to relationships they had developed on site and personally, which shows how deep-seated and all-pervading the construction sector culture of recruiting exclusively via networks is. It also means that, where there is discontinuity within those groups and networks, like the estates' ageing workforce and the privatisation of the Fountains stonemasons, the challenge of sustaining or resurrecting them is substantial because people can move within the network to find challenges and opportunities. The emphasis within the current system on college and assessment as the unwavering centres of craft

education facilitates this ease of movement because there is less opportunity for apprentices to develop strong bonds with master-mentors and place.

5.5 The outcome for the apprentices

With sustainability of the discipline in mind, it is valuable to reflect on the trajectories of the three apprentices through the two-year period of training. The apprentice recruited on merit alone completed the two-year period with the estate and college-based diploma, achieving a full apprenticeship in their craft. Furthermore, their skill was such that they were able to complete a Level Three qualification while at college, where they were also recognised with an award for excellent work. Despite being offered employment on an estate at the end of the apprenticeship programme, this individual chose instead to move to a private firm through a contact made during the apprenticeship, which enabled him to work on a wider range of sites. The apprentice with personal connections to their employing estate also completed their qualification and apprenticeship but left their employment about three months before the end of their full two-year term for a position on a larger estate. The local network that had been important in their original recruitment played a role again because this position was found through a personal contact. Both of these apprentices moved to excellent, stable positions within their craft, and their apprenticeships can largely be considered a success for them personally. It is unfortunate that the apprentice who joined later could not engage fully with the programme and did not develop a career in conservation craftsmanship.

As stated above, the project can be considered a success for two of the apprentices on a personal level, and it can be argued that their careers contribute to addressing the shortage of skilled conservation craftsmanship nationally. However, the key challenge of an ageing maintenance workforce on the estates was not addressed because none of the apprentices remained in their estate's employment. During our time at the Stonemason's Lodge, the apprentices talked about working on the estates, expressing frustration that mostly related to the limited scope of work or their ageing mentors; dissatisfactions that had been evident at Fountains and also surfaced on the Lodge project itself. However, their anecdotes showed how challenging it was for them as young people to assimilate into a staid and ageing workplace culture, which reflects Firm15SM's desire to more regularly revitalise the workforce with 'young blood'. Continuity is therefore an ever-present issue for conservation craftsmanship: at Fountains, continuity of place contributed to Robertson's superior understanding of the condition of the monument; among the firms, continuity of craft skill itself was a key aspect of the tripartite package of motivations; and the discontinuity of recruitment at the estates prevented the apprentices from conforming to the workplace culture.

5.6 Conclusion

5.6.1 The site's culture

This case study has shown that even small and atypical building sites like the Lodge sometimes operate as 'masculine' and 'corporeal' places, and so through triangulation I can deduce that this culture contextualised the work of the interviewees in Chapter Four. Workplace culture was never mentioned explicitly as affecting conservation crafts, but other pursuits that characterised the London builders, such as the management of local processes and unforeseen on-site findings, clearly did. The gulf between office-based conceptual professionals and on-site material craftspeople, which was evident in Chapters Three and Four, was also apparent at the Lodge where overly detailed drawings and specifications were quickly discarded. Much of this related to the importance of being physically present on site, but there was also an indication that these technical instructions did not account for the means with which features should be conserved, whether a scarf joint to the spar or in the rebuilding of the inside wall. This was important to the craftspeople whose bodies were physically engaged in the hard and tiring work, but also because the prevailing culture inspired them to get on and work efficiently.

Although the cultural emphasis on getting on occasionally overshadowed the desire to learn a task, more often than not the two motivations complemented each other. Getting on efficiently was an integral part of being a craftsperson, so much so that it distinguished them from 'office workers' and, when realised properly, through specific tasks, such as placing stones deliberately or setting out the roof tiles, could improve their conservation craft ability. These were the sorts of tasks that the apprentices were keen to learn on site because it helped them perform the discipline of crafting in practice, which complemented their education in college. Because of this, the firms interviewed in Chapter Four would make ideal places to learn a craft, so it is unfortunate that, for many, external factors had prevented them from training apprentices in recent years. If some of the structural issues could be resolved, supplementing the transience of the private firms' contracting work by appointing a mentor for each apprentice may be able to provide stability through the workplace rather than a further education college.

As apprentices, the three trainees who worked on the Lodge attended college fairly irregularly (on average one day a week during term time). From my limited interaction with the college, the emphasis was on demonstrating proficiency through paper-based evidence such as the interview tests and the written statements about communicating on building sites. Not only did these individualised and linear methods of assessment overlook important on-site relationships but also the opportunity to develop skill through co-practising craft with colleagues, a 'micro-practice' of 'shared utterances and performance' that is at the heart of learning to craft (Marchand 2010, 117).

As such, the design of the construction qualifications themselves revealed a presumption towards the mind-body dichotomy in both content, where they distinguish between theory and practice (Marchand 2007), and in a delivery model that is based on linear assessment methods that fail to recognise that dialogic practice develops embodied congnition. Although this was a result of the 19th-century standardisation of vocational qualifications, it had become more influential in conservation practice since competitive private firms had emerged in place of more stable sites like Fountains, and further education colleges had become the symbolic and consistent centre of an apprentice's learning.

5.6.2 Vocational training for the conservation crafts

The aim of this case study was never to explore conservation craft education as a micro-practice that has been neglected by social and cultural change but to test the framework of construction apprenticeships for conservation. As such, the entire apprenticeship programme – from its employer-led purpose, through recruitment, to working at the Lodge and the apprentices' eventual outcome – proved to be of interest. The findings' resonance with those from both the previous case studies and the more mainstream construction sector could be anticipated, such as the approach to recruitment, the importance of trust and autonomous working, but others were more surprising. This was particularly the case for the longstanding creep of the mind-body dichotomy into the standardised design of vocational qualifications (Marchand 2010), which had displaced a focus on master-mentors in a way unsuited to learning craft. A renewed emphasis on this relationship in the workplace might address this, and in addition there were other perhaps less transformative findings that could improve vocational routes in conservation craft.

Discussions with the college in 2011/12 clearly showed that the mandatory units of construction apprenticeships focused almost entirely on the processes of new building and therefore did not recognise the conservation and maintenance work in which the apprentices were involved. However, this was symptomatic of a systemic issue in vocational training, which made Sector Skills Councils such as the CITB and further education colleges responsible for the content of qualification (Wolf 2011). Measures have been taken to address this, and new construction qualifications composed by an employer-led and government-backed Trailblazer group include conservation techniques within the standard. Greater numbers of construction craftspeople should therefore be exposed to repair and conservation knowingly, which could enable the network of skilled people that Chapters Three and Four showed enhanced the sector's resilience by being able to respond to demand. The incompatibility of standardisation itself will not be addressed because 'theory' and 'practice' will be considered separately, but employers' new roles could re-emphasise the workplace as a symbolic setting and focus for learning. On the other hand, the same emphasis could risk the future of skills by

reinforcing qualifications that 'cater for employees' specific and often temporary needs' (Clarke 1999, cited in Marchand 2010, 259). Hartley's (forthcoming) thesis will make an important contribution to this debate.

One criticism of employer-led standards for vocational qualifications is their division of craft disciplines into 'job roles' because this effectively streamlines training (Lynch 2013; Marchand 2010, 260) in a way that is unsuited to the non-standard nature of heritage. Firm03SM identified this as 'maybe I'm just old fashioned, but if you're a mason, you can't call yourself a mason unless you can actually pick up a mallet and chisel and make it', as did the apprentices who wanted to learn techniques beyond their roles in the maintenance teams. It was also recognised at Fountains, where the apprentices were taught banker masonry to make their skills more transferable and relevant to other employers. Current plans for the Trailblazer apprenticeships are positive in that broad entry-level positions leading to higher, more specialised, areas are proposed, and this could highlight the career pathways absent at the Lodge. However, these case studies serve to illustrate the risks of employer-led qualifications that become overly focused on a particular job role.

The other main risk to a functioning network of conservation craft skill (as discussed in section 5.6.4.2) was the exclusive approach to recruitment found latterly at Fountains, among the private firms and in the apprenticeship programme. Some amendments to the system of apprenticeships would counter this, particularly the removal of training fees for any person no matter their age, and this could go some way towards alleviating perceived cultural and class-based barriers into construction. That said, the cultural challenges seemed less prevalent among the aspirational interviewees in Chapter Four who had often entered the discipline through means other than apprenticeship. The potential for more inclusive recruitment could therefore open up craft opportunities to vocational migrants that might sustain the craft through growing businesses and, crucially, networking with others. It is in helping to develop that cross-craft network that specialist training projects like the Lodge can contribute: by providing time and space for trainees and apprentices to make thoughtful on-site decisions in settings that overcome the dichotomy of thought-based and motor-based tasks, as well as any divisions between crafts themselves. Here, trainees could learn to manage their own work locally, through practising, repeating and performing craft technique.

5.6.2.1 'Live-site' conservation training

Initially established as a short-term focus for conservation craft skills training that would stress the distinctiveness and expedience of heritage conservation through maintenance and repair, the Lodge project became much more than that. For its duration it became a hub of training activity, which

stirred a place-based pride in the apprentices that related to the first of the tripartite package of motivations from Chapter Four (Figure 4e), although, at the Lodge, it was not connected to the significance of the building but to the apprentices' ownership of its conservation. The challenge itself illustrated a level of trust in them from the steering group and their employers, which boosted their confidence and inspired them to learn more by getting on. As such, they were keen to learn not just the techniques of craft but also the practice of being on site, coordinating people and tasks locally, which made the stonemasons and interviewees self-sufficient. Working alongside craftspeople and other disciplines further allowed them to learn about different crafts in building, and with that more about their coordination and the building's construction. Networking outside their normal workplace and college was also valuable, and provided one apprentice with the means to employment after the two years of training ended. So, while special projects such as the Lodge enhanced their apprenticeship experiences with an immersive on-site educational experience that distilled the holistic nature of buildings and the heritage sector, the debate embraced in that learning experience was often the cause of great frustration. This was particularly interesting because it often related to the perceived significance of the building or one of its features (Norton 2017).

5.6.3 Heritage values and conservation craftsmanship

The Stonemason's Lodge was chosen for characteristics that were deemed appropriate for a training project. It was traditionally constructed, albeit with limited evidential value, in a neglected condition without being dangerous and, with limited options for reuse, was unlikely to be conserved by any other means. However, when on site, the lack of evidential value led to increased debate around expending extra time and effort on certain features rather than getting on. This is because the craftspeople and apprentices on site already had experientially-based preconceived ideas about significance. While the building's aesthetic contribution to the conservation area could be referred to when its appearance risked being altered, through replacing features such as the ridge board, the retention of unseen, poor-quality and commonplace features was more difficult to justify. Although the apprentices acknowledged that they were learning about some techniques for the first time, such as splice repairing the spars, they had practised many of the other tasks previously, which meant that they sometimes found the Lodge's conservation confusing and undemanding of their craft skills. The limited presence of professionals served to reinforce the view of the Lodge as less significant and weakened its position in the hierarchy.

As well as finding it difficult to engage in the distinct positions of each debate, the apprentices found the dialectic mode of that debate challenging. Like the apprenticeship standards, it required them to separate the principles of conservation from their craft discipline, when in fact the two things were interconnected. Setting out the roof and carefully piling the stones for rebuilding were examples of

methodical craft technique enhancing conservation practice in proportion to the significance of the building. Furthermore, not only would both processes have conserved the building's significance but also their autonomous use was of value to both the craftspeople and apprentices because it was this that enabled their getting on efficiently through the discipline of their craft. However, an apprentice could only develop this level of largely non-verbal, performative and practical autonomy through the 'observation, practise and reproduction of [craft] skills' (Marchand 2003, 32). Projects like the Lodge, which made space available on site for the acquisition of this type of knowledge, could contribute positively to the experience of building craft training in England.

The Lodge project would have been of greater value to the apprentices' acquisition of craft skill if it had involved more complex craft processes such as the replacement of structural or decorative elements in either stone or wood. This would have clarified the relevance of the training project as a pathway to conserving the famous, rare and high-quality buildings, which, as aspirational craftspeople, they perceived as significant and wanted to work on in order to contribute to the tradition of craft. Furthermore, because this type of work is less in demand than the maintenance work at the Lodge, it would have provided a rare opportunity to observe, learn about and reproduce these tasks and objects. The infrequency with which such opportunities present not only validates the need for a network of skilled people but also explains the outcry around the nylon replacements at Kew (Morrison 2017). Creating work like this holds a heritage value to the community of craft practitioners because the craft skill it requires enables the creation of knowledge and its transmission to a new generation of craftspeople, in a cyclical pattern than should not be discontinued. However, the performative, personal and sometimes intangible nature of that knowledge made it difficult to express linguistically and therefore protect.

Even in the inclusive landscape of today's heritage and conservation there is little in English legislation to protect intangible heritage such as craft skills (section 2.3.1). *Conservation Principles* (EH 2008, 31) sets out a procedure for understanding communal values in order to protect the 'places that figure in [a community's] collective experience', but the focus on the singular place is restrictive. It would encompass Fountains Abbey as a place of significance to the stonemasons, but not necessarily the collective value of multiple features across several sites. This is especially so because the value itself is unknown until a craftsperson member of that community begins working there, discovers through performance, and then only in practice learns about and from it. It is therefore a community's response to evidential value, but, as embodied cognition, it is difficult to analyse, share and ultimately make a case for in the dialectic world of conservation.

Through bringing together many of the strands of this thesis, the case study of the Lodge training project has shown that the fabric of historic buildings holds an archaeological interest to the community of craft practice. Although it is difficult to articulate, it relates to the way in which craft is performed 'bodily', transmitted from master to apprentice, and practised creatively, feelingly and as a discipline. The framework for conserving such interest in England is incomplete because of a continuing bias towards thought-based rather than motor-based knowledge, but the clear benefits that such experiential craft knowledge brought to the heritage of the Lodge provide hope. The success or failure of conserving certain features relied on the proportionate use of craft technique, and this intersection of the dialogic craft practice to conserve heritage as a cultural construct demonstrates the symbiotic relationship of the two. This can be articulated to make a case for greater freedom within conservation craft training through special projects such as the Lodge, which provide flexibility for craftspeople to learn through doing, and engender the creative and autonomous practice of the past and present. Independence from the control of standardised qualifications and remote project programming is of primary importance for even a short period because, ultimately, it is not possible to fully explain what the craftsperson knows or seeks to learn. Conservation practice should instead 'engage with how the knowledge is constituted' in order to make time and space for it to be continually reconstituted (Marchand 2003, 44).

5.6.4 Reflection on the methodology

As stated at the beginning of this chapter, the Lodge case study has made a major contribution to both the methodology and the thesis findings. It has provided a rare and valuable insight into craft as a process of conservation, which has previously been overlooked. Compared with the findings from Fountains (where detailed written instructions were absent until the 1980s) and the accounts of craft firms, which were sceptical about the utility of detailed specifications over large sites, the three case studies make a key suggestion. The process of crafting buildings as a physical and corporeal pursuit, which has been overlooked by researchers (Thiel 2012a), is neither understood nor accounted for by the conservation discipline. This has much bearing: the key method of communicating with conservation craftspeople through drawings and specifications is of questionable worth because they are too cumbersome to be used on a building site. Pacey's (2007, 167) suggestion that working drawings had 'real practical value' from the Elizabethan period did not hold true today. Under pressure in challenging on-site conditions, building craftspeople found using paper-based materials finicky and impractical; working drawings were not working for them.

There is an explanation for the lack of awareness of this fact within the conservation sector. Even if working drawings were functional in communicating conservation instruction to craftspeople, it would be a largely contrary exercise. Many craftspeople were experts in their field and were entitled – on

the basis of interwoven tangible and intangible values they attached to place – to contribute to decisions about conservation. That this was wanting was due to the conservation management planning process' unintentional synchronisation with the mind-body dichotomy present in the commercial construction sector (Figure 5h). The expectation on craftspeople to provide labour devoid of expertise was having a particularly damaging effect because the cost of their work was being compared to non-experts. This iniquitous competition was squeezing the largely private firms so much that they were no longer able to appoint apprentices or provide space for any on-the-job training.

The need for time, freedom and a 'social space' for trainees to observe, mimic, learn and improve was a key finding to arise from this chapter. The apprentices were enthusiastic to learn, get on and earn the trust of other stakeholders in the project, particularly more experienced craftspeople. However, there were several barriers preventing their full engagement in learning conservation craft. Firstly, the very masculine culture of the building site was biased against failure of any sort, which was highlighted by their embarrassment over the roof tiles. This dominant culture obstructed their learning through practice because it gave prominence to the most present people on site, to whom the apprentices looked for guidance. A comparative absence of conservation professionals validated their actions and gave the team autonomy to formulate insular and personal approaches to conservation based on their own expert view of craft, but ignoring the value-based framework that now exists. It illustrates the chasm that has been left by the loss of the Ministry of Public Buildings and Works' [MPBW) precious hierarchy.

5.6.4.1 The deference effect

When I reflect on my field notes, I realise the palpability of the missing hierarchy at the Lodge. The notes show that I was eager to step into the void, and guide the apprentices on appropriate forms of conservation for detail. I think it was this – my acting as a conservation professional – rather than being the only female on site, that distorted the site's dynamics and undermined this as a truly ethnographic case study. Most of my decisions as conservation professional were directed by wanting the apprentices to learn repair technique, but that is irrelevant, because, as a true ethnographer, I would have been able to stand back and observe the apprentices' navigation of the project without interaction. For, if Emerick (2014, 220) is correct that 'establishing the cultural significance of a place is about drawing out meaning rather than dictating it', the heritage sector has to make way for historic buildings to be opened up, dismantled and repaired according to craft tradition and in a way that employs craftspeople's embodied cognition in creative problem-solving. This thesis has consistently shown that, with the exception of a few studies (e.g. Yarrow 2017), very

little is known about this nexus of on-site decision-making in conservation, and so truly ethnographic studies in this area would be of great – and possibly revelatory – value.

Although my actions are perhaps an indication of distance from fully drawing out the meaning of conservation as it is practised, my participant observational study has illuminated much that should be of interest to conservation studies. Not least is the crafts' 'inalienable relationship' with historic buildings, which is fragile and endangered from the changing social structures that contextualise it. Conservation's current aggrandisement of tangible heritage means its influence can be seen as an additional risk factor. I therefore end this thesis by making the case for the centrality of craft values within contemporary conservation.

• Chapter Six •

• Discussion and Conclusion: towards a future for craftsmanship in conservation •

'When I ask why I find the answer in the system, the method rather than the man' (Ashbee 1914)

6.1 Introduction

Prompted by the known capacity issues that have dogged heritage conservation since the 1970s (Council of Europe [CofE] 1975; International Council on Monuments and Sites [ICOMOS] 1993; 2013; National Heritage Training Group [NHTG] 2013), this thesis began as an explorative review of craftspeople that identify with the sector. It established the overarching aim of using qualitative methodologies to study craftspeople as a community with its own set of values that have been hitherto neglected by critical approaches to heritage conservation. The centrality of this methodological ambition means that its effective realisation relied upon the rigour, depth and capacity of the other findings to transform and enhance prevailing views of conservation. I thus begin this conclusion (section 6.2) by discussing how far four of the research questions established in section 1.2.1 have been met, before evaluating the outcome of the qualitative research design and considering how such methods might help sustain crafts in future (RQ5) (section 6.3).

Rather than respond to each research question in isolation, I prefer to emphasise their interconnectedness and discuss them thematically in a way that accords with my inductive methodology. Indeed, my study has evolved as grounded theory in that each case study has highlighted distinctive areas of interest that tie together the chapters in a cohesive response to the original research questions. Chapter Four's interviewees gave an overview of contemporary conservation as part of a social and organisational structure that had to be carefully navigated, which early on in the research began to address RQ3 (structure), and this was then enriched by Chapter Two's historiography and the contextual descriptions provided in Chapters Three and Five. As such, these are brought together in the first part of my conclusion (section 6.2.1) in a discussion that highlights the reliance of craftspeople's social realities (RQ2) on environmental factors that include conservation's historical developments (RQ1) and the construction sector they function within (RQ3).

Section 6.2.2 considers the interplay of critical heritage studies approaches to conservation (RQ1 and RQ4) and its social structure (RQ2 and RQ3). It draws on the diverse experiences portrayed in Chapters Three and Four to show that a misunderstanding of craft is promulgated by the omission of craftspeople's values from value-based conservation, from which are unthinkingly sidelined by the casting of heritage as a social construct that determines conservation solutions. Understanding and extracting meaning from the conservation process itself was left to individuals in Chapters Four and

Five, whose strong relationships created the conditions in which craftspeople could learn, practice and transmit their motor-based expertise (RQ2), as section 6.2.3 shows. The final part of section 6.2 (6.2.4) focuses on the theoretical context for the findings (RQ4) and identifies elements of practice, particularly 'getting on' discussed in Chapter Five, that can be articulated within value-based interpretations of heritage.

The final section of the thesis (section 6.3) considers the Chapters Two to Five in relation to the sustainability of conservation crafts (RQ5), which are currently poorly understood by both critical heritage and conservation studies. The triangulation of methodologies used here has helped reveal craftsmanship as living heritage that bridges tangible and intangible, but this could be further explored though more innovative approaches that combined ethnography and archaeology. Underlying the recommendations, there is an appeal for cooperation among the people who practise heritage conservation conceptually and materially, so that the constructive mutuality of Fountains Abbey, which led to transferability between craftspeople and professionals, might flourish in future.

6.2 Response to the research questions: conservation craft and heritage at risk

6.2.1 Defining the conservation crafts

Very early on this study identified the complexities of trying to define craft skills in conservation. Most attempts (Bilbrough and Moir 2004; NHTG 2013) resorted to an inventory of occupations that only shared one thing: their function as a means to an end in conservation. Inspired by other craft researchers, I adopted the comparatively holistic and active term 'conservation crafts' in the hope that this would provide a more inclusive position from which to explore them inductively. The approach has proven advantageous because it has shown that, above all, craft is defined by *how* it is practised rather than what is practised, *how* it feels to craft rather than the object at hand, and *how* the context for practice is navigated instinctively rather than planned. Because conservation is a field concerned historically with the objects of material culture, incorporating this unspoken, intangible and invisible form of knowledge and expertise has proven difficult, even as the discipline moves towards a more inclusive form of practice.

Ethnographical work that presents craft practice as a dialogic and performative form of heritage exists (Yarrow and Jones 2014). Similar interpretations can be found in vernacular building studies, which is consistent with the definition of crafts as dynamic, creative and – from the outside – mysterious. In the modern period, freedom to work like this restricted and bureaucratised through regulation and the organisation of labour. It is interesting then that builders still operate in a largely autonomous way, circumventing the accepted authority of construction sector professionals driven by a conceptual and objectified idea of completed buildings, timescales and cost. When on site,

craftspeople were absorbed in the logistical, often corporeal, challenges of how to complete a task through enacting their craft discipline or (for the most experienced craftspeople) coordinating the actions of others.

The unsuitability of the dichotomatic division of labour – one conceiving a design and focused on outcome; the other interested in detail and process – had resulted in craftspeople's work being either hidden from or unrecognised by professionals in a dualistic 'moral economy' of give and take. Partly in response to a flawed system that did not acknowledge the value of their work, Topbuild's' builders exploited their enigmatic status for personal gain through 'indulged time-banditry' (Thiel 2012, 43). Conversely, the unique recent history of the heritage conservation sector coupled with the aspirations of conservation craftspeople made them more likely to compensate for the system's failures by undertaking informal educational 'journeys' and providing their knowledge and skills without remuneration. The next section contends that this historical context is entirely relevant to the craftspeople's distinct use of a counter-economy because it was necessitated by the gradual reorganisation of conservation from a directly funded pursuit steered by heritage and its policymakers to a construction sector business model of competition and commerciality.

6.2.1.1 Reversing an ongoing trajectory of decline

The origins of the discipline of heritage conservation as a response to an unprecedented and industrial pace of change within the building industry are well known. Although it was contemporaneous with the development of a standardised system of technical education for builders and craftspeople, the impact of this has only recently been considered. By employing the qualitative tools of an inductive research approach to explore the current decline of conservation craft skills, this study has corroborated Hartley's (forthcoming) findings about a relational network of actors in conservation craftsmanship. Through showing that the structure of conservation and construction influences the network, this study has highlighted that the format of education is fundamentally important to the health of craftsmanship as a performative discipline. Its effect on the community of practice's ability to function was recognised by Ruskin and Morris, two of the leading 19th-century proponents of conservation, whose perspectives on craftsmanship were exemplified in the activities of both men. While Morris' work on historic buildings and the labour market evolved quite separately, Ruskin began to see the two things as connected and, along with several Arts and Crafts designers, instituted projects that demonstrated this.

It is telling that a less centralised approach provided a variation from the modern orthodoxy. The literature review to this thesis showed how Detmar Blow, an Arts and Crafts architect trained by Philip Webb, travelled with a group of 'itinerant masons', conserving historic churches on behalf of

the Society for the Protection of Ancient Buildings (SPAB) (Drury 2000). His frequent absence from site suggests a management model similar to that at Fountains Abbey, which was based on trust, mutual understanding and collaboration between archaeologists, architects and craftspeople, despite the professionals often being very remote. It is possible therefore that Webb's influence on the SPAB architects' ways of working gradually began to penetrate the Office of Works as the two organisations' personnel intersected and their practice began to align (Powys 1995; Thurley 2013, 75). The combination of research findings from Fountains shows that a hierarchy based on a fixed interpretation of heritage and conservation solutions eventually provided cooperational existence for site-based craftspeople and office-based professionals. The strength of the Ministry of Public Buildings and Works' (MPBW) hierarchy may not have been deliberate, but it was evident in areas of the building's fabric where the work of different groups is discernible. MBPW's organisational practices do not seem to have been examined theoretically, however, and so they came to an abrupt end when the directly employed labour (DEL) of the Office of Work's successor was privatised. After this, the current position of crafts confined to the second half of a two stage process of conservation management emerged as dominant and shortages of skills began being felt.

The relatively recent developments of the Burra Charter (BC) (BC 2013) and *Conservation Principles* English Heritage (EH) (EH 2008) have established a theoretical framework for accepting crafts as heritage in and of themselves. However, in England, the continuing bias towards tangible built heritage threatens has overwhelmed and alternative perspectives, which has allowed emphasis on conservation decisions informed by a conceptual, linear and largely paper-based process to undermine the on-site performative expertise of craftspeople. The false dichotomy that this is based on even the more traditional values that craftspeople attach to the detail of fabric as they empirically and scholastically interpret materials and the work of their predecessors, which is a crucial motivation for working on historic buildings (Figure 4e).

Craftspeople and craftsmanship in conservation are therefore misunderstood in two important ways: firstly, the idea that craftwork is contingent on or directed by a conceptual architectural idea is false, and it plays into the second inaccuracy about craft values attached to heritage, which relate to an empirical understanding and are both tangible and intangible. With space to develop craft skill and discipline, empowerment to work instinctively and autonomously, and recognition for their independent and educated decisions, craftspeople are better able to 'get on' with practical conservation effectively, efficiently and expertly. Any absence of these working conditions is damagingly paradoxically because it reduces craftspeople's ability to perform conservation, as illustrated by the three case studies in this thesis. The systemic rejection of craft as intangible heritage is therefore a missing link in the framework for contemporary conservation in England,

which, if rebalanced, could catalyse improved conservation practice through enhanced craft skills capacity. However, I have made the case that conservation craft skills should also be supported because of their critical role in protecting the fabric-based heritage that is more traditionally recognised. With this argument in place, my conclusion moves on to describing the conditions in which conservation craftsmanship needs to continue and develop through skills transfer to a new generation.

6.2.2 An environment for conservation craft skill

Although the principles of and framework for heritage conservation have not necessarily been directed at craft practice, the craftspeople interviewed in Chapter Four felt that conservation had affected a positive experience that was distinct from mainstream construction. Any impact that the discipline's development has had upon conservation craftspeople was therefore ancillary to its central intentions, which meant that it was unsurprising that other political and societal factors had also influenced the community of study. The chronology of the thesis has shown those influences as variable over time, but Chapters Two and Four showed that the impact of a late 20th-century political move towards a more universal and publicly recognised form of conservation endured for the interviewees. As the historic environment had been interpreted ever more holistically, its conservation had to lever regenerative benefits for more people in a greater number of areas. More importantly still, freedom within the construction sector marketplace meant that a greater number of firms could compete for heritage work. In all of this grand rhetoric of inclusive public value, the detail of craftsmanship as an autonomous discipline, performative process and sustainable conservation activity was lost.

Calculating annual expenditure on conservation is complicated because of the various ways that heritage can be defined. Chapters Two and Four argued that in including all pre-1919 buildings, the NHTG had taken an extremely holistic approach that conflicted with its outdated and comparatively restrictive position on 'appropriate standards' for conservation. To relieve this conundrum, this study has focused on the work of the Heritage Lottery Fund (HLF), which is acknowledged as the biggest financer of heritage conservation in England. It has found that the preoccupation with understanding significance and informing conservation as a paper-based exercise before projects are on site are overcome by craftspeople in a typically dynamic way when they build trusting and cooperative relationships with client intermediaries. This relationship is critical because it was the intermediary's official (although often nominal) role to ensure that heritage conservation was achieved through the craftsperson's bodily work. Nuances around the meaning of 'proper' heritage conservation meant that these two key stakeholders should share or try to reach a basic mutual understanding about heritage significance. This meant that, in the inevitable event that something unknown and

unexpected was discovered on site, in most circumstances the craftsperson would be able to dialogically, instinctively and physically conserve it without the 'permission' of the intermediary. Chapter Five showed that a breakdown of this cooperative relationship – a replacement for the hierarchy at Fountains – forces covert practices that ultimately threatens either the tangible heritage or the viability (and sustainability) of the craft firm.

Chapters Three and Four both illustrated how relationships between craftspeople and client intermediaries could facilitate conservation practice. The hierarchy at Fountains meant the stonemasons were trusted to work extremely remotely from Office of Works inspectors, while Chapter Four's interviewees relied on their client intermediaries to understand and defend the decisions they made as they worked. Both examples required experienced ex-crafts coordinators who could defend flexible approaches towards heritage's unknowns. Although this need for 'constant supervision of a competent directing [craftsperson]' (Powys 1995) is critical to conservation, it is no longer guaranteed. The HLF's model of indirectly funding multi-million pound projects has necessitated the involvement of construction sector management firms that treat conservation sites as calculated programmes subject to risk control. Not only is this impossible because of the realities of autonomous working but these firms' lack of relevant expertise also disrupts craftspeople's shared understanding with intermediaries, and with that their capacity to work dialogically and according to unknown significance. It is this barrier to a mutual understanding, more than any specific processes, that made the construction sector management firms' current configuration unsuited to heritage conservation work.

Many of the interviewees expressed dislike for the operational reality of commercial construction, casting doubt on the suitability of processes such as competitive tendering to fixed specifications. However, taken together, the interview accounts showed that conservation work could be competitively tendered fairly, so long as several principles were observed (set out in section 4.6.3.1). As well as monitoring projects' scale and ensuring heritage conservation specialists could communicate, it was important that any project specification included input from an experienced craftsperson. Interviewees' unremunerated involvement in this type of work was an example of their moral compulsion to compensate for a defective economic model, itself based on a false dichotomy of thought-based and motor-based expertise, as exemplified in the intellectual work of Ingold (2013). The archival evidence that craftspeople were originally responsible for retrospectively recording practical conservation indicates that these occupational categories evolved only latterly at Fountains; when Tommy Young began documenting verbal instructions during the 1960s, and then further still during the 1980s when Henry Rumbold received written instructions. By the time the works team was disbanded, we know that the conception of craftspeople as the labour only material executors of

professionals' written and drawn concepts was so firmly entrenched that Robertson's report was mis-archived and the masons' drawings lost even though Appendix Four showed what a rich body of information they contained.

There are then several environmental factors that affect individuals' capacity to conserve heritage through craft skill. Chief among these is the craft firm's relationship with the client intermediary, which must be based on trust and a concurrent position on conserving heritage in response to its significance. This latter aspect was particularly important because it enabled flexibility and cooperation between an on-site conservation project's two main stakeholders, whose portrayed job roles overlapped in reality because they were based on the false distinction between conceptual and material work. The two roles' coalescence was evident not just in the trajectory at Fountains, where at first architects played only a minor role, but also in the interviewees' accounts of designing detail through technical drawing and advice, and even at the Lodge where decisions were taken daily and in response to the unknowns described in section 5.4.1.3. Where client intermediary relationships did not reliably create the on-site flexibility to respond to unknowns, craftspeople benefitted from advising on specifications beforehand, but their perceived position as manual workers (as well as the commercial conflict of competitive tendering to those specifications) meant that they often contributed surreptitiously. It is therefore regrettable that this prevented them from being recognised and appreciated for their expertise, which was important as an environmental factor because it helped forge their identity as highly skilled and knowledgeable conservation craftspeople.

6.2.3 Conservation craft identify and the culture of construction

The interview and participant observation methodologies of Chapters Four and Five generated masses of detailed data about the routine of craftspeople's work. When under analytical scrutiny, this material revealed how the participants' daily activities of negotiating structural bureaucracy and performative practice reflected their status as autonomous decision-makers and, for some, experts in their field. Many of the managerial interviewees had been compelled to design conservation works to ensure that they retained on-site autonomy, whereas the apprentices and other stakeholders propelled the Lodge forward by making decisions instinctively and with little reference to the plans, which focused on outcome rather than process. In performing the majority of these activities, the craftspeople echoed not only the independent decision-making of other building craft communities (Jones and Yarrow 2013; Marchand 2009; 2012; Thiel 2012a) but also a theoretical argument that 'tacit' (Jones and Yarrow 2013), 'dialogic' (Sennett 2013) and 'textillic' (Ingold 2010; 2013) practice is a form of motor-based knowledge equal to its academic counterpart.

It is clear then that achieving excellence through craftsmanship can be seen as an aspirational and challenging career choice. As such, many of Chapter Four's interviewees had striven to realise their position and reputation within the sector, and were justifiably proud of the standard of work it was based upon. It was interesting that, although the majority of the 235 craftspeople (Figure 4c) represented by the interviewees had begun their career as apprentices, comparatively few former apprentices had become managers. Of the managers interviewed, most with a craft background had entered the sector 'late' as mature trainees, career changers or creatives, with a determination to succeed that induced their behaviour as moral agents contributing unremunerated advice. This resonated with Bilbrough and Moir's (2004, 10) portrayal of 'well-educated middle class' rural craft workers, as well as the 'vocational migrants' that pursued fine woodwork careers despite 'financial obstacles' (Marchand 2007, 39), and perhaps explained the stonemasons' (as former apprentices) disparaging stonemasonry as a vocation. However, unlike other vocational migrants who worked in 'relative isolation from the wider economy' (Marchand 2007, 39), the privatisation of works teams such as those at Fountains, coupled with the bigger scale of conservation projects, had led to specialist conservation craft firms increasingly having to compete as labour only within the mainstream construction sector. This focus on measurable economic worth harked back to issues identified during the 19th century, which similarly had an impact on the firm's viability and ability to offer and recruit to apprenticeship positions.

The mainstream construction company researched by Thiel was beset by recruitment challenges. Apprenticeship opportunities had been declining since at least the 1980s, which meant that employers were more likely to recruit through networks and 'at the pub' than on the basis of skill and qualification. The view of construction as a fallback career for when other options were limited conflicted entirely with the portrayal of the committed and aspirational conservation craftsperson (Lynch 2013). There were some commonalities in that, like Topbuild and its subcontractors, the Fountains stonemasons and my interviewees recruited trainees through personal and professional networks. However, I argue that this is a typical response to the unyielding structure of commercial construction. It aimed to safeguard their firm's training efforts by appointing trusted and loyal candidates in whom to transmit and share craft expertise, and the resilience of family firms indicated this was successful. Some had been disappointed by more open recruitment, not because positions were perceived publicly as 'dirty' work (Thiel 2012a) and a 'poor career option for young people' (Creative and Cultural Skills 2013, 6), but by trainees' aspiring to learn conservation craft as a romanticised vocation and unprepared for the 'tough' reality of it. As with previous studies (Bilbrough and Moir 2004, 12), the Lodge project then drew attention to the difficulties of recruiting older apprentices in a restricted further education funding model, even though the best outcome was arguably for an older apprentice recruited on merit alone.

All of the above demonstrates that the perception around mainstream construction made it unsuited to recruiting passionate, creative and often highly educated (Chapter Four) conservation craftspeople that could channel their interest into solving conservation problems efficiently. Attaining a balance between making decisions about detail and moving a project forward according to outcomes was of central importance to being on site, and the Lodge showed that it took time and experience to learn to negotiate this through tacit craft knowledge: when to press on without the client intermediary, when to slow down to refer to drawings, how to work carefully but in proportion to significance. Taken together, the three case study chapters illustrated that the masculine culture of building sites, coupled with the competitive and intermittent nature of construction industry work in 2011/12 was unlikely to provide the space needed for trainees to test and learn such instinctive craft knowledge. Indeed, my non-native presence at the Lodge perhaps mediated the site's overriding masculinity in a way that has been noted in conservation previously (Gunthorpe 2013). It has not been possible to evaluate the working culture at Fountains Abbey, but it is feasible that any machismo was mediated by the emphasis on training and education, the strength of which led to the Department of the Environment (DofE) manipulating further education routes to its own end. Indeed, an area superintendent's work 'to move mountains' so that DofE stonemasons could be among the first 'trade trained' applicants for a higher qualification demonstrated that their sites were not only exceptional in terms of education but also that the recurrent presence of an ex-craftsperson superintendent contributed to this.

Even if conservation craft firms are characterised by a less explicit masculine culture than mainstream construction, the Lodge project highlighted the importance of an individual's physical presence when the foreman's decisions were observed because of his continual on-site visibility. The balance of visible and mysterious craft practices has therefore surfaced throughout this study, with the exacting standards of the Office of Work's expectation of Robertson making way for craft groups that were either concealed in archive or transient to sites. The resultant lack of understanding about craft expertise meant that interviewees were unrecognised for any contributions to design work, which this contrasted with the apprentices' need for an accountable on-site presence.

Craftspeople's gradual invisibility from outside their community again reflected the imbalanced dichotomy between conceptual and material practitioners, which, as we have seen, had to be carefully (although somewhat paradoxically) negotiated. The separation's impact on training had evolved differently because, as private firms had been subsumed into the mainstream construction sector, they had absorbed its culture rather than exploited its apparatus, as was the case at Fountains. As such, universal standards and further education colleges had supplanted any

emphasis on the transfer of tacit knowledge between master-mentor and trainee. Fortunately, changing arrangements for further education and apprenticeship currently present an opportunity to correct this, to re-evaluate and re-emphasise the important contributions of master-mentors in vocational training (section 6.3.2).

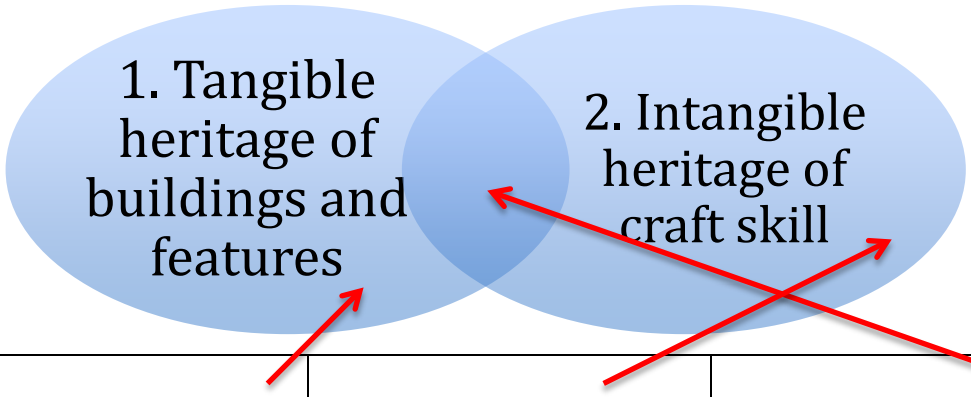
6.2.4 Relevance of academic portrayals

Section 6.2.1.1 has already asserted that the English disregard for intangible heritage created a void that prevents conservation craft skills from being safeguarded in their own right, which in turn presents a risk to heritage. Here, I argue that this disconnect can be bridged by the articulation, not of embodied craft cognition per se, but in the elements of that knowledge that are acquired through working with historic buildings. Jones (2010) made a significant contribution to this area when she identified the relationship between people and fabric as 'inalienable', but I believe that, in the specific case of conservation craftspeople's 'tacit' knowledge (Jones and Yarrow 2013), it is useful to unpack this further. This is because craft knowledge is also motor-based and bodily, which is to say that when observed in practice it can be perceptible while also being tacit: despite being often unspoken, craft knowledge has an important tangible association with historic buildings.

Craft knowledge was tangible at the Lodge when the builder interpreted its inside wall, and then observed a method of working that conserved its significance. However, it was the interviewee accounts from Chapter Four that more clearly explained why the craftspeople's relationship with material was important. It related to a principal reason for their interest in historic buildings (Figure 4e), the motivation to add to the work of previous craftspeople and contributing to an evolving tradition of craftsmanship. Some of the narrative around this point, such as 'I see the tool marks inside and I think 800 years ago a stonemason chiseled them out' (Firm11SM), demonstrated their intrinsic and scholarly interest in the evidential value of historic fabric. They not only talked about taking 'delight' and 'inspiration' (Firm10SM) from seeing previous work but also clearly tried to interpret and emulate it in order to 'keep the craft' (Firm17SM), become 'part of a tradition' (Firm14PD) or 'chain' (Firm11SM), and 'have a stake' (Firm10SM) in a building. These accounts suggest that, in the throes of performative conservation practice, craftspeople drew interpretations from fabric that then enhanced their embodied cognition and enabled them to conserve both the heritage at hand and any future projects more effectively.

A communal heritage of this sort corresponds entirely with a value-based system for understanding heritage, but continues to be being displaced by an approach that views 'monuments as documents' (Emerick 2014). This is happening for two reasons: firstly, the interest is embedded in an enacted activity that is carried out on site, usually after conservation has already been 'informed'; and,

secondly, because of its nuanced position at the intersection between tangible heritage and the intangible heritage of craft (Figure 6a).



1. Honour of working on revered historic buildings	2. Intellectual challenges posed by bespoke conservation of significance	3. Interpreting and contributing to an evolving tradition of craftsmanship
Motivations for working as a conservation craftsperson		

Figure 6a: The third of the tripartite package of motivations illustrated in Figure 4e relates to values around craft and heritage

Section 4.2.2.1 has already explained that the third of the motivations for becoming a craftsperson was unexpected. This was not because it was inaccurate or peripheral to the theoretical framework for recognising heritage but because it was experienced by the community of craftspeople through their performance, and as such it was difficult to articulate within the semantic disciplines of heritage and conservation. The veracity of this claim was validated by two university-educated craftspeople's engagement in the discourse, which enabled their adept navigation of the divide of concept and material decisions (section 4.4.1.1). Although the craftspeople's communal interest in heritage was subtle, the accounts above showed that they were vibrant, meaningful and often very sophisticated. Indeed, section 4.3.2 showed that craft firms' valorisation of either the evidential value of fabric or the aesthetic value of design derived directly from their craft discipline. There was one additional characteristic that the craftspeople found very important, but which was more marginal to any theoretical framework for heritage and conservation, and that was having the freedom and capacity to 'get on'.

Although several interviewees identified the importance getting on (Rumbold; Firm02CJ; Firm08BS), only it became clear at the Lodge that it had more than just commercial meaning. It was actually

evocative of craftspeople's performative 'tacitly regulated' processes (Jones and Yarrow 2013, 18), which are fundamental to practising craft as a discipline. The apprentices' desire to learn about and find a role in 'the mechanics of this system' (Marchand 2012, 118) heightened its importance at the Lodge, but the project also showed that the efficient and effective practice it enabled could be of benefit for the building being worked on. It also importantly demonstrated that such practice could be beneficial to conserving tangible heritage in proportion to its significance, but that this aspect continued to be overlooked by a national framework that focused almost entirely on conservation's tangible and quantitative outcomes, without enough consideration of how these are achieved.

This brings me to the final point in this response to the thesis' overall research questions. My observations of and interactions with conservation craftspeople have demonstrated that they would resonate with the concept of their intangible craft knowledge's inalienable relationship with tangible heritage. However, because that knowledge is not dialectic, it is difficult to articulate in the value-based theoretical framework for heritage conservation, despite it being partly driven by a communal interest in the tangible and authentic aspects of the historic environment. The incongruity of this is more difficult to explain but I contend that it not only relates partly to academia's advance on policy in this area but also to those evolving environmental factors that, throughout the 20th century, have distanced heritage policy from physical conservation (as Figures 4a and 4b illustrate). This meant that the conservation craft community became increasingly isolated as the false construction sector dichotomy of thought-based and motor-based labours took hold. The effects of this were wide reaching: conduits between professionals and craftspeople at Fountains Abbey had closed, craftspeople's inevitable on-site decisions had to be taken in a policy vacuum (as at the Lodge), and they could not articulate their communal values in an ill-fitting linear process of informed conservation. Indeed, in its focus on non-expert communities, the sector's laudable move towards a more inclusive form of practice had unintentionally excluded these experts by neither recognising their unique way of learning from heritage nor appreciating that this engenders their practised craft knowledge with authority and autonomy.

In response to the gulf left by a policy framework that did not fully trickle down and reach them, many of the conservation craftspeople had established personalised ways of interpreting heritage in order to inform their conservation through tacitly regulated craft practice. They displayed expertise and creativity in 'getting on' with conservation, but their interpretations of heritage – based on self-directed education and their own 'expert' perspectives – were more outdated, as seen at the Lodge and with interviewees' aggrandisement of some values over others. The view of their contribution to conservation as labour only had thwarted craft engagement in theoretical developments, so it stands to reason that craftspeople did not participate in either articulating their own values or widening

participation in craft. It is another example of the false and damaging dichotomy in heritage conservation, and illustrates that the craft community's struggle is not necessarily one for power and control as described in Chapter Two. Rather, they retain significant autonomy and power on site, but they find communicating and gaining recognition for the significance of this outside their distinct community of bodily and tacit knowledge difficult.

I have argued throughout this discussion of the thesis' first four research questions that the cumulative policy and structural changes within the heritage and conservation sectors have resulted in its flawed understanding of and approach to craftsmanship. Although the act of conserving through craftsmanship is at the nexus of values around tangible and intangible heritage (Figure 6a), competing influences on its structural context have meant that, since the 1960s (at Fountains Abbey at least), craftspeople have been relegated to an increasingly tangential position. Space for them to work dialogically and in discussion with client intermediaries and other stakeholders no longer routinely exists, preventing the co-production of a practice-based intellectual response to an ever more complex interpretation of heritage. This key finding from my research suggests that craftsmanship correlates more with the idea as the living embodiment of continuous tradition, than the binary view that encourages a multi-faceted interpretation of heritage, which once realised discourages change. For craftspeople the question of change seems very specific: it is not a question about the nature of change itself, but how that change develops skill, embodied cognition and motor-based expertise. Conservation has not looked at this question before, but researching it may help sustain craftsmanship more effectively. The final section of this conclusion, which considers the thesis' impact on future research and practice, therefore begins by discussing ethnography as a methodology for exploring the communities that practise conservation on site, as they interact with each other and heritage as a structural force.

6.3 A future for conservation crafts

6.3.1 The power of ethnography

This project's methodology has drawn on research tools from across the humanities and social sciences, in a critical and experimental approach to studying a community that the heritage conservation sector has historically depended upon but did not appear to sufficiently understand. Archival work was intended to provide an overview of the changing interplay between conservation and craftsmanship, but the fruitfulness of the qualitative encounters changed this historical emphasis. This is because the findings showed that, while the conservation movement's early solutions to monument preservation had nurtured and emphasised the skills of 'competent' individual craftspeople (like Fountains Abbey's Robertson) as critical, seemingly extraneous changes to the structure of conservation had made its relationship with the craft community far less deliberate. Any

strategic approach towards the employment and development of craftspeople was supplanted by a drift into reliance on construction industry procedures, despite their being based on a false and damaging distinction between conceptual and material work (as the latter two case studies showed). Although several academics had identified this societal divide, its relevance to and impact on conservation had not yet been considered, and so I have looked to other observational studies of the building crafts to enrich and contextualise my research.

Anthropologists, sociologists and others have challenged the embedded Western view that there is a separation between thought and motor-based labours Notably, Sennett (2013, 278–279) has argued that the loss of 'empathy' and cooperation engendered by the gulf has meant that, in economic terms, 'workers cannot sustain supportive social relations with each other'. This is of direct consequence to heritage conservation, not just because of the discipline's heavy reliance on the relationships between its on-site stakeholders, craftspeople and the client intermediary but also because it benefitted from craftspeople being recognised for their expertise and autonomous practice. According to the archive, the two stakeholders apparently worked both cooperatively and autonomously after the Ministry of Works' arrival at Fountains, but over time this approach was eroded by other dynamics such as the pressure to procure external contractors. Craftspeople's accounts from the focus group and interviews partly explained the pragmatic necessity of autonomy based on a mutual understanding with client intermediaries, but the elusive, non-verbal and often performative nature of this meant that it was only fully accentuated by studies based on participant observation (Marchand 2009; 2012; Thiel 2012a). The participant observation element of this research project therefore grew in importance as I sought to understand the impact of the divide on heritage conservation during the 21st century, particularly in relation to one of the sector's biggest challenges – a decline in craft skill.

Chapter Two has already outlined the skills and capacity issues that have afflicted heritage conservation since around the turn of the millennium, showing that attempts to resolve the problem were centred on a simplistic assumption that it had an economic and social basis. Targeted activities therefore included additional heritage skills qualifications for partially skilled craftspeople, and funded placements to attract a wider range of people into conservation craftsmanship. However, neither response addressed the most pertinent issue raised by this study, which was that a commercial construction business model based on a false idea of 'labour only' was unsuited to training in this area. This is because it disregarded and therefore did not provide space for the instinctive, performative and autonomous expertise that conservation craftsmanship was defined by. All of my case studies have guided me towards this conclusion, in the process of corroborative triangulation that was outlined in Chapter One, but it was interpreting the findings through the lens of other,

similar, work that highlighted this inherent contradiction. Even as a professional-cum-researcher with a vested interest, my participatory observations illuminated the tension between expectation and reality in conservation practice. In Chapter One I positioned myself as a non-native insider and I maintain that as the case, I recognise that even though I engaged in the corporeal building task, my disengagement in motor-based craft as embodied cognition prevents me from truly understanding craft from the inside.

Immersive and participative fieldwork is therefore a potent tool for appreciating the little understood community of builders and craftspeople. Future research projects should address this by looking at the phenomena of being on more complex heritage sites during their conservation. Marchand's (2010b) unique perspective already analyses how knowledge is transferred between craftspeople, but we need to know more about how this and the other relationships of craft practice are navigated as they intersect with conservation policy and construction sector management. Like some of Marchand's work (2009; 2012), research outputs that richly depict, vividly visualise and ultimately draw attention to this world's reality of instinctive performance and routine autonomous decision-making would be of value. There are ethical dimensions to consider here: the exploratory nature of this research meant that, like sociologist Thiel, I was necessarily careful to anonymise and protect my research participants, but, in some ways, this has degraded their expert and highly individualised contributions to craft and conservation. Future work would therefore benefit from a more firmly anthropological approach that celebrated and made visible the personal skill, wisdom and motivations of craftspeople. Participant observation can generate meaningful, rich and contextual portrayal of this sort, for, as Ingold (2013, 4) says, it is not that we need to 'describe the specificity of' craft', but that we be open to understanding what craft 'life is like in particular times and places', and accordingly 'what's passing in the hearts and minds of people with whom we have to work' (Sennett 2013, 274).

The value of an anthropological and visual approach to this field of inquiry is therefore clear, but I maintain that the mixed methodologies employed here have offered a unique perspective. The triangulated use of archive, focus group and interview has repeatedly and neutrally proven a damaging and purposeless drift in the way in which heritage conservation has regarded and influenced the building crafts throughout the 20th century. This fresh perspective provides several important conclusions for the discipline to consider: firstly, the emphasis on informing conservation before projects are on site inhibits craftspeople from finding a place for their dialogic and performative practice; secondly, this is because the informed conservation's uncritical synchronisation with the construction sector's dichotomatic view of thought-based and motor-based labours, which, until resolved, will impair any work to improve conservation craft capacity

sustainably; and finally, that there is a specific archaeological and heritage-based imperative to embrace the process of craft knowledge and skill. Taken together, these three points show that conservation is currently flawed by a 'blind spot' that is frustrating craft practice in an unsympathetic 'zero-sum' (Sennett 2013, 83) association that harms both discrete fields of practice.

6.3.2 Sustaining conservation craftsmanship

The section above has shown that there are philosophical and practical reasons for heritage conservation re-establishing its relationship with crafts and craftspeople carefully. Indeed, it is essential if craft firms and craftspeople are to meet the sector's frequently acknowledged but cyclical demand for their expertise. This brings me to the fifth and final research question outlined in Chapter One, which aimed to explore how conservation craftsmanship might be sustainable. It is difficult to respond to this fully, but my final section collects together the comments, thoughts and interpretations on sustainability in the thesis to form a conclusion that looks forward into the future, and considers the potential implications of this study for policy and practice.

Developments during the eight years since I started this project have inevitably influenced the wide range of disciplines that the study draws on. Most pertinently, the 2015 separation of EH's collection of properties from the new government advisor, Historic England (HE), signified policy's further removal from conservation and craft practice (Figure 4a). Following this, proposed amendments designed to align *Conservation Principles* (HE 2018) with the National Planning Policy Framework (NPPF), seemed regressive in terms of conservation craft process (as outlined in 6.2.1.1). Indeed, this key position statement on 'the sustainable management of the historic environment' not only upholds heritage significance as an entity that can be understood and articulated before conservation decisions are made but also, in downgrading communal values, it reduces the prospect of any on-site, craft-based re-evaluation. This, along with *Conservation Principles* the distinction between designs created 'directly' or 'through detailed instruction' illustrates that the societal misjudging of building crafts as the hand of an architectural designer – rather than the 'fascinating art' of creative problem-solving – continues to afflict conservation (Adamson 2018a; 2018b; Pye 2015; Risatti 2007; Sturt 1974).

Varied evidence demonstrates that conservation craft capacity issues continue to exist. Articles in popular and specialist media, including HE's own *Heritage Counts* publication, frequently refer to current and anticipated skills shortages (Guise et al 2017; HE 2012; Love 2017; Napier 2018; NHTG 2013; Snow 2016). Despite this apparent economic imperative, several of the largest and longest-established companies have gone into administration, including William Anelay Ltd; clearly highlighting that a purely commercial model for heritage conservation is currently flawed.

Firm11SM's insight that an approach that 'look[ed] just at numbers' ineffectually leads to 'management buyouts' had proven prescient, because heritage conservation is 'not the enterprise to make money' and cannot be sustained that way. Capacity problems persist internationally too (Napier and Hunnisett-Snow 2017), and have inspired ICOMOS's International Training Committee (2013) to review its *Principles on Capacity Building*, repeating the need for an 'integrated approach' and newly emphasising craftspeople's direct responsibility for 'a great deal of decision-making'. Tensions that this decision-making juncture may cause are neither noted nor resolved, but the recognition of 'craftsperson's' and artisans'' autonomy is more progressive than any parallel policy in England.

Although heritage conservation policy does not yet recognise the reality of craft expertise, there is a growing realisation about the parity of vocational and academic knowledge. As part of the drive to reorder apprenticeship and other technical training in England, large employers – including heritage policymakers – are now interested in the curricula of vocational qualifications and in recruiting apprentices. In this work, there is not only a cultural opportunity to revitalise the workplace as a centre for education with important master- (or other employer) mentors, but also for policymakers to witness the development of empathetic relations between diverse groups of trainees. Amenity societies have already recognised the opportunities that this could bring to the heritage sector (Slocombe 2017), so it is possible that influential policymakers and funders will follow suit. Indeed, the HLF has already financed many vocational training opportunities through its *Skills for the Future* programme, which provides individual trainees with valuable work-based opportunities but does not combat the structural issues identified here. It is these issues and the inherent unsuitability of purely commercial construction to conservation that poses the biggest risk to the heritage sector's craft capacity.

6.3.2.1 Towards a solution

Among the challenges that the current commercial arrangement caused for conservation craftsmanship, two were conspicuous as particularly damaging. This thesis has already given a lot of attention to the societal distinction between thought-based and motor-based labours because it has catalysed an unfavourable ignorance towards 'invisible' craftspeople's work as labour only, but Chapter Four showed that there were also separate problems with the sector's spending profile. The model of financing large, one-off projects created an irregular pattern of demand that specialist craft firms with their regional networks based on local knowledge and relationships found difficult to serve, so much so that extremely large projects (such as Firm02CJ's 2500 windows) simply could not be undertaken. At the same time, craft firms that expanded seemed to put themselves at risk, like Anelay and Linfords that have gone into administration since the start of my research.

Being a specialist within an intermittent sector seemed to create problems for the interviewees. Specialisation had made them experts in their field, but it naturally meant that their business was less resilient to the dips in demand for their particular skill. This risk was recognised at Fountains where apprentices engaged in banker work even though it was unnecessary for the monument's conservation, and by those interviewees who were involved in multiple techniques or new building. This ability to diversify and be flexible about the exact nature of works in times of low demand seemed important to the survival of the business, while meeting peak demand relied on being able to reach out to other craftspeople in a network of support. As ever, many environmental factors affected the craftspeople's capacity in these areas, but there were signs of a move in the right direction. As stated in section 5.6.2, the employer-led development of new apprenticeship standards for construction has already incorporated basic conservation works, which positively means that a greater number of people would be recognised for these skills and able to perform them. However, this does not compensate for the fact that so few of Chapter Four's interviewees felt able to recruit apprentices, as this signified a discontinuation of craft transfer that would be difficult to recover from.

Continuity has repeatedly arisen as an important factor for the development and transference of conservation crafts. Not only was continuing a craft tradition one of three key motivations for working on historic buildings (Figure 6a) but it was also recognised that the very existence of the craft relied on its transference to a new generation. Through Robertson and the other Fountains stonemasons, as well as at the Lodge, we also saw how valuable craftspeople's continued dialogic interaction with a specific place could be. It not only enabled an expert knowledge of condition and significance but this and the relationship with the place also engendered a sense of pride that was so motivational (Figure 6a) that an apprentice posted pictures of the Lodge on Facebook. So, although the intermittent nature of current funding seemed incongruous with the clear advantages of working at a stable location, the Lodge showed that even small efforts to appreciate craft knowledge and provide space for its development could provoke a positive response. This is an important point because, although the craft firms interviewed could limit their network through exclusive recruitment practices, they were otherwise reliably connected enough through regional relationships to respond dynamically to demand: it was the time and space to pass on their craft that was missing.

At the beginning of Chapter Five, I set an intention to question whether the integration of project-based training into apprenticeship and work-based placements could provide trainees with space for developing embodied craft expertise, while emphasising the importance of resilience through flexibility and networking. I believe that to do this, projects like the Lodge must offer trainees time and space to develop alongside other craftspeople and the important client intermediaries in a

cooperative endeavour. This is important for bringing the two groups together in a more balanced environment that transcends the modern division of labour and encouraged exchange. The strict hierarchy of Fountains might be unsuitable for interpreting and conserving the complex range of values now acknowledged but its breakdown has left a damaging void that has allowed craft training to become isolated from the wider conservation sector (Hartley forthcoming). This void needs to be bridged so that craftspeople and their sector allies, architects and other intermediaries can cooperate on site more easily. Projects like this cannot and should not replace the stability provided by employers and mentors, but, like Fountains, they must emphasise commitment to place and the importance of relationships based on respect and a shared understanding; keystones of practising conservation.

6.3.3 Conclusion

My close professional interest in the community that I have studied has been made clear throughout this thesis. Despite a degree of closeness to the subject, I have constantly been surprised by the suppressive nature of the societal distinction between thought-based and motor-based labours. The clarity of its effect on the distinct discipline of heritage conservation means that this thesis should be of interest not only to those studying conservation but also to anthropologists and ethnographers studying the building industry and crafts in general. Its harm to conservation is such that I have been compelled to document the above practical recommendations for alleviating the problem, which aim to increase the visibility of craftspeople, redefining the workplace and master-mentors as stable centres of education, promoting dynamic networking and providing space for craftspeople to learn and engage with place. However, there is good reason to develop this research area further within the unique context of a value-based system of heritage management, which must recognise non-verbal heritage values and seek to protect them, whether or not there is an additional benefit for heritage conservation.

The historical overview portrayed by the use of archival and qualitative research tools has been invaluable in showing how the association between the conceptual and material labours of conservation has changed. Through this approach – discerning implicit and explicit archival findings through comparison with the stonemasons' memories – there is still much to learn about craft communities past and present. There is a particular need to explore the tacit world of localised and bodily decision-making, which is as important to the fabric of a building as the materials it is made from but is overlooked in English conservation principles and processes. I have stopped short of recommending that future research should support new technical advice on the processes of conserving heritage on site, because that would undermine the central finding of this research. Conservation craftsmanship is defined by its tacit, dialogic and performative nature, and so to try and

articulate its processes in order to safeguard tangible heritage would be a contradiction that was once again predisposed to the product, rather than the discipline, of craftsmanship. Rather than seek to control and influence craft processes through advice, detailed drawings and competition, conservation needs to create opportunities like the Lodge, where trust and cooperation with craftspeople's distinct expertise can develop on complex sites. In the short term, conservation perhaps needs to be prepared to sacrifice tangible heritage in order to reconnect with and nurture craft, and attempt to rebalance a system that seems quite broken. After all, crafts are at their essence dynamic; they are continuously adapting to heritage conservation. Conservation just needs to be more mindful of that.

Word count: 89 609

Acronyms

AC	Athens Charter
BC	Burra Charter
CITB	Construction Industry Training Board
CofE	Council of Europe
COTAC	Council on Training in Architectural Conservation
DCLG	Department for Communities and Local Government
DCMS	Department for Culture Media and Sport
DEL	Directly Employed Labour
DNH	Department of National Heritage
DofE	Department of the Environment
EH	English Heritage
GDPR	General Data Protection Regulations
HBMC	Historic Buildings and Monuments Commission for England
HCA	Heritage Craft Alliance
HE	Historic England
HLF	Heritage Lottery Fund
HPR	Historic Property Restoration
ICOMOS	International Council on Monuments and Sites
MHLG	Ministry for Housing and Local Government
MPBW	Ministry of Public Buildings and Works
MTC	Medium-term contractor
NDA	Nara Document on Authenticity
NHA	National Heritage Act
NHMF	National Heritage Memorial Fund
NHTG	National Heritage Training Group
NPPF	National Planning Policy Framework
NT	National Trust
NVQ	National Vocational Qualification
NYCC	North Yorkshire County Council
P(LBCA)A	Planning (Listed Building and Conservation Areas) Act 1990
PPS5	Planning Policy Statement 5 (Planning for the Historic Environment)
RIBA	Royal Institute of British Architects
SPAB	Society for the Protection of Ancient Buildings
UNESCO	United Nations Educational Scientific and Cultural Organisation
VC	Venice Charter

WHS	World Heritage Site
WRCC	West Riding County Council
WWII	World War II

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Appendix One

Transcript of Interviews with Henry Rumbold

Redacted until 2024

Appendix Two

Transcripts of Interviews with Craft Firms

Redacted until 2024

Appendix Three

Coding Co-occurrence Matrix

This co-occurrence matrix shows where codes were applied to same excerpts concurrently. This ‘co-occurrence’ provided a useful starting point when mining the material for arguments, for example the high incidence of the codes ‘professionals’ and ‘client; co-occurring.

	Business culture	Contracting	Family business	Heritage knowledge	Multi skilled	Recruitment	Class	Competing for work	Fair situation	Pricing	Recommended	Specification	Tendering	Unknowns	Education	Accredited training	Coincidence	Journey	Non-accredited training	External factors	Administrative restrictions	Client	Professionals	Economy	Heritage sector influence	Other firms	Individual motivations	Challenging	Creative	Interesting	Passionate	Pride	Satisfying	Researcher influence	Working practices	Bespoke	Care	Decision making	Drawing and design	Innovational	On-site	Other crafts and craftsmanship	Part of a whole	Traditional working practices	Total
Business culture																																													
Contracting			2	5	7				4	7		2	9	3		1					6	17	17	4	5	16		3	3	2	2		2	2		1	1	2	2	2	5	3	5	1	141
Family business		2		1	1	7	1				1	1	1	1		7	3	4	2		1	3	2	3								2							1		1	1	3	49
Heritage knowledge		5	1		3		1		3	3		5	5	4		1			3		4	15	10	5	16	3		4	2	7	4	1	4	2		2	5	8	5	5	6	8	6	7	163
Multi skilled		7	1	3		1	2					1				6		5	2		3	7	3	2	3	1		2	6		1	1	2			1	1	2	3	2		5	6	3	82
Recruitment			7		1		1									10	5	6	7			1		6	4			3	4	2	3	1	1			1	1	1	1			2		1	69
Class			1	1	2	1				1	1		2			5		5			2	3	6	2	1			1	1	1		1		1			1	1			1	4	2	1	48
Competing for work																																												
Fair situation		4		3					6		3	14				2					1	8	7	2	1	6			1		2					1	1	1		1	3	2	1	70
Pricing		7		3			1		6		1	11	10	6		2					2	5	11	8	4	7					2						3	1		5	2	1	1	99
Recommended			1				1			1		1	4					1				2	2		1											1								15
Specification		2	1	5	1				3	11	1		16	13		3			1		2	17	37	2	2	4								2		3	5	4		6	4	6	2	153
Tendering		9	1	5			2		14	10	4	16		3							3	19	19	9	3	7				1					2	3	1	1		3	4			139
Unknowns		3	1	4						6		13	3			1						8	9	1	1	4		2		4	2		3	1		1	2	2	3		4	2			80
Education																																												
Accredited training		1	7	1	6	10	5		2	2		3		1			7	16	29		7	4	3	9	6	3		4	3	4	4	2	2	3				2		1	3	6	1	1	158
Coincidence			3			5										7		6	8				1	1	1					1														33
Journey			4		5	6	5				1					16	6		20				5	3	2	2		1	2			1		1			1	2		1	2	10	3	3	102
Non-accredited training			2	3	2	7						1				29	8	20			2	6	2	8	3	2		2	2	3	2	2	1	1			3	2	1	1	1	5		5	126
External factors																																												
Administrative restrictions		6	1	4	3		2		1	2		2	3			7			2			17	11	10	7	9		2	1		1			2		3	2			2	8	1	3	112
Client		17	3	15	7	1	3		8	5	2	17	19	8		4			6		17		45	18	41	13		4	5	4	5	1	1	4		1	1	8	3	2	6	5	1	2	302
Professionals		17	2	10	3		6		7	11	2	37	19	9		3	1	5	2		11	45		10	26	12		2	2	5	5			4			4	14	8	1	16	12	15	9	335
Economy		4	3	5	2	6	2		2	8		2	9	1		9	1	3	8		10	18	10		30	17		1	1	3	2	1	1	1		2	4	1	1	2	2	5		2	179

	Business culture	Contracting	Family business	Heritage knowledge	Multi skilled	Recruitment	Class	Competing for work	Fair situation	Pricing	Recommended	Specification	Tendering	Unknowns	Education	Accredited training	Coincidence	Journey	Non-accredited training	External factors	Administrative restrictions	Client	Professionals	Economy	Heritage sector influence	Other firms	Individual motivations	Challenging	Creative	Interesting	Passionate	Pride	Satisfying	Researcher influence	Working practices	Bespoke	Care	Decision making	Drawing and design	Innovational	On-site	Other crafts and craftsmanship	Part of a whole	Traditional working practices	Total
Heritage sector influence		5		16	3	4	1		1	4	1	2	3	1		6	1	2	3		7	41	26	30		7			2	2	3	2		4			1	2	2	4	1	2	3	2	194
Other firms		16		3	1				6	7		4	7	4		3		2	2		9	13	12	17	7			1		1	1	1		4		1	1	1	1		2	7	1	1	136
Individual motivations																																												
Challenging		3		4	2	3	1							2		4		1	2		2	4	2	1		1			5	18	2	4	8	2		2	4	5	2		4	2	3	3	96
Creative		3		2	6	4	1		1							3		2	2		1	5	2	1	2			5		7	6					2	2	3	10	2	1	3	4	4	84
Interesting		2		7		2	1						1	4		4	1		3			4	5	3	2	1		18	7		9	6	8	2		1	4	4	2	1	3	3	3	3	114
Passionate		2		4	1	3			2	2				2		4			2		1	5	5	2	3	1		2	6	9		1	4					2	1		2	2	1	69
Pride			2	1	1	1	1									2		1	2			1		1	2	1		4		6	1		6	4		2	6				1	1	2	1	50
Satisfying		2		4	2	1								3		2			1			1		1				8		8	4	6		2		1	4	2			3	2	3		60
Researcher influence		2		2			1					2		1		3		1	1		2	4	4	1	4	4		2		2		4	2			1	3				1	1	1		49
Working practices																																												
Bespoke		1		2	1	1							2	1								1		2		1		2	2	1		2	1	1			1	1		1					24
Care		1		5	1	1	1		1		1	3	3	2				1	3		3	1	4	4	1	1		4	2	4		6	4	3		1		3	2	2	3	12	1	6	90
Decision making		2		8	2	1	1		1	3		5	1	2		2		2	2		2	8	14	1	2	1		5	3	4			2			1	3		7	1	27	10	5	4	132
Drawing and design		2		5	3	1			1	1		4	1	3					1			3	8	1	2	1		2	10	2	2						2	7		4	3	9	3	2	83
Innovational		2	1	5	2											1		1	1			2	1	2	4				2	1	1					1	2	1	4		1	4	1	8	48
On-site		5		6			1		1	5		6	3	4		3		2	1		2	6	16	2	1	2		4	1	3		1	3	1			3	27	3	1		6	6	7	132
Other crafts and craftspeople		3	1	8	5	2	4		3	2		4	4	2		6		10	5		8	5	12	5	2	7		2	3	3	2	1	2	1			12	10	9	4	6		19	20	192
Part of a whole		5	1	6	6		2		2	1		6				1		3			1	1	15		3	1		3	4	3	2	2	3	1			1	5	3	1	6	19		9	116
Traditional working practices		1	3	7	3	1	1		1	1		2				1		3	5		3	2	9	2	2	1		3	4	3	1	1					6	4	2	8	7	20	9		116
Total		141	49	163	82	69	48		70	99	15	153	139	80		158	33	102	126		112	302	335	179	194	136		96	84	114	69	50	60	49		24	90	132	83	48	132	192	116	116	

Appendix Four

Timeline of Works

A rough timeline of major works at Fountains according to Robertson's retrospective report, foreman's reports (*text in italics*) and progress reports (underlined) (AA020107/2/PC6/EHCentralArchive 1969; AA020107/VOR/PT5/EHCentralArchive/VisitingOfficersReports27/07/1963-09/09/1983). Abbey areas refer to the plan in figure 3b (re-printed below). Only major works are given; these were usually preceded by the clearance of vegetation, and all works on the ancient Abbey fabric were concealed with a combination of cement grouting and tamping followed by lime pointing.

Ref	Abbey area	1930s	1940s	1950s	1960s	1970s	1980s
1	Huby's Tower			Two reinforced concrete beams inserted from below the buttress to above the window to prevent stress in the wall of the north transept.	*Internal scaffold tower to repair windows. Stone samples to be taken & all interior walls photographed.*	Scaffold erected externally, maintained & overhauled throughout decade. Old iron cramps removed from south east and north west buttresses, replaced with Delta Metal. Cutting out and tamping internal joints at top of tower. Making replacement mullions to replace defective stones, as instructed. All existing holes to be blocked 6" from	Working stone mullions in connection with Huby's Tower [in the mill]. Taking down old mullions & erecting new. Dismantling scaffold on all four internal & external faces. Taking out old mullions, fixing cills with Delta Metal dowels & making good. Contractor constructed reinforced concrete

Ref	Abbey area	1930s	1940s	1950s	1960s	1970s	1980s
						face to prevent birds nesting. Rubber moulds of inscriptions & statues taken.	catwalk.
2	Transept	Repair of badly eroded mullions in the south transept with Delta-Metal & cement mix with crushed stone for colour matching.	South east pier: two reinforced concrete tie beams inserted in the wall top & between the window & arch below. A number of overhanging arch stones fastened with Delta-Metal and cramps.	West wall: inserted a reinforced concrete tie-beam at top window cill level to tie an 18' fracture. Rough-racking to wall to support face stones where the wall top was irregular.	West wall: secured overhanging corbelling with face stones. New keystones added to both arches looking south. Delta-Metal used to tie rough stone at the top of the spiral staircase. *West wall: Badly eroded ashlar to be carefully removed face reversed & rebedded if possible, otherwise renew.*		Pointing & tamping of vaults to south chapel.
3	Church nave	South wall: three reinforced concrete tie beams inserted over top arch (fixed with ¾" steel bars), between top arch and arch below, & through the wall between two arches		Rough-racking to wall to support face stones where the wall top was irregular.	*Steps to be made good in lime concrete.* *North wall: loose stones in blocked doorway to be fixed. Turf to be made good. South wall to be scaffolded.*	South wall: consolidating wall top. North wall: window arch taken down & rebuilt with Delta cramps & dowels. Scaffold erected inside nave,	Erecting independent scaffold. Removing window cills & rebuilding with cement & lime mortar. Taking down & rebuilding wall above windows. West window: fixing

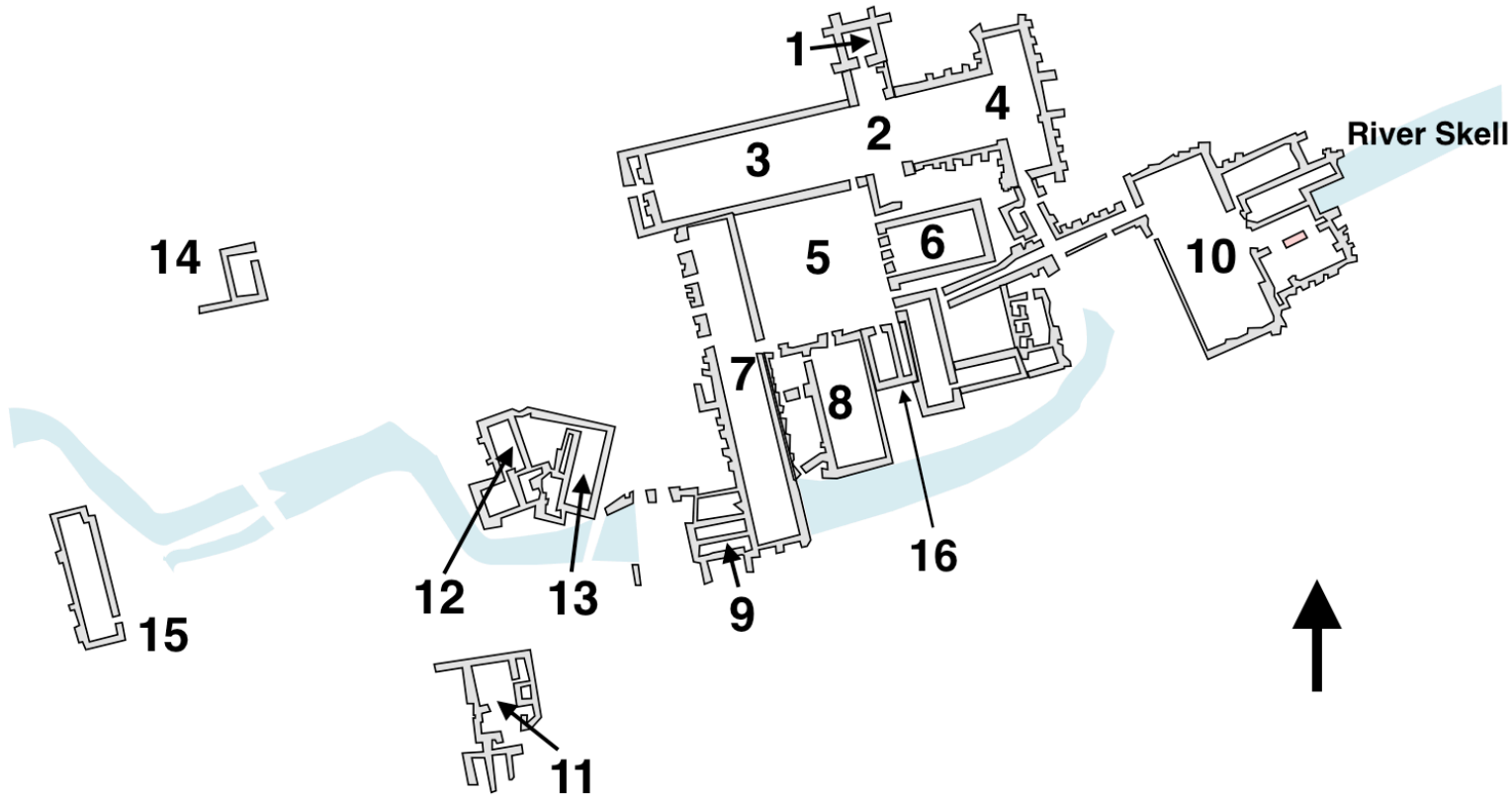
Ref	Abbey area	1930s	1940s	1950s	1960s	1970s	1980s
		(held with metal plate 1½" ties. Concrete and tie-rods used in the wall core to stabilise arch. Rough-racking to overhanging masonry at wall tops.				consolidating wall tops.	outer ring of tracery stones with metal fixings. Taking down & rebedding ashlar window. Scaffold to east window built.
4	Chapel of the nine altars	South gable: stone removed, cleaned & replaced. Rough-racking to wall top. Delta-Metal inserted at the springer of the main arch. Large fracture between the window & the remains of a staircase cleaned out & repaired. Reinforced concrete tie beam inserted in south wall in clerestory.	Continuation of works to the south gable in the 1930s. Another reinforced concrete tie bean inserted into west wall in clerestory to link up with tie beam in south wall.		North west corner & west wall: selecting, cutting & fixing 12 stones to renew columns. Rough-racking to waterproof wall top. *Steps to be re-laid and floor piscinas to be reset.* *Fallen stone to be refixed.*	Consolidating base of buttress (east wall) & joints of voussoirs with cement grouting & lime pointing. Consolidating interior face of north end.	Consolidating with grouting, tamping & pointing. Taking out & fixing cills in the south west corner.
6	Chapter house	Secured stones to top window arch, replacing stones on lower window. Installation of a soak-away to drain surface		Clearing & refixing stones after a fall in the south west		West wall: consolidating top section to a depth of 4' with a reinforced beam of core work, underpinning.	

Ref	Abbey area	1930s	1940s	1950s	1960s	1970s	1980s
		water & level floor.					
7	Cellarium			William Anelay of York added a 2" covering of concrete to the flat cellarium roof. Abbey staff installed a drain to convey water to the river at the south end.		Cutting out perished joints, tamping & grouting of face work. Carried out during inclement weather.	Erecting scaffold for access to cellarium top. Removing concrete & rubble from top. Reconcreted by Measured Term Contractor. Making cellarium weather tight for winter work consolidating vaulting. Digging out & consolidating tunnels. Attapulgite clay plastered to columns to prepare for Brethane treatment. Doorway to cloister yard: taking down jamb & rebuilding.
8	Refectory	Masonry overhanging pulpit (on west wall) 'hung on' a 39' reinforced concrete camber comprised of steel bars & 'fish-tails', & help up with stirrup-					Scaffolding to & consolidating east & west wall tops, large mullions & cills.

Ref	Abbey area	1930s	1940s	1950s	1960s	1970s	1980s
		irons (see figure 3e). Stonework slurried in neat cement, & wall top rough-racked.					
9	Reredorters	Rough-racking and underpinning of overhanging masonry. Used light railway to clear silt from river & move it back to its original course. Men brought in from Ripon Labour Exchange. Robertson 'riddled' the silt for archaeological finds.		Collapsed drain between prison & reredorters repaired.			Cutting out defective mortar, consolidating with tamping & grouting. Taking down & rebuilding part of north wall.
10	Infirmary	Tiles reset on a bed of concrete			*Carry on with preservation of the pillars and preserve passage. To lay scaffold battens in passage to form a runway for a dumper.*	Consolidating infirmary passage. Top five courses removed & rebidded with Delta Dowel cramps.	
11	Outer course (prison & bakehouse)			Blocking to opening from prison to river removed and reset.	*Commence work on prison block by consolidating small sections of walls.*	Moving soil to a new position on-site.	Taking down low wall, rebuilding with cement & lime mortar.
12	West guest house	Rebuilt & made good foundations after a				Recording, taking down, cleaning &	

Ref	Abbey area	1930s	1940s	1950s	1960s	1970s	1980s
		large section of masonry (12' by 9') fell down. Build a retaining wall on north side to prevent flooding from river.				rebedding loose masonry.	
13	East guest house	Rebuilt bridge parapet.				Loose masonry of parapet taken down & refixed.	Consolidation of the elevations (including by measured term contractor). Fixing concrete beam under window according to engineer & inspector's instructions.
15	Mill	Despite being in use as the Estate joiners shop, the building was deteriorating badly. Beams, floor joists & boards repaired. Roof re-slated. New course of stone added to wall tops to make parallel.			*To be cleaned out & used as a store for building plant. Land drains to be installed to drain workshop area.*	*Excavate mill leat.* Rebuilding boundary wall. Repairing culvert after flooding.	Reslating south side of roof.
16	Chimney, muniment room & dormitory	Displaced arch stones removed to original position		Basement (south end): taking down and resetting loose stones	Basement (east end): Rough racking and Delta-Metal ties to secure		New oak window fitted to muniment room. Asphalting roof.

Ref	Abbey area	1930s	1940s	1950s	1960s	1970s	1980s
					overhanging stones.		



A plan of the abbey ruins (not to scale): 1) Huby's Tower; 2) Transept; 3) Church nave; 4) Presbytery and the chapel of the nine altars; 5) Cloister; 6) Chapter house; 7) Cellarium; 8) Refectory; 9) Reredorters; 10) Infirmary; 11) Outer court (bakehouse and prison); 12) West guest house; 13) East guest house; 14) Porter's Lodge; 15) Mill; 16) Muniment room, chimney and dormitory (author's own 2019)