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Title

Architect and craftsperson: project perceptions, relationships and craft

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# Architect and craftsperson: project perceptions, relationships and craft

**Purpose** – Architects and craftspeople work together on complicated built heritage projects as part of a diverse multidisciplinary team. Effective interactions and collaborations between them can lead to a more successful project outcome, however, differing perceptions of each other can cause professional relationship tensions, communicative barriers and disharmony.

**Design/methodology/approach** – Through the analysis of online surveys completed by architects and craftspeople, this study examines the contemporary relationship between the two groups, including the architect's perceptions of the function of traditional building craft within their day-to-day role.

**Findings** – Results suggest that whilst both groups agree the craftsperson is an essential specialist on a built heritage scheme, there are contradictory perceptions with regards to the architect's role. Despite these differences, the results suggest architects are open to accommodating more exposure to craftspeople and traditional building craft within their day-to-day role – believing they would learn more about building materials, make better practical decisions and understand craftspeople better. More importantly, this study proposes that a focus on craft would break down communicative and perceptual barriers, in turn improving relationships and project outcomes.

**Originality/value** – The study strongly suggests traditional building craft can form an essential, tangible bond between architects and craftspeople by increasing focus on relationships and learning. The insights offered are not only relevant to those in the fields of architecture and traditional building craft; but also those involved in heritage management, as well as other professional roles who may benefit from the use of craft as a method to repair professional relationships, as well as historic buildings. AM (Accepted Manuscript). This revised article has been accepted for publication in ARCHNET-IJAR: International Journal of Architectural Research, published by Emerald. The final published version is available at the following DOI: <u>https://doi.org/10.1108/ARCH-01-2020-0010</u>

### Keywords

built heritage, traditional building craft, architecture, building conservation, heritage

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## Paper type

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## **Declarations of interest**

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#### 1.0 Introduction: a team of generalists and specialists

As in many areas of the building and environment sectors, [building] conservation also has its generalists and specialists. (Orbasli, 2008: 8)

Heritage in the UK is integrated within the planning system (Glendinning, 2013: 285), which naturally creates a legal emphasis on themes that relate directly to physical heritage. Pendlebury (2013: 709) refers to this as the 'conservation-planning assemblage', with the heritage listing system itself also falling within this grouping. The resulting built heritage projects that operate within this assemblage are particularly complex (Misirlisoy and Gan Günç, 2016: 92) and the various individuals involved in these projects carry 'diverse disciplinary backgrounds and forms of practise. . . ranging from the hard sciences to the arts' (Jones, 2009: 11). The success of a built heritage project is therefore underpinned not only by a comprehensive knowledge of the building and its surrounding context (Jokilehto, 2018: 446), but also by the interdisciplinary relationships within project teams.

The need for a diverse team of professionals on a built heritage project has been long noted, with the Venice Charter emphasising the need for '...all the sciences and techniques' to adequately safeguard the built heritage (ICOMOS, 1964: article 2). Feilden (2003: 190) gives a flavour of the variety of professions that make a contribution to a built heritage scheme, such as: owner, archaeologist, architect, architectural historian, builder, conservator, master craftsperson, materials scientist, and so on<sup>1</sup>. Research often contributes towards elucidating the complexities inherent within a built heritage project, such as philosophical issues, technical conservation approaches or complexities concerning sustainability and/ or energy performance of historic buildings. Yet what of the complexities inherent within the coming together of these various disciplines? Research tends to overlook this matter, or at best takes these relationships as given.

The authors of this article also come from different professional backgrounds in relation to built heritage (architecture and building surveying). This is somewhat reflective of the contemporary built heritage project in the UK, where the coming together of various roles creates a melting pot of various skills and contributions (Waterson, 2019: 1). Part of this will also involve the coming together of varying priorities and indeed various unavoidable and unforeseen perceptions and preconceptions. This 'coming together' of various skilled professionals on a built heritage project not only facilitates the assimilation of various experiences, educational backgrounds, training and standards requirements and best-practice guidelines, but in turn also relies on the allegiance and collaboration of an integrated team of 'generalists and specialists' (Orbasli, 2008: 8). This article is interested in exploring the relationship between the diverse members of this integrated team, in particular the perceptions between the architect<sup>2</sup> - as representative of the 'generalist', and the traditional building craftsperson – as representative of the 'specialist'. To elaborate further, the architect is not formally educated in a particular specialism (Orbaşli and Whitbourn, 2002: 70), and therefore when working with built heritage is expected to have good knowledge across all fourteen skills outlined under paragraph 5 of the ICOMOS (1993) Guidelines for Education and Training for the Conservation of Monuments and Sites (AABC, 2019; see Royal Institute of British Architects, 2014: 5). This demand for a wide-ranging skillset in turn makes the architect a more generalised heritage practitioner within the scope of a built heritage project<sup>3</sup>. By contrast, a craftsperson is a more specialised individual, demonstrating skills that represent '...the special human condition of being engaged' (Sennett, 2008: 20). More specifically for heritage projects, these skills are concerned with knowing how to carry out building repairs without creating any further damage to the physical building fabric (Waterson, 2019: 1). We can further define the traditional building craft role as one that is committed to hands-on skills and physical materials – for example, the stone mason focuses on maintaining a '...thorough knowledge of the material and the tools with which to manipulate this material' (Klinger, 2001: 240). Despite these differences, the professional work of the architect (generalist) and contemporary craftsperson (specialist) typically overlaps on a built heritage project (Jones and Yarrow, 2013: 7), with the success of the project undoubtedly underpinned by the success of the relationship between these two very different roles. This is particularly evident if viewed through the lens of Richard Sennett, who emphasises a transferability of understanding and improvement between craft and human relationships:

...the craft of making physical things provides insight into the techniques of experience that can shape our dealings with others. Both the difficulties and the possibilities of making things well apply to making human relationships. (Sennett, 2008: 289)

As will be explored in this article, the human relationship between architect and craftsperson has been continually tested – unified and fragmented – through a shared history of perceived divisions between 'minds/bodies, manual/non-manual, and dirty/clean' (Thiel, 2007: 245); or '...thought and practice, head and hand, mind and world' (Yarrow and Jones, 2014: 258). The two roles were once naturally unified under the mythical medieval role of 'master builder' and ultimately fragmented due to

industrialisation, Fordism and '...a myopic focus on cost' (Thomas et al., 2002: 2). Fleeting attempts at reunification have followed, for example, such as the successes of the nineteenth century Arts and Crafts Movement (Dormer, 1997: 35), however, the impact of their fragmentation has led not only to a disintegration of building culture, but also to the repression and erosion of the craftsperson and their role (Cohen, 2011: 11; Frampton, 2004: 42; Furján, 2003: 6).

Set against both the historical backdrop and the contemporary comingling of roles, this study seeks to examine the present-day status of the relationship between architect and craftsperson. What is the status of contemporary perceptions between these two historical bedfellows and how might a historical hangover of perceptions impact a modern-day built heritage scheme? The study begins with a historical account of the relationship between architect and craftsperson, and follows with a comparative analysis of empirical data to gain insight into present-day perceptions of their roles, responsibilities, and interactions. In particular, the study is interested in exploring the following research questions:

- (1) How do architects and craftspeople perceive their own role on a built heritage project?
- (2) How do architects and craftspeople perceive each other's role on a built heritage project?
- (3) What are architects' inherent perceptions of traditional building craft, particularly as a method to enhance relationships on a built heritage project?

#### 2.0 Literature review: a shared history

#### 2.1 The master builder: architect and craftsperson

Since the age of Vitruvius and his treatise on architecture entitled De Architectura, there has been an acknowledgement of the difference between the practical and theoretical

aspects of knowledge and skill. This is outlined within Morgan's 1914 translation of Vitruvius (Morgan, 1914):

Practice is the continuous and regular exercise of employment where manual work is done with any necessary material according to the design of a drawing. Theory, on the other hand, is the ability to demonstrate and explain the productions of dexterity on the principles of proportion.

Many scholars believe the relationship between theory and practice has reflected a social dilemma, with its roots in the association of slaves with manual work and freemen with the time and luxury to think and ponder (Ayres, 1998: 8). This perception changed throughout medieval Europe with the long period of competitive cathedral building which facilitated the emergence of the 'master'<sup>4</sup> (hereafter 'master builder'). The master builder was extremely knowledgeable and creative in traditional building methods (Karakul, 2015: 137), with their knowledge passed on through a structured guild system that provided a continuity of skills (Jacobs, 2016). Within medieval Europe, apprentices began as labourers, became layers, then maybe carvers. If the individual was believed to be skilled, they would become a master mason's apprentice and learn about design (Ousterhout, 2008: 52). The master builder, having gained experience across a number of hands-on roles and stages of a building project, was at the peak of practical building knowledge - overseeing the practical and theoretical aspects of building. This reliance on the guild system not only supported the development of skills and knowledge in building, but also became a vehicle of social mobility for those who became particularly skilled (Ayres, 1998: 9).

#### 2.2 The rise of the architectural profession

In England, building projects were heavily centred around the medieval craft guild system up to the early eighteenth century (Davis, 1995: 125), when there was the eventual emergence of the formalised 'building professional'. Thiel (2007: 229) highlights three major factors which led to this, namely: the invention of the printing press; industrialisation/ mature capitalism; and mass production/ pre-fabrication. These factors – directly emergent from the process of the Industrial Revolution – added new layers of organisational and administrative complexity to a building project, creating a new hierarchy which placed all craft trades under the umbrella of a single employer – the newly emerged contractors and subcontractors (Cooney, 1955: 167; Thiel, 2007: 229). The once *craft-structured* guild system that placed control of design, building and wages within the hands of those doing the work (the 'guildsmen'), was now superseded by a recognisably modern system that placed the contractor in a position of power, regardless of whether they were a 'master' of any specific craft (Cooney, 1955: 171).

This shift towards a more recognisable building construction industry developed at a time when advances in architectural theory were also occurring in Renaissance Italy. The combination of these major global developments went some way towards setting the scene for a formalised architectural profession, which emerged in England from 1768<sup>5</sup>. At this point in time, there were also a variety of informal routes to becoming an architect throughout the eighteenth century (Crinson and Lubbock, 1994: 8). This remained the case up until the nineteenth century when there was 'the eventual triumph of a professionalised vision of the architect that was narrowly focussed and extraordinarily powerful' (Crinson and Lubbock, 1994: 38). This newly formed profession was now representative of itself, with the RIBA formed in 1834 for 'the general advancement of Civil Architecture' (Royal Institute of British Architects, 2016). Fused with the international popularity of the Beaux Arts style of architecture, architectural education was no longer a hobbyist pursuit for the casual entertainment of the upper classes (Ayres, 1998: 8). It was now perceived as a legitimate educational pathway that placed emphasis on designing high quality masonry and carpentry, as well as methods for assessing completed works (Woods, 1999: 70).

#### 2.3 The decline of traditional building craft

The learning of design methodologies within the newly formed architectural educational pathways (as opposed to the *practise* of practical building skills) encouraged architectural students to develop design drawings in an abstract and isolated manner, and traditional building craft training was explicitly excluded from the architectural student's scope of study (Crinson and Lubbock, 1994: 76; Woods, 1999: 53). This exclusion of traditional building craft was in part fuelled by the belief that technological advancements could negate the need for craft skills (Dormer, 1997: 3). Many architects of the latter pre-modernist era embraced the technological advancements and Fordist production methods of the internationalised 'new world' (Cohen, 2011: 11). For example, architects such as Adolf Loos called for an 'aesthetic of radical simplification'<sup>6</sup> (Masheck, 2013: 87), which in-turn influenced a reappraisal of architectural design methodologies. Ultimately, this reduced the demand for skilled carvers and decorators and contributed towards the erosion of their status and role (Furján, 2003: 6).

We can thus posit the demise of the craftsperson (at least in the guild system sense of the role) was a consequence of four major factors: 1) the industrialised and

prefabricated framework of the modern building industry; 2) the rise of the contractor who appropriated control and power; 3) the emergence of the formalised architectural profession that carried out the 'intellectual' design work; and 4) the development of premodernist architectural aesthetic theory that reduced the demand for skilled carvers. These factors consequently demoted craftspeople '...into the working class, forced to sell their casualized [sic] labour to undertake manual "dirty work"' (Thiel, 2007: 230), and is unquestionably intertwined with the formalised legacy of professional architectural practice.

## 2.4 Project relationships and serious play

This article has already highlighted the multi-disciplinary nature of a built heritage project. It is also acknowledged that design projects (which a built heritage project is becoming more akin to<sup>7</sup>) also consists of and requires specialist knowledge from a variety of professional domains (Sonnenwald, 1996: 277). Yet what of the relationships between these various professionals? Sonnewald (1996: 295) highlights the difficulties surrounding communication on a multi-disciplinary project, and how in-turn this can negatively impact the project outcome. Any difficulties in communication that may impact the relationship between architects and craftspeople could be overcome through 'serious play' – that is, the ability to 'play' with real materials in order to enhance innovation and communicate '…the critical thinking inherent in the activity of making' (Gore, 2004: 1). Carpenter (1997: xi) believes introducing a more 'hands on' aspect to the architectural role through traditional craft-based tasks could facilitate cross-disciplinary approaches that not only enhance the architect's knowledge of traditional materials, but also enhance communication skills between the two disciplines. In turn,

this could bring architects *closer* to the process of craft, and therefore closer to the mindset and perceptions of the craftsperson. Leaving the 'conceptual' and 'representational' notions of the architectural role behind (Christensen, 2008: 3), serious play can therefore encourage what Rieber (2001: 4) describes as an 'experience first, explain later' approach. Although studies that connect traditional building craft with architecture primarily focus on architectural education (Carpenter, 1997; Djabarouti and O'Flaherty, 2019; see Gore, 2004), this study posits the proposed benefits purported by these studies would be equally relevant and advantageous to employ at professional practice level and particularly within a multi-disciplinary built heritage project team, which can often be subject to issues of quality control (Orbaşli and Whitbourn, 2002: 61).

We must also address the cultural and social aspects of a built heritage scheme and the *act* of traditional building craft skills. Cody and Fong describe conservation as a '...social and interpretive act, centred around the material creations of culture' (2007: 265). Oftentimes when we speak of the 'social' with regards to the built heritage, we speak in terms of the wider society – of the people who will use and appreciate the built heritage upon completion of the project. However, we can also interpret the coming together of various professionals as a temporary multi-disciplinary micro-society. Formed to serve the needs of the historic building, they must (at least temporarily) attempt to reconcile their views and understandings. As Thomas et al. (2002: 12) explain:

Commonly accepted social, economic, political and procedural understandings reduce conflict within the organisation and enhance communication and coordination, and increase the ease with which project objectives are achieved. What might be the commonly accepted (or disputed) understandings for architects and craftspeople, and how do they relate to their shared history? Furthermore, what role might traditional building craft, in the guise of 'serious play', have in the enhancement of perceptions and relationships between these two related but distinctly separate professional bedfellows?

## **3.0 Empirical Research**

## 3.1 Surveys introduction

Building on the historical analysis of the relationship between architects and craftspeople, this study administrated two surveys in 2018 in order to understood the contemporary perceptions between architects and craftspeople.

#### 3.2 Survey design

The surveys (one to a group of architects who work on built heritage, the other to traditional craftspeople) were designed to address the underlying research aims of the study. Initial screening questions were included in each survey to ensure only relevant respondents were recruited. Following the screening questions, a mixture of quantitative and qualitative questions were used to gain statistical data whilst allowing for elaboration and to gain further insight into the statistics obtained. The quantitative questions used included multiple choice and single choice questions, as well as Likert-type scales, which 'build in a degree of sensitivity and differentiation of response while still generating numbers' (Cohen et al., 2007).

Excluding initial screening questions, the architects survey contained a total of 18 questions (11 quantitative and 7 qualitative) (refer to Tables 1 and 3), and the survey

to craftspeople contained a total of 13 questions (9 quantitative and 4 qualitative) (refer to Tables 1 and 2). The lower number of questions for the craftspeople survey was a result of feedback from piloting, where craftspeople highlighted the need for the survey to be as short and succinct as possible, due to their role not being a 'desk based' activity and them not spending much time at a computer.

## 3.3 Details of participants

## 3.3.1 The architects

26<sup>8</sup> architects regularly involved in built heritage projects responded to the survey. The survey was distributed as a web link in three ways: 1) via the official Institute of Historic Building Conservation (IHBC) LinkedIn Group; 2) via the mailing list for the Manchester Society of Architects; and 3) through direct distribution to gatekeepers of well-known architectural firms within the Greater Manchester region<sup>9</sup>. These methods led to the majority of respondents being from the Greater Manchester region, although overall participants were UK wide.

Table 1 – Shared	questions acros	s architect and	craftsperson	surveys
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1	Scale: On a scale of 1 to 5, how involved are you in the conservation of historic buildings?
2	Scale: If you were trying to learn about a new subject, how effective do you think the following learning methods would be? 1) Learning through 'theory'; 2) Learning through hands-on experience.
3	Scale: Why do you think this about the effectiveness of learning conservation architecture through 'doing'?
4	Open: What do you think is the primary advantage of learning architecture through hands-on participation?
5	Open: What do you think is the primary disadvantage of learning architecture through hands-on participation?
6	Scale: In which of the following ways is learning through 'doing' (e.g. workshops, craft classes, hands-on participation) beneficial? 1) Helps to understand the end result; 2) More interesting; 3) More memorable
7	Scale: How much do you agree with the following statement: 'Individuals learn more about building materials when they physically touch, handle and manipulate them'.
8	<ul><li>Scale: How much do you agree with the following statements: 1) Craft is an activity involving skill in making things by hand; 2) Craft is something that can be taught to someone else; 3) Craft is knowledge passed down through generations; 4) Craft is still as relevant in today's society as it was 200 years ago; 5) Craft is something anyone can do with enough practice and repetition; 6) Craft can be a digital process not necessarily involving a manual activity</li></ul>
9	Choice: Who do you feel is best placed to choose the most appropriate methodology for cleaning stonework? 1) the craftsperson; 2) the conservation architect; 3) other heritage professional; 4) main contractor
10	Open: Why do you think this role is based placed to advise on stone work cleaning?

Table 2 – Questions specific to craftsperson survey

11	Scale: How much do you agree with the following statement: 'Conservation architects are knowledgeable about building materials and understand material properties, causes of material defects and repair/remedial solutions'.
12	Choice: How would you best describe your role and relationship with a conservation architect: 1) I expect the conservation architect to provide me with details and specifications, telling me exactly what I need to do; 2) I expect the conservation architect to provie an initial proposal for me to feed into with specialist knowledge and guidance; 3) I expect to be consulted directly by a client and often give advice to conservation architects for conservation works
13	Open: Why do you think this about your relationship with the conservation architect?
	Table 3 – Questions specific to architect survey
11	Scale: How often have you had the opportunity to learn through hands-on / practical experience?
12	Scale: How effective have you found these hands-on experiences in helping you understand the topic?
13	Open: Why do you think this about the effectiveness of hands-on experiences?
14	Open: You must attend a 2 hour lecture on stone masonry. How do you feel about this?
15	Open: You must attend a 2 hour hands-on workshop on stone masonry. How do you feel about this?
16	Scale: How often do you interact with craftspeople?
17	Choice: How would you best describe your role and relationship with craftspeople: 1) I expect the craftsperson to carry out the work to my reports/ philosophies/ details/ specifications; 2) I expect the craftsperson to give specialist advice and I am happy to accommodate their advice into the proposals; 3) I expect the details and complexities concerning the repair, replacement or cleaning of specific materials to come directly from the craftsperson

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Open: Why do you think this about your relationship with the craftsperson?

#### *3.3.2 The craftspeople*

72 craftspeople responded to the survey, representing a variety of craft trades. Their crafts ranged from the more common trades such as 'carpentry' (15%) and 'stone masonry' (21%), through to more obscure trades such as 'seat weaving' and 'medieval tile making'. The survey was distributed as a web link to primary and secondary

contacts, but primarily via the National Heritage Training Group's (NHTG) mailing list, which led to the respondents being from a variety of locations from across the UK<sup>10</sup>.

## 3.4 Analysis method

For quantitative data, the prepared data was analysed in SPSS to produce descriptive statistics. For qualitative data, content analysis was used, which was executed not just by word counting, but by 'examining language intensely' to generate categories of both explicit communication and inferred communication (Weber, 1990).

## 4.0 Results

## 4.1 Results introduction

Survey results were analysed in two stages. Firstly, codes were generated under three headings: 1) combined survey themes; 2) architect survey themes; and 3) craftspeople survey themes (refer to Table 4).

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Table 4 – Top 15 codes derived from both individual and combined survey analysis.

	Top combined survey codes
1	Built heritage project should be a team effort
2	Specialist input is crucial
3	Various professions/trades can learn from one another
4	A good working relationship is essential
	Top architect survey codes
5	Architect is aware of more options to overcome barriers
6	Architect is custodian of overall philosophical vision
7	Architect is the link across the job (between people and knowledge)
8	Craftspeople are specialists
9	Learning through 'doing' contextualises knowledge
10	Learning through 'doing' is more effective
11	Logistical and time-based barriers in attempting hands-on learning
	Top craftspeople codes
12	Craftspeople are custodians of material understanding
13	Architect's knowledge is not specialist
14	A mixture of practical and academic knowledge is essential
15	Communication and healthy debate should be encouraged

Secondly, these initial codes were further organised under two main themes for further analysis: 1) the roles and responsibilities of architects and craftspeople; and 2) utilising traditional building craft to enhance relationships.

## 4.2 The roles and responsibilities of architects and craftspeople

Results from the survey indicated that architects believe craftspeople have a specific role within a built heritage project, with 77% expecting the craftsperson to give specialist advice. They saw their own role as being responsible for appropriately accommodating this specialist advice into the overall built heritage project:

'Architects should make informed decisions by referring to those more experienced' (architect respondent) Through analysis of the qualitative survey data, it was found that this expectation arose from the belief that the specialism of the craftsperson would aid in better decision making and would therefore help to bolster the architect's position as the primary link between the craftsperson and other team members and stakeholders on a built heritage project:

'[The] Architect is [the] custodian of [a] coherent vision, including [the] craftsperson's own philosophies' (architect respondent)

It was felt that collaboration and communication are essential in ensuring this link between the two groups:

'Communication between professional and craftsperson is essential' (architect respondent)

'Good outcomes depend on a readiness to work together' (architect respondent)

Comparatively, only 58% of the craftspeople expected the architect to provide an initial proposal for them to feed into with specialist knowledge, suggesting a difference in perceptions between the two groups. However, craftspeople did agree with architects that there is a need for a good working relationship:

'No one has all the answers so you need to work together' (craftsperson respondent)

Craftspeople further added that the two groups could learn a lot from one another if they effectively collaborated and worked together:

'Architect and craftsperson should learn from each other' (craftsperson respondent)

'Respect each other's understanding and be willing to consider changing things' (craftsperson respondent)

However, less than half (44%) of the craftspeople believed that architects are adequately knowledgeable about building materials, understand material properties, understand causes of material defects, or can give suggestions for repair/ remedial solutions. Ultimately craftspeople felt that an architect's knowledge is too general to be able to tell them exactly what to do, which creates a tension between the expectations of the relationship and the perceived reality of what is achievable:

'I would not expect the architect to understand the finer points of traditional craft' (craftsperson respondent)

'[The] Architect has broad knowledge but a craftsperson has specialist knowledge' (craftsperson respondent)

There were also stark differences between the two groups when shown an image of a cleaned piece of carved stonework and asked who they believed would be best placed to choose the most appropriate methodology. Craftspeople were more likely to think they would be best placed (62%), whereas architects were more likely to think it should be them who makes the decision (also a 62% majority). The architects believed they would be more aware of multiple cleaning options, as well as being best placed to appraise the appropriateness of particular conservation options, based on their perceived position of themselves as overall custodians of the philosophical vision for the built heritage project:

'Architect responsible for developing philosophy for cleaning' (architect respondent)

'Architect can establish the correct conservation philosophy and method statement' (architect respondent)

Conversely, craftspeople favoured themselves based on their enhanced material understanding and because they will be physically carrying out the work.

'Craftsperson has spent their whole life dealing with the material so if they are masters they will be up to date with cleaning methods' (craftsperson respondent)

'People who do it know it best' (craftsperson respondent)

Whilst these differences in understanding were strong, the analysis of qualitative data associated with this survey question found that overall both groups agreed it should be a team approach, with both commenting on the need for 'specialist' input for an issue such as stone cleaning:

'Each person brings something to the table from their experience and knowledge' (craftsperson respondent)

Alongside the difference in perceptions, there was also found to be a lack of interaction between the two groups, with only 29% of the architects saying they frequently interact with craftspeople. If, as stated prior, architects expect the craftspeople to provide specialist knowledge, then it appears they do not frequently engage directly with the craftsperson to see how this knowledge is derived and developed.

## 4.3 Utilising traditional building craft to enhance relationships

Whilst working on built heritage projects, architects generally had low hands-on experience of engaging with craftspeople, their craft, and their approaches towards building materials, with only 34% stating they frequently get the *opportunity* for this type of experience. Despite this lack of experience, 91% of the architects believed they *would* learn more about building materials if they were able to physically touch, handle and manipulate them. Analysis of the follow-up qualitative data to this statistic revealed that the architects believed hands-on experience is a more effective learning method that would allow for better absorption of information relating to the project building:

'More memorable and easier to visualise for applying to work' (architect respondent)

'Better understanding of the building [and] the repair process' (architect respondent)

The architects also believed hands-on experience would enable them to develop a deeper understanding of building materials, tools and handling:

'You cannot understand a material without handling and using it' (architect respondent)

'Seeing the work in context helps it make more sense' (architect respondent)

Alongside this, the architects also stated more interaction with building materials, craft, and craftspeople would provide an essential *link* between theory and practice on the built heritage project:

'Essential link to theoretical knowledge' (architect respondent)

'Being able to put theory into practice' (architect respondent)

It was also felt an improved understanding of specific building materials resulting from more interaction with building materials, craft, and craftspeople would improve the architect's ability to make better practical decisions:

'Improved understanding of materials and technique' (architect respondent)

'Helps avoid suggestions that aren't practically possible' (architect respondent)

In the context of the aforementioned finding that craftspeople feel architects do not have enough specialised knowledge to give specific instructions to them on a built heritage project, this improved material understanding from architects could in turn help to encourage better on-site relationships:

'Better understanding of craftspeople' (architect respondent)

'Ability to put yourself in the shoes of people on site' (architect respondent)

Whilst the architects clearly felt there would be advantages to more interactions with craftspeople and craft on a built heritage project, there were a number of barriers that were highlighted by them with regards to achieving this level of interaction. The architects felt it would likely be too time consuming to interact with craftspeople and their craft at the level required to fully appreciate their knowledge and understanding of their craft. They were also conscious of too much focus on craftspeople and building craft, to the detriment of other relevant branches of knowledge, as well as to the detriment of a more generalised knowledge base of the wider frameworks and working of the built heritage project. Therefore, whilst the architects generally believed that increasing engagement with craftspeople and building craft has clear tangible benefits for architects, it needs to be a part of a wider learning framework that integrates with theory:

'[Craft] Needs a balance with theory and legislation' (architect respondent)

'[Architects] Need to be aware of the theory behind the conservation techniques' (architect respondent)

#### **5.0 Discussion**

'The maker is not dependent on the authority of an outside critic to predict the future success or failure of the thing made.' (Gore, 2004: 13)

Both the craftspeople and architects who engaged with this study were in agreement that the craftsperson has specialist knowledge. Yet when it came to the architect, there were differences in perception relating to their role. The architects believed their unique role was to have a clear knowledge of the wider framework(s) of a built heritage project ('the bigger picture'); however, this was perceived by craftspeople as being too general a remit to provide specialist knowledge or guidance to the specialist craftsperson. This can be observed as a primary underlying tension in the relationship between architects and craftspeople. The craftsperson is indivisible from the building fabric, having learned

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their craft through 'sensory perception. . . practical engagement. . . [and] participating in a world of materials' (Ingold, 2007: 13). They see themselves as part of a lineage, or tradition, of craft practice transmitted across generations (Karakul, 2015: 136; Yarrow and Jones, 2014: 261), which as previously highlighted, predates the arrival of the formalised 'architect' professional. Conversely, the architect believes that '...the conservation of historic buildings should be undertaken by architects' (Orbasli and Whitbourn, 2002: 71), which from their perspective involves a wider skillset and more generalised tasks, such as the identification of original/ additive building fabric, the interpretation of project information to clients and the coordination of work from all other professions on the project (Feilden, 2003: 12). Based on this remit, it would not be possible for the architect to have the level of specialised knowledge relating to building craft and materials that the craftspeople expect of them. Yet their role still involves inspecting and assessing quality and uncovering errors with particular site works (Thomas et al., 2002: 5), including the completed work of the craftsperson. The work of the craftsperson (the specialist) is therefore judged through the work of the architect (the generalist), creating a setting for a dubious and tense relationship founded on a clash between perception, role and authority on a built heritage project – echoing a tension founded within the historical transference of power and control from practical builder to theoretical designer. This was exemplified in the aforementioned survey results regarding advising of appropriate cleaning methodologies for carved stonework, where both groups perceived their own skillset to be the most appropriate for advising a methodology - but for completely different reasons. The craftspeople relied on their material knowledge and practical understanding and the architects relied on their general knowledge of more cleaning options, the overarching philosophical departure point of the project, as well as their knowledge of the wider legislative framework.

Based on this perceived variance in knowledge between architects and craftspeople, both agreed there was a benefit to a good working relationship between them, believing this could be achieved through increasing collaboration and communication on built heritage projects. Architects believed more exposure to building craft and the craftsperson would not only improve relationships but would also be of benefit to the architect's knowledge base, by increasing their material understanding. This would go some way towards closing the gap between perceptions of manual dirty work and non-manual clean work by emphasising the critical thinking that takes place throughout the process of traditional building craft (Gore, 2004: 1; Thiel, 2007: 230). From this perspective we can posit the goal is not necessarily to teach the architect a comprehensive knowledge of craft specialisms, but to instead break down perceptual barriers and increase understanding of each other's roles. Referring back to Richard Sennett, an exposure to building craft not only has knowledge and educational consequences for the architect, but also 'social consequences', whereby '...the capacities our bodies have to shape physical things are the same capacities we draw on in social relations' (2008: 290).

However, architects did not feel they had opportunities to engage with craftspeople, building craft and building materials in this way, attributing this to a number of logistical and practical constraints, such as it being too time consuming, difficult, exclusive, and specialised. Though respondents did not offer any specific methods for overcoming these constraints, an increase in informal interactions between architects and craftspeople – instigated by architects – when drafting up project

proposals and visiting site, would be a fundamental starting point. This could also be more formally addressed through integrating hands-on involvement with craftspeople and their craft within an architect's 'continued professional development' (CPD), which should comprise of at least 35 hours of learning per year<sup>11</sup>.

#### **6.0** Conclusion

Architects and craftspeople work together on complicated built heritage projects. Throughout history, the idealised 'master builder' role has been fragmented in order to develop a broad range of both generalist and specialist roles across practical and theoretical disciplines. The rise of the architectural profession (and subsequently other built heritage professions) led to a decline of the craftsperson – both socially and professionally. The transference of power and control from the practical builder to the theoretical designer; and from a guild system to an industrial system; is the foundation of contemporary building conservation culture, from which current perceptions across disciplines are grown and fostered on built heritage projects.

These perceptions were comparatively assessed with regards to how more hands-on engagement with the craftsperson, their craft and their building materials may impact these relationships and perceptions. Overall, the results indicate a difference in perception of the architect's role, with craftspeople expecting more specialised knowledge from individuals who are tasked with inspecting their work. Conversely, the architect does not feel this is necessary, with the knowledge of wider project constraints taking precedence over specific craft knowledge. The architects were open to accommodating more exposure to craftspeople and their craft within their day-to-day role, which would in turn help to foster a better relationship between the architect and craftsperson by breaking down misconceptions; integrating practical realities within theoretical proposals; and encouraging more informal communication within an environment underpinned by 'serious play' with materials – either informally on site or formalised through an architects CPD requirements.

In conclusion, traditional building craft can form an essential, tangible bond between architects and craftspeople by increasing focus on relationships and learning (see Figure 1). By increasing the focus on relationships, the use of craft can improve communication and the respective perceptions of each other's roles. By emphasising the importance of learning, particularly from the perspective of the architect, the knowledge and understanding between the two roles can be improved. To achieve this, increased interaction is essential to break down any barriers in the form of unfounded perceptions, and could manifest informally via CPD workshops and learning/educational activities, or more formally within the context of a built heritage project via more meaningful interactions on site or at craft workshops. Perhaps too, a focus on this relationship may forge new narratives in relation to the practical use of craft within built heritage schemes. If conservation is indeed a social act, and craft skills are the symbolic activity of previous generations, then ultimately traditional building craft is already concerned with serving people. It therefore has the capacity to be concerned with repairing the *relationships* between those people, alongside the repair of historic buildings. AM (Accepted Manuscript). This revised article has been accepted for publication in ARCHNET-IJAR: International Journal of Architectural Research, published by Emerald. The final published version is available at the following DOI: https://doi.org/10.1108/ARCH-01-2020-0010



Figure 1 – Benefits of traditional building craft integration (Source: author)

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#### Endnotes

- [1] Many disciplines that are not traditionally associated with having specific heritage expertise now also offer this specialism, for example: heritage planners, heritage project managers.
- [2] This article defines the role 'architect' as an individual who is registered with the Architects Registration Board (ARB) and actively works on built heritage projects. Many architects who work with built heritage (namely listed buildings) are qualified to use the title 'conservation architect' through formalised accreditation from recognised bodies (such as the Royal Institute of British Architects 'CA' or 'SCA' accreditation, or the Architects Accredited in Building Conservation accreditation pathway). However, conservation accreditation is not a prerequisite for architects to work on built heritage in the UK, which means there are many architects who have considerable experience working with built heritage but are not necessarily 'accredited', nor practise using the title 'conservation architect'. Therefore, the definition of 'architect' for the purpose of this article places an emphasis on experience over accreditation.
- [3] For example, all desk-based heritage professionals must be able to demonstrate a variety of skills such as: the interpretation of a building's significance; the diagnosis of material decay; the understanding of relevant heritage policy, and the ability to manage the needs of various stakeholders (ICOMOS, 1993:2). There are also other varied skills required, such as the ability to design and construct reports (Orbasli, 2008:9).
- [4] Also referred to as 'master mason', 'master builder', or 'master architect'.
- [5] See Crinson and Lubbock (1994:8); in conjunction with the founding of the Royal Academy. For context, it is also worth noting that neighbouring France established an architectural profession before England, in 1729 (see Hart and Hicks (1998:354); architectural competency standards set by Victor Amedeus II).
- [6] Based on his manifesto 'Ornament and Crime' of 1913.

- [7] This is due to the shift in approach on built heritage schemes, which are beginning to focus less on 'conservation' per se, and more on an approach of 'adaptive reuse' (Plevoets and Cleempoel, 2019:1), which turns the built heritage scheme into a challenge for designers as well as conservators (Mısırlısoy and Gan Günç, 2016:91). The architect therefore becomes a central figure as the project will rely on creative processes and design skills to successfully re-use existing buildings (Orbasli, 2008:6).
- [8] Hogg, et al. (2015) state between 25-30 respondents per survey will normally ensure statistically relevant results.
- [9] Due to the nature of the survey distribution (larger, less controlled distribution with screening questions), it was not possible to gauge the response rate, as the number of architects who actually received the survey was not quantifiable.
- [10] The survey was sent to a total of 6312 craftspeople, the bulk of which were on the National Heritage Training Group mailing list (6250), with the rest being a mixture of primary contacts and secondary contact through organisational gatekeepers. As the distribution numbers for the craftspeople survey was quantifiable, a response rate of 1.14% (based on 72 respondents) can be calculated. This is poor but was anticipated based on the aforementioned feedback at piloting stage. For context, Nulty (2008) states the average response rate for an online survey is 33%.
- [11] As per the CPD requirements of the Royal Institute of British Architects; see: https://www.architecture.com/education-cpd-and-careers/cpd/fulfilling-your-cpdobligations