# BRIDGING BETWEEN HISTORY AND ORGANISATION STUDIES: MAKING THE CASE FOR ARCHIVAL RESEARCH IN CONSTRUCTION MANAGEMENT

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The construction management (CM) research community makes limited use of archival sources. A plethora of archival sources exist in the form of documents and visual representations and are often found within project or organisational records. Such artefacts tend to be cast as 'secondary data' which are seen as complementary to supposed 'primary data' such as that derived from interviews. Despite the increasing recognition of archival sources, there remains a paucity of reflexive dialogue on archival methodology within the CM research community. In particular, the issue of emplotment as it relates to the creation of archives and their subsequent interpretation requires methodological attention. Examples are drawn from the current DEGW archive project which seeks to pilot the concept of a 'living archive'. Curation is proposed as an archival research method to address the issue of emplotment. A reflexive account of emplotting archival sources is offered based on two empirical vignettes. It is contended that CM researchers should heed the call of organisational historians for methodological reflexivity which goes beyond taking documentary sources at face value.

Keywords: archival research, curation, DEGW archive, emplotment

## INTRODUCTION

Archival datasets are of minority interest within the construction management (CM) research community in comparison to a continued widespread reliance on questionnaire surveys and semi-structured interviews. A search of the ARCOM database of 12,270 abstracts reveals only 50 references to archival research.[2] Moreover, archival sources are often used as secondary data rather than being perceived as primary sources. Dainty's (2008) analysis of 107 papers from Construction Management and Economics Volume 24 revealed that only three papers adopted 'document analysis' as a research method, and these were primarily as part of a broader case study methodology. The dearth of archival research within the CM community has also resulted in a lack of a methodological dialogue around archives. This stands in stark contrast with the diverse methodological discussions which have taken place around case study and ethnographic research. Archival research within the CM community begs its own methodological space. The purpose of this paper is to initiate a methodological dialogue around archival research by discussing empirical

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[2] A search for the truncated keyword "archiv" (to include both terms archival and archive) in the ARCOM database was carried out on 5th April 2018.

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accounts of working with the DEGW[3] archive. Insights are drawn from the reflections of organisation historians as they attend to epistemological differences between organisation researchers and historians. In particular, the issue of emplotting archival sources in the research process is unpacked through the empirical accounts. Two empirical vignettes are discussed: Making a chronology and sensing research themes. Particular emphasis is given to the notion of a 'living archive' whereby archival sources are used as a medium for knowledge creation involving the active participation of academia and practice through the mode of curation.

## Need for Reflexivity in Archival Research

Selected examples of the use of archival sources within CM focus on health and safety practices (Alkilani *et al*., 2006), adoption of innovative technologies (Azri *et al*., 2012) and institutional effects on project arrangements (Chi and Javernick-Will, 2011). It follows that archival sources can be analysed to study a wide range of sociological and cultural phenomena, both through qualitative and quantitative approaches. Archival sources have also been combined with a variety of theoretical frameworks, including: Institutional theory (Chi and Javernick-Will, 2011), actor-network theory (Grabowski and Mathiassen, 2013), situated nature of knowledge (Ness, 2010) and systems theory (Azri *et al*., 2012). Despite this theoretical diversity there is little recognition that research problems pertaining to 'time' and 'causality', which are central concerns of historical explanation, can be investigated through archives (cf. Jordanova, 2006, p.41). Archives can be mobilised to study a phenomenon at a certain point in the past (Ruchinskaya, 1996), or longitudinally over a certain period of time which might even lead up to the present (Gosling *et al*., 2015), or to compare different temporal states (Ness, 2010). Despite the potency of archival sources a critical and reflexive dialogue on archival methodology is notably absent from the domain of CM research.

A useful starting point for methodological discussion is to probe the very idea of an 'archive'. A professional archivist might define an archive in terms of materials that have been preserved because of the enduring value of the information that they contain (Pearce-Moses, 2005, p.30). However, a broader definition might emphasise the quality of 'trace' that can provide meaningful access to the past. Moore *et al*., (2017) conceptualise an archive as a repository that might not necessarily be in the form of a paper-based document (p.1). They suggest that an archive can be in a form of other tangible objects such as a building or a website; or an archive might even be in an intangible form such as a discourse of interconnected ideas. Very few CM researchers who cite archival research provide a list of specific archival sources or even discuss the nature of the archive they are studying. Moreover, there is seldom any discussion of how a source is interpreted and what contribution that source makes to empirical or theoretical understanding (as with the case of quoting interview excerpts). Even more notable is the limited extent to which CM researchers who rely on archival sources offer any methodological reflection. Partial exceptions include Rasmussen *et al*., (2017), Gluch and Svensson (2017), Holt (2016), and Lucko and Mitchell (2009). The limited discussions offered by such authors echo the broader theoretical chasm which exists between historical theory and organisation theory (Rowlinson *et al*., 2014; Decker, 2016). Rowlinson *et al*., (2014) identify three

[3] DEGW is not an acronym, but the name of the firm. Sources from the DEGW archive suggest that the firm used the name 'Duffy Eley Giffone Worthington' during 1970s-80s, reflecting the last names of its founders.

epistemological dualisms that tend to differentiate organisation theorists from historians: (i) explanation, (ii) evidence and (iii) temporality. Their framework is not intended to be definitive and is one of many approaches which is used to characterise research occurring at the interface of history and organisation studies (Decker, 2016). However, the framework provides a good basis for methodological reflexivity in the context of CM research. The issue of emplotment within the formation of archives and analysis of archival sources is of particular importance.

## Towards an Understanding of Emplotment

It should be stated from the outset that the past is increasingly recognised as an important empirical context amongst CM researchers, not least because of the shaping influence of path dependency (Green *et al*., 2008; Hemström, 2017; Mahapatra and Gustavsson, 2008). Those influenced by new institutionalism are especially prone to recognise that 'history matters'. Indeed, there has in recent years been increasing interest in the way CM as a discipline has been constituted over time (Green, 2011). There is however a danger that researchers see archival sources, and by extension the past more generally- as repositories of ready-made data. But historical narratives are rarely neutral, and claims to objectivity in the way in which the past is presented are increasingly discredited.

Archives are subject to emplotment at various stages of their life - from their creation and throughout the ongoing process of acquiring new materials. They are also subject to emplotment when researchers chose which sources to use and which to ignore. There are hence two manifestations of emplotment when working with archival sources. First, the sources themselves are emplotted at the time of their making. If archival sources are to be mined for data, it must therefore be understood that they have to a greater-or-lesser extent been 'written'. Moreover, archival sources reveal the idiosyncratic epistemologies of their creators. The past is invariably interpreted with at least one eye on the future (Foster *et al*., 2017). Conscious choice has been exercised in terms of which artefacts have been kept, and which have been rejected. The artefacts which are judged to be worth keeping are therefore indicative not only of the past, but also of a desired future direction of travel. This idea of bridging between the past and the future is of central importance to the notion of emplotment. It is perhaps a lazy truism to say that history tends to be written by the victors, but a similar bias is evident in the formation of archives. The choices are made by those who are in a position to make them. Hence, the history of medieval England is heavily skewed towards royalty and the clergy. Social history only became possible due to the invention of the printing press. Second, researchers selectively emplot archival sources in the narratives that they construct. Czarniawska (2010) explains emplotment as a logical structure, which is introduced as a thread to make sense of seemingly disparate events. A given set of events could conceivably be weaved into a plot in a variety of different ways. Moreover, the events that do get discussed within a research process are contingent upon what can be accessed within the archive. Of particular interest is the emergence of historiography as a distinctive subject area: "the writing of history and the study of historical writing" (Jordanova, 2006). Historiography emphasises questions such as "What kind of history am I writing?" and perhaps more pertinently "What kind of history am I reading?" (Rowlinson *et al*., 2014). The latter question would seem to be consistently ignored by the CM research community.

Rowlinson *et al*., (2014) further allude to the distinction between ontological theories that relate to 'history as an object', and epistemological theories concerned with 'knowledge of that object'. Such an argument would be well recognised by CM researchers, and yet rarely are they applied to archival sources. Even time-series statistical sources such as those produced by the UK Office for National Statistics (ONS) are more often quoted in terms of what they say about a supposed objective reality (ontology), rather than in terms of what they say about how such a reality can be known (epistemology). It is contended that this distinction is of critical importance in assessing the potential of archival sources within CM research. In progressing their analysis Rowlinson *et al*., (2014) point towards three key epistemological dualisms seen to be useful in positioning organisation theory against historiography. It is expedient to touch on each of these in turn.

*(i) Dualism of explanation: Narrative or analysis*
Organisation researchers are seem to be primarily interested in the analysis of relationships between concepts, whereas historians are more concerned with the emplotment of chronologically related events. Within the domain of CM there are multiple examples of the first, and relatively few of the second. Löwstedt and Räisänen (2012) provide a good example of a recent tentative shift towards narrative approaches with a corresponding emphasis on the importance of emplotment.

*(ii) Dualism of evidence: Data or sources*
Rowlinson *et al*., (2014) further observe that organisation researchers use the language of primary and secondary data, whereas historians use the terms primary and secondary sources. CM researchers such as Holt (2016) are especially fond of referring to documentary sources as secondary data with little sensitivity of the distinction between data and sources. Historians lay importance on primary sources that are produced at the time of events being researched, and yet CM researchers tend to view such sources as part of the 'literature', i.e. not comprising empirical data. Source criticism, a critical aspect of historical research, is an undoubted blind spot amongst CM researchers.

Published accounts can comprise either primary or secondary sources depending on the research question (Jordanova, 2006). A good example is provided by the narrative analysis of the quasi-historical account of international contracting produced by the Turkish Contracting Association (TCA) (Duman *et al*., 2017). The account produced by the TCA is a primary source, and important insights are to be gained by understanding how it is emplotted. Although the use of footnotes is uncommon amongst CM researchers they are crucially important in historical writing, and not just an issue of stylistic convention. Rowlinson *et al*., (2014) note that historians are committed to emphasising in detail the sources used. In contrast, organisation researchers tend to focus on how the data is constructed and are often obliged to fictionalise the identity of participants for the purposes of maintaining confidentiality. The use of footnotes in historical writing is based on a 'logic of verification'. Footnotes provide transparency to allow peers to verify the efficacy of the arguments made (Jordanova, 2006). The archival sources used in CM research most often form part of a case-study approach which is based on a 'logic of replication'.

*(iii) Dualism of temporality: Chronology or periodisation*
The third dualism addressed by Rowlinson *et al*., (2014) elates to temporality. The majority of CM research tends to be conducted in the present. The accepted mainstream research methods are predominantly concerned with interpreting reality as

it is 'now'. At best, time is seen as a constant which helps to specify a chronological order of events. But historians see time rather differently in that they are primarily concerned with specifying periods. The identified periods are defined through a process of analysing available sources, not least in terms of how they are emplotted. There are relatively few such examples within the domain of CM, Green (2011) perhaps being a notable exception.

The consideration of the three dualisms above is sufficient to problematise the current state of archival research within the CM community. Archives can comprise both primary and secondary sources, but they should not be thoughtlessly delegated to the status of 'secondary data'. Such a designation would say more about the researcher's predisposition to view the past as an 'object' which is waiting to be revealed. It is of course important to derive insights from the materials included in the archive, but it is equally on occasion necessary to reflect on the materials which are missing. Armed with such sensibilities and through the mode of curation, the research around the DEGW archive strives to understand the practices of DEGW and accessing the worldviews which made those practices meaningful.

## The DEGW Archive as a Living Archive

DEGW was founded as an architectural and space planning consultancy specialising in workplace design. The origins of the firm can be traced back to 1971 when it began operations as the London offshoot of US space planning firm JFN[4]. DEGW progressed to become a prominent actor in shaping the field of office space planning. The legacy of DEGW is alive globally and the methods which they piloted continue to flourish. The DEGW archive at the University of Reading mainly comprises project reports from 1971 to 1997. The archive is complemented by the personal collections of two of the co-founders: Frank Duffy and Luigi Giffone. Engaging with the broader DEGW diaspora provides the basis for linking the archival materials with contemporary issues. The DEGW archive is hence perceived as the nexus of a multi-method research process rather than a static collection of documents. The interpretation of the archival sources therefore co-exists with the sourcing of new materials. The connectivity with the DEGW diaspora is of crucial importance in identifying the significance of the archival sources and in the identification of gaps. The archive is hence conceptualised as a ‘living archive’ (Hall, 2001).

## Curation as Research Method

Curation is broadly accepted to include scholarly research into the collected artefacts, the selection of new materials and the mounting of exhibitions (Obrist, 2014). In the case of the DEGW archive project, these activities were conducted by the research team in active collaboration with members of the DEGW diaspora. The approach comprises a 'methodological commitment to collaborative knowledge production for creative public intervention and engagement', otherwise construed as 'curating sociology’ (p.43, Puwar and Sharma, 2012). It is important to emphasise that the mode of curating is not limited to the duration that exhibitions are on display. Curation is seen to be a continuous process that builds on the experiences and learning from one exhibition to another. A series of thematic pop-up exhibitions, workshops, walks and lectures were curated to understand DEGW's concepts and methods in the

[4]Duffy, F, Greenberg, S, Myerson, J, Powell, K, Thomson, T and Worthington, J (1998) "Design for change: the architecture of DEGW". Haslemere / Basel: Watermark / Birkhauser.

light of contemporary concerns.[5] Curation of archival materials continuously acts to enrich the contents of the archive. New materials are discovered, the structure of the archive is unpacked, different theories are explored and alternative accounts are created – through participatory curatorial practice (Huvila, 2008).

## Curating 'DEGW Methods' Exhibition

The DEGW archive research project started in May 2016. The initial task was 'to get a feel' for the archival materials. Three aspects framed the initial acquaintance with the archive. Firstly, the archive was not catalogued.[6] A list of the materials, not based on any particular order, was used as a finding aid. The form of the Microsoft Excel spreadsheet allowed different ways to sort and filter the list. In order to make sense of the archive, it was deemed necessary to create a chronology that was more detailed than the spreadsheet. This provided the basis for a visual chronology of the archive, in form of a 7-metre long roll prepared in consultation with ex-DEGW members. The chronology included key diagrams from the project reports within the archive. A timeline of DEGW's development as a firm (the legal entity) was also included in the visual chronology. Secondly, an intensive interaction with the archive was experienced while browsing the archive at an off-site storage facility rather than the reading room from where access to the materials is more controlled. Thirdly, two DEGW publications provided very useful guides for navigating the archive at the formative stage: 'Design for Change: The architecture of DEGW' and 'Managing the brief for better design'. The period covered in the former mirrors the archive as it refers to DEGW's work from its origins through to 1997 (when DEGW merged with Twynstra Gudde, a Dutch Management Consultancy); it also contains narratives from DEGW members on the development of the firm's key ideas.[7] The latter can be viewed as a catalogue of various briefing methods. The archive provides insights into how DEGW operationalised these methods in their projects.[8]

The 'DEGW Methods' exhibition was curated on 27th October 2016 to accompany John Worthington's public lecture at University of Reading's new School of Architecture. The lecture and exhibition invitations were sent to DEGW members. The events were also open to members of public; 165 people registered for the lecture and many of them visited the exhibition. Worthington's lecture described the development of key DEGW concepts from 1971 to 2002. The exhibition provided an alternative narrative for the same period, emerging from the archive and linking projects and methods to DEGW's key concepts. Six methods were presented in the order of their emergence within the DEGW archive: Space standards, space utilisation, building appraisal, analysing change, time utilisation and workplace envisioning. A caption was prepared for each of these methods referring to key projects where the application of that method was evident. Original project reports were displayed next to the captions. Two key DEGW concepts were then linked to

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[5] For an overview of various events and exhibitions that were curated for this project, see http://www.reading.ac.uk/architecture/degw-archive.aspx.

[6] The archive is now catalogued and the catalogue can be accessed via https://www.reading.ac.uk/library/. The two founder's collections are yet to be catalogued. Discussions with the archivists regarding the findings from the ongoing research subsequently informed the adoption of a client based cataloguing system.

[7] Duffy et al., 1998.

[8] Blyth, A and Worthington, J (2001) "Managing the brief for better design". London: Spon Press.

the methods: Conceptualising a building as layers of different lifecycles[9], and bridging between the concerns of the demand and supply sides of the construction industry. The visual chronology roll was also displayed in the exhibition.

# FINDINGS

## Making the Visual Chronology

The first version of the visual chronology was devised with a framework for categorising the works as either building projects or research projects, with the former at the top of the chart and the latter at the bottom. There are not many reports relating to building projects in the archive, most are in the form of publications and consultancy reports for clients. However, in the process of working through the data, it became apparent that DEGW's work could not be categorised in accordance with these two labels. Their work blurred across categories. Another version of the chronology was prepared to capture important projects in the development of DEGW's concepts and methods. Moreover, it was not possible to accommodate all the projects due to the physical limitation of the chronology roll. Important projects were selected for inclusion in consultation with DEGW members, which also led to the identification of projects not covered in the archive.

## Sensing Storylines

Understanding what DEGW actually did in practice was key to unpacking the archive. The exhibition became a site where multiple storylines co-exist. The exhibition and lecture captured four different narratives of DEGW's development over the period of 1971-1997: John Worthington's narrative, the development of DEGW as a firm, the development of DEGW's methods, and the visual chronology of the archive. The latter two storylines emerged from the curatorial research process. Tamboukou (2016) emphasises the situated nature of the researcher in privileging certain storylines, topics or themes over others in the archive. The baggage of the authors indeed shaped the initial impressions of the archive and affinities for certain themes. Several documents in the archive have an explicit section summarising the methods adopted for the project. These include glossaries of terms that depict how the reality was constructed in terms of which aspects were leveraged at the cost of silencing others. Moreover, DEGW's methods can be imagined as performative of their reality and not just as a set of procedures (Law, 2004). By analysing the methods adopted by practitioners from within DEGW, insights were gained into their worldviews, their concepts and their realities. As Frank Duffy writes in his account of the development of DEGW's Building Appraisal service, "This paper describes how between 1985 and 1995, in one building type - the office - a form of Building Appraisal became an operational reality in DEGW… " (149)[10].

# DISCUSSION

## Making Emplotment Public

The DEGW Methods exhibition demonstrated the important contribution of DEGW in the field of user research and briefing. Elf *et al*., (2012) note the sparsity of studies into the briefing process and lack of evidence-based information to support the

[9] This DEGW concept has been popularised in Brand, S (1997) "How buildings learn: What happens after they're built". London: Phoenix Illustrated.

[10] Duffy, F (2009) Building appraisal: A personal view. "Journal of Building Appraisal", 4(3), 149–156.

development and evaluation of new facilities. However, the documents in the DEGW archive, which include briefing documents, provide rich descriptions of the methods adopted, evidence gathered and analysis conducted.

The timelines were an important element of the 'DEGW Methods' exhibition. The timelines provide a skeletal narrative with a clear beginning, middle and end (Yakura, 2002). The timelines helped to weave a theoretically-informed narrative between the disparate archival materials. Moreover, the exhibition became a site for gathering new data from DEGW members as they added references to missing artefacts. The exhibition hence made the emplotment explicit - the privileging of certain archival materials over others, certain themes over others, certain research methods over others, certain theories over others, and certain concerns over others. Choices were made at every stage. This indeed was emplotment in action. The timelines also acted as a tool simultaneously to engage different audiences, namely: DEGW members, academics, and members of the public. However, for each audience, the same timeline is enacted differently. Moreover, the timelines used in organisational practices provide an ending to the endeavour that the participants are involved in (Yakura, 2002). However, the timelines in the exhibition do not have an ending, and flow into the present via audiences continuously linking the past with the future.

## CONCLUSIONS

There seemingly remains within the CM research community a strong bias against the use of archival research methods. There further seems to be a recurring tendency to dismiss archival sources as secondary data. Even those who do rely on archival sources pay scant attention to the methodological issues relating to the use of archives. The use of archival sources has been related to the discipline of historiography which emphasises the need for reflection around key questions such as ‘What kind of history I am reading?’. A particular emphasis has been given to emplotment. No researcher can aspire to observe everything within an archive; there are no standard sampling approaches. The very process of engagement with an archive is a process of knowledge creation. To address archives as presentation of a supposed objective past is not only indicative of a misunderstanding of their potential contribution, it is also indicative of a misunderstanding of how reality is constructed.

Curation has been introduced as an archival research method and positioned as an open-ended process of connecting archival materials with contemporary issues. The notion of a ‘living archive’ has been offered as a means of building participative engagement between researchers and interested practitioners. Adopting curation as the essential mode of doing research, archives become a critical site of engagement between academia and practice. Examples of how such a process can be operationalised have been derived from current empirical work with the DEGW archive. Archival sources provide potent opportunities for CM research. However, a critical and reflexive dialogue around archival methodology is currently notable only for its absence. By means of this paper, we have sought to initiate a discussion around archival methodology by drawing on the experiences of working with the DEGW archive. In summary, our clarion call to the CM research community is simple: Archival methods are deserving of more attention.

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