Archaeology and construction:

an odd couple or a fruitful partnership?

Sadie Watson and Guillermo Diaz from MOLA present preliminary results from research into the relationship between archaeology and construction

The vast majority of archaeologists in the UK work on developer-led projects. This means that archaeologists are working, along with several other contractors, on busy construction sites, where infrastructure such as roads or railways, housing, office blocks, or any other development is being built.

But this isn't perhaps what people might first think of when they consider archaeology, which is often imagined instead as a pursuit carried out on rural excavations with large open trenches full of archaeologists gently trowelling.

Do these very different occupations actually work together well, or is it a tricky relationship for both sides?

Archaeologists as construction professionals

When archaeologists are working on these projects, it is obvious that their goals and those of their counterparts in construction are both similar and different. Both sides aim to finish on time and on budget, and of course, make sure that the health and safety of their staff is prioritised.

But their ideas of success are quite different, as are the ways in which they communicate with each other. We think these differences could be reducing the potential for a better relationship between both professions, which in turn, hinders the wider public from having a more meaningful and sustainable relationship with their heritage.

MOLA (Museum of London Archaeology) is leading a bigger research project funded through UKRI), where we are trying to understand how to provide better public benefit from the archaeological work done through the planning system.

By interviewing field archaeologists, project managers, consultants, field officers, and others, we have gained a rounded picture of this complex and occasionally challenging relationship. We hope that by understanding it, we can propose ways for improvements.

How does archaeology happen?

The planning system across the UK regulates construction, while also protecting historic places and buried archaeology. One of the aims of this system is to contribute towards sustainable development, making sure that society benefits from it.

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It is in this context most interactions between archaeology and construction take place. During the planning application stage, the local authority's planning archaeologist will mandate some form of archaeological work to ensure that no significant archaeological heritage is being destroyed by the proposed construction.

Generally, this is only a small number, for example, in the years 2017-18 in England, out of a total of 470,000 applications, only 16,000 required archaeological intervention. The system for ensuring archaeological attendance on those that do is well used, works well (usually) and employs many professional archaeologists.

74% of the total archaeological workforce (almost 4,500 people) are employed in development-led archaeology, so the sector is larger than, for example, marine fishing, and can be compared with the total amount of people working in tax consultancy in the UK.

This working environment includes many occupations, from the client or the developers of the project to the building contractors, suppliers, managers and so on.

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There are also those who are part of the planning system, the Local Planning Authority archaeologists, English Heritage advisors, and other local and heritage authorities. Within archaeological contractors, it includes the project managers, project officers, field teams, and also those involved in community work, research and analysis of the materials found, writing reports, and of course, those curating, displaying, and protecting the artefacts.

Another role that has become very common is that of the consultant, an archaeological professional that works for the client or developer, mediating between them and the archaeological contractor. This means that there are a lot of people and organisations involved and plenty of relationships to navigate.

Archaeology: is it really such a risky business?

Archaeology is often perceived by the construction industry as a risk for a development programme. This can be a problem, and while it is indeed true that archaeology can be unpredictable, it rarely has the dramatic financial impact sometimes attributed to it. For example, in 2007 an estimated £144m was spent on commercial archaeology, which was barely 0.14% of the overall cost of construction.

Furthermore, and given the fact that dealing appropriately with archaeological remains is required by law. When delays and overspends occur, these seem to be related to a lack of planning for archaeology, rather than to its presence. In fact, it is estimated that in 2017-18, archaeological work made up to £1.3bn in savings through reduced delay costs, when the right amount of time and resources was allocated from the outset.

Some construction colleagues perceived archaeologists as a risk in terms of a supposed lack of concern for health and safety, which seems to be due to a lack of understanding of how fieldwork operates.

Many of our practices, for example, such as having pits or features open during an excavation, are deemed as unsafe for a construction site, although this, of course, is how archaeologists dig, and thus cannot be avoided. Perhaps, devoting more time to explaining our methodologies to construction teams might help them understand the way archaeologists work.

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'Known unknowns' and 'unknown unknowns'

Another critical element affecting this working relationship is the differing levels of uncertainty. Uncertainty here refers to the capacity of dealing with unknowns, with things that cannot be planned or solved straight away, and this is a crucial structural element of how archaeologists think and work.

Uncertainty includes the lack of knowledge about the remains that they might encounter, and the impossibility of predicting everything is part of the usual routine of archaeologists. This, of course, doesn't fit particularly well with how construction works, as their focus – their programme – is devoted to overcoming uncertainty.

The result is often confusion and occasionally conflict, but perhaps if archaeologists were to quantify their work in a detailed way this would help ease this block; they would have managed to translate uncertainty into terms that would be understood by the construction community.

Talking at cross purposes?

There are also some fascinating structural issues to think of, including that of translation. While both disciplines share many elements in common, their methods and aims are often fundamentally different, and thus a process of translation is often required to find common ground for communication.

This need for translation can be seen, for example, in the kind of documents that archaeologists send to developers. Briefs, programmes, and progress reports quite often include excessively detailed archaeological information, but this can fail to provide an adequately non-technical explanation of archaeological methods or fail to communicate in sufficient detail how long the work is going to take.

A different element of this translation issue is how certain concepts have different meanings. For example, the notions of 'progress' or 'success' entail different things for construction and archaeology. Progress in construction can often be measured in terms of cost and time and is formatted in a manner that can be easily incorporated into the wider development programme.

Archaeologists, on the other hand, are trained to focus on the progress of the archaeological excavation and the interpretation of the remains, rather than measuring their own progress in the quantitative terms that construction is used to.

Similarly, the notion of success within a construction project tends to focus on finishing on time and on budget, as well as prioritising health and safety, to avoid putting their staff in danger, but also because the latter would add risk to their programme.

Archaeology, while also paying attention to finishing its work according to time and budget, can often prioritise other elements in its assessment of success, such as the protection of heritage, the quality of the historical knowledge produced, or the public benefit brought to local communities.

Finally, our research indicates that precarity in archaeology needs to be considered as another fundamental element shaping the relationship between archaeology and construction. Precarity affects, first, the profession, as jobs can be unstable, and the highly trained people working in archaeology can struggle in the current economic climate, despite the efforts of many archaeological companies to improve the working conditions of their staff.

The archaeological workforce in the UK is excellent, but to protect the UK's rich heritage, working conditions need to improve. Here, developer-led projects can play a leading role because, at the end of the day, they employ most archaeologists.

Archaeology's position and further potential

Overall, our research shows that there is much room for improvement in the relationship between archaeology and construction. But it also allows us to be optimistic and shows that some things are already improving.

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This can be seen, for example, in the increasing attention that archaeologists are receiving from construction in relation to the PR potential of archaeological interventions within development-led projects.

Independently of what is being built, archaeologists help to bring public benefit to the table. They help to create historical knowledge, which in turn helps local communities understand and connect with their surroundings. It also appeals to universal interests, such as understanding how people in other places and other times lived.

There are multiple ways of doing these things, ranging from open days during excavations, talks, communication finds through social media and all manner of outreach activities. The site teams and our construction colleagues are a major part of this communication and will be allies for us if we work with them.

Furthermore, the incorporation of archaeology into certain projects has had a positive impact, adding value to their design. An excellent example was the unexpected discovery of the Boar's Head Playhouse in London during the development of a Unite Students accommodation hall.

The accommodation has now integrated its theatrical heritage into the building itself, including a community performance space that connects students with London's history in a unique setting.

Improved communication: it's a two-way thing

Archaeology and construction also affect each other positively when they interact in the correct way. Archaeology crews offer first-hand historical knowledge to those working with them on-site and tend to bring significant diversity to construction sites that aren't always that diverse.

Conversely, archaeologists can often learn from their construction peers new ways of measuring and monitoring their work in a more effective manner.

This last element seems to be particularly important because once archaeologists communicate their progress and their needs effectively, it is likely that their colleagues in construction will be more receptive to valuing and fostering the public benefit that archaeologists bring to development-led projects.

Sadie Watson is…. and Guillermo Diaz is…

For a background to the contracting archaeology sector, visit: https://profilingtheprofession.org.uk
Information on the contribution of the planning-led archaeology system: https://www.algao.org.uk/archaeology-development-management

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