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Reviewed Article:

Castrum Corcagiensis - Roman Experimental Archaeology in Ireland

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Barrack blocks were a central feature in any Roman fort and functioned as the living spaces for a Century and its officers. While Roman forts varied in size from just over an acre for a simple 'numerius' fort, to over 55 acres for some large 'legionary' forts such as Deva (Chester), the layout of a barrack block was the same.

Castrum Corcagiensis is an experimental archaeology project undertaken by Legion Ireland,

the Roman Military Society of Ireland. The aim of the project is to reproduce a working Roman fort barrack block, similar to 1st century barracks found at Isca Silurum (Caerleon) and Deva (Chester), and function as a working Iron Age Roman military environment for re-enactment and experimental archaeology.



Eight men living in such a confined space makes even simple things like preparing food and cooking difficult. We constantly found ourselves bumping into each other and trying to find a somewhere to sit down. We now have the opinion that there was a duty roster in place, which always ensured at least two men were out of the barracks on fatigues or patrol.

Legion Ireland

Legion Ireland is a Roman re-enactment and living history society, we portray the Imperial Roman army between the reigns of Vespasian to Hadrian (AD69 - AD138). Legion Ireland has members from all over Ireland and has a unique collection of reproduction Roman artillery.

Castrum Corcagiensis - The Idea

The idea for the project came in 2015. Every August we attend the Cork City Military Show. This is a multi-period re-enactment event held on lands owned by the Munster Agricultural Society (MAS). The lands are a former dairy farm and there are several disused buildings and sheds on the site. One particular range of buildings, former cow sheds, always struck us as having the potential to be converted into a barrack block. Back in 2015 these were just a shell, although MAS had re-roofed them with galvanised sheeting.

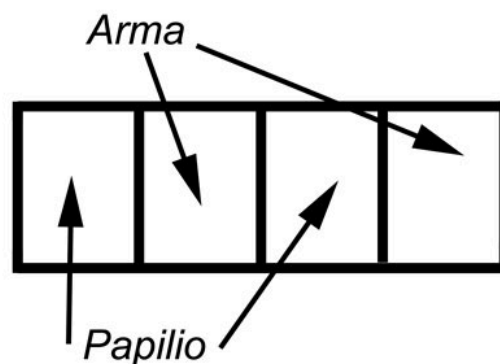
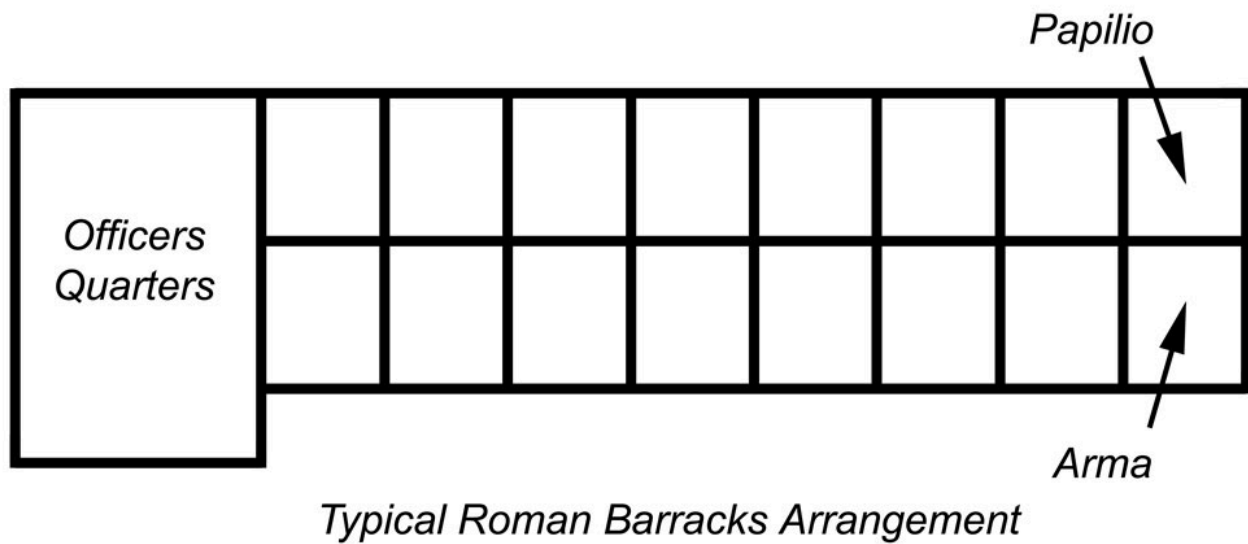
Over the two days of the event in 2015, we examined the buildings and discussed the possibility of converting them into a barracks. While not a perfect fit for what we wanted, we agreed we could come up with a design and conversion that would work (See Figures 1 and 2).

On the last evening of the event we met with the chairperson of MAS and decided to “chance our luck” by casually suggesting that the old buildings would make a great Roman barracks, and to our surprise he agreed. From that initial conversation we developed a master plan for the project and submitted it to MAS committee for consideration. This plan was submitted in December 2015 , with approval granted for the project in March 2016.

Conversion into a Barracks

From the start it was clear we would have to make many compromises with the conversion. Actual Roman barrack blocks consist of 2 rooms configured front to back, our rooms were configured side by side (Johnson, 1983, Figure 127). Original barracks had a tiled or wooden shingled roof, ours was galvanised steel. Essentially we'd been given 4 sections of the former cow shed. We decided to break these into 2 barrack blocks consisting of 2 rooms each. As was

the case with original barracks, one room would serve as a living and storage space (arma), while the second would serve as a bunk room (papilio). The average size of our rooms is 4m x 5m, which is very close to the size of the rooms of the Caerleon barrack blocks.



While MAS had given us use of the buildings, the cost of the conversion would be borne by Legion Ireland, so every cent counted. In 2016 we only had enough money to erect the internal partitioning, put in doors and windows and paint the rooms. We were going to have to get into our piggy banks and do some serious saving to pay for the internal fit-out of the rooms.

Our target for completing the first phase of the conversion was the middle of June 2016. MAS runs an annual summer show on the site in mid-June and they wanted us to have something to exhibit to the public. We started work on the conversion in May 2016, and by mid-June we had completed the first phase of the works. We now had four painted rooms completed with partitions and windows, but without any furniture or fittings. For now we would have to make do with trestle tables and temporary seating, but at least we could open it to the public as a work in progress (See Figure 3).

Internal fit-out

By August 2016 we had gathered enough funds to proceed with the first part of the internal fit-out. This would consist of fitting out one set of rooms. One of the problems we faced was that nobody knows how these rooms were actually fitted out. We have plenty of evidence showing the size and arrangement of the footings, but nothing beyond that so we had to go with our own best guess.

In the case of our barracks we decided to make two different examples of Arma and Papilio. In the first set of rooms we would not include a hearth in the papilio, but would include a 'Craticula'. The second set of rooms will contain a hearth in the papilio that will be used for cooking, thus we can experiment with two types of accommodation.

In the papilio we decided to use bunk beds. Again, we have no evidence for this but if you're going to squeeze 6 to 8 men into such a small space then bunk beds make sense. We also decided to put some curtains up along the beds in an effort to provide some simple form of privacy. We also included some benches to sit on and hooks to hang equipment from (See Figure 4).

For the arma, we knew we needed to install some type of hearth, storage space and worktops. We decided to do a little experimentation using various layouts before committing to a final design. These experiments were very basic and consisted of placing tables in various parts of the room and attempted moving around them with shields and equipment. We quickly realised that putting anything in the middle of the room wasn't going to work, and the key to having a functioning room was to keep floor space as free of obstacles as possible.

In the end we came up with a room plan with a long worktop along one wall, shelving above it and a simple charcoal-burning *Craticula* for cooking. A Craticula is a simple charcoal burning open stove on which frying pans and cooking pots can be placed and heated by a layer of burning charcoal in a frame underneath. We decided to use a Craticula because charcoal gives off little smoke when burning, unlike a wood burning stove which gives off much smoke. We didn't have a hearth or chimney in the room, thus using charcoal and a Craticula meant we could cook without filling the room in smoke. Over the years we had collected replications of Roman cookware and earthenware which we could now put to use (See Figures 5, 6 and 7).

The internal fit-out of the first two barrack rooms was completed in October 2016. This gave us a space from which we could run training events and display to the public. Completion of the remaining rooms was pushed out to 2017 while we sourced funding to complete the project.

Food Preparation

There is little information on how or where soldiers prepared and ate their food while garrisoned in a fort. With the exception of bread ovens, no fort excavated so far has contained a central food preparation and eating area, so the assumption is that food was prepared and consumed within each barrack block, and probably within each Arma or Papilio. Evidence of hearths has been found in the Papilios of some Roman forts such as Heidenheim in Raetia, but whether or not these were used for cooking remains unknown (Johnson, 1983, Figure 131).

Apart from the Craticula, we have also experimented with a small earthenware charcoal burner for food preparation. These are common finds in both Roman forts and civilian settlements. This proved to be very efficient for making simple single-pot dishes such as stews or soups. Such 'stoves' use little fuel yet deliver a very efficient source of heat in a very mobile form.

All Roman forts had communal bread ovens. These were probably constructed from stone, but in another compromise, we decided to build a simple wood-fired clay oven. With minimal research and little knowledge we set about constructing our oven, and as expected, the result was a spectacular failure. We did not make the walls thick enough and removed the sand core too early. As a result, the whole thing collapsed into a sorry mess (See Figure 8).

Using the mistakes made during our first effort, the second attempt was much better. This time we carried out more research into the construction of Cob ovens before starting work on our next oven. Cob ovens have become somewhat fashionable over the last number of years, and there are many instructional papers and videos available on the internet. We made the walls much thicker and used a better sand/clay mix. We also waited two weeks before removing the sand core, and did so very carefully. While our second oven turned out well, our attempts to bake anything other than small bread rolls have been unpredictable. Sometimes a large loaf baked perfectly, while other times we ended up with a sticky mess. We are continuing to experiment with the oven to try and understand the heat distribution so we can bake in the right place (See Figures 9 and 10).

Operational Experience

Historically, each set of rooms was home to a Contubernium. A Contubernium was the most basic unit of the Roman army, and its organisation was based on the tent parties of the Republican legions where 8 men shared a tent, one or 2 mules and entrenching equipment (Connolly, 1998). We have been using the Castrum for over one year, and from the outset the first thing that struck us was the total lack of privacy. There is effectively no option but to work, eat and sleep in the close company of your fellows, and that can often result in friction and conflict. After a few days everybody gets used to each other and things settle down but it is still difficult to get used to the lack of privacy.

Eight men living in such a confined space makes even simple things like preparing food and cooking difficult. We constantly found ourselves bumping into each other and trying to find a somewhere to sit down. We now have the opinion that there was a duty roster in place, which always ensured at least two men were out of the barracks on fatigues or patrol. Even the removal of two men makes a significant difference in the relative comfort of the barracks.

The other thing that surprised us was the high quantity of water we used. We became very aware of how much water we used, from drinking and cooking to cleaning and washing, perhaps almost 400L per day, without showers or flushing toilets - but that is another story. Cooking is simple, provided everybody eats the same thing. We use either the Craticula or the oven to make flat breads, and the Craticula to make porridge and simple stews. Again, given the space constraints, men have to eat in rotation.

From a strictly military perspective, the barracks are very functional. Equipment can be easily stored by hanging from hooks and storing under bunks. Even shields can be neatly hung from hooks thus keeping them off the floor and avoiding more clutter. That said, it does take some discipline when storing your equipment to avoid shields, in particular, from becoming an obstacle and taking up unnecessary space.

Up to now we have only lived in the Castrum over weekends. In 2018 we plan an experiment to live in the Castrum for a week. The ultimate goal of this experiment is to finish the week as friends without anybody committing murder or suffering from food poisoning.

Future Plans

By November 2017 we plan to have completed the second set of barrack rooms. The second living room, which is largely finished, is pretty much a mirror image of the first, but the bunk room will be different from the first in that it will be based on finds from Heidenheim (Johnson, 1983, Figure 131). The main difference will be the inclusion of a hearth and stone chimney at the back of the room.

Once finally completed we will continue to use the Castrum for experimental archaeology with plans to start building a watch tower in 2018. The Castrum will also be available to other historical groups and societies including educational institutions (See Figure 11).

🔖 **Keywords** [living history](#)
[cookery](#)
[army](#)
[construction of building](#)

🔖 **Country** [Ireland](#)

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Gallery Image



FIG 1. BUILDING EXTERIOR IN 2015



FIG 2. BUILDING INTERIOR IN 2015



FIG 3. FIRST PHASE OF CONVERSION COMPLETE



FIG 4. PAPILIO



FIG 5. ARMA



FIG 6. THE CRATICULA



FIG 7. STORAGE SHELVING



FIG 8. THE FIRST BREAD OVEN



FIG 9. SECOND OVEN



FIG 10. BREAD ROLLS



FIG 11. THE SECOND ARMA

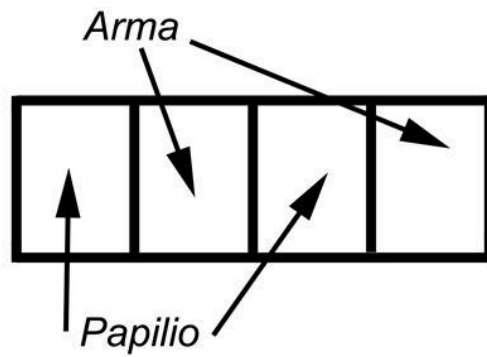
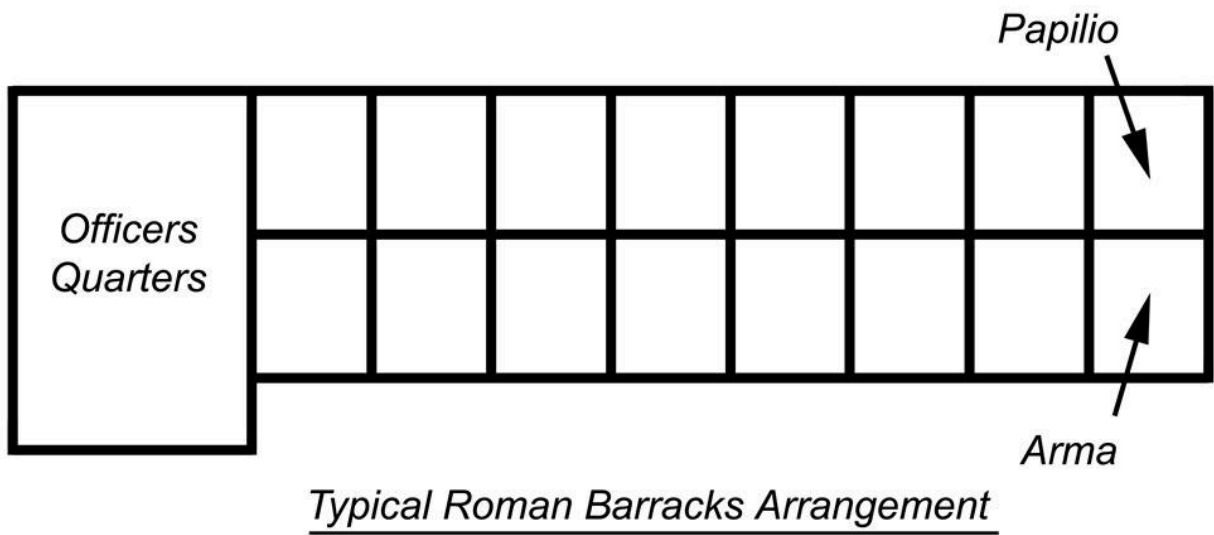


FIG 12. TYPICAL ROMAN BARRACKS ARRANGEMENTS AND AT CASTRUM CORCAGIENSIS