

6_2_1_House_construction_(Stuart_Johnston) (see Johnston et al., in press)

A three-week window was available for the construction of the house models in late July and early August 2014. This short time frame meant that some compromises had to be made in the choice of construction materials and the tools used but decisions were made that achieved the desired results without compromising the integrity of the project.

In keeping with current theories of Trypillia-Cucuteni house construction, the house models were constructed using a series of sleeper beams resting on levelled ground (Burdo, 2011). These beams were used to locate the vertical structural elements in mortice and tenon joints to create a structure similar to a modern stud partition (Mitchell, 1982). All framing timbers were held in place by their own weight unless under tension or warping caused poor fitting of the joint. Three simple types of joint in various combinations were used in the construction of the timber framing. Tee-halving joints and corner halving joints were used to join horizontal timbers together. Mortice and tenon joints, tee halving joints and corner halving joints were used to join vertical timbers to horizontal timbers (Mitchell, 1982).

Work began on 14th July (Day 1) with clearing the site on waste ground in Nebelivka. The following day, plots were cleared and levelled for each of the house models using local labour. Over the following six days, elements of the timber frames of both the single and two storey house models were cut and shaped by a small team of reasonably competent woodworkers. Like many construction projects, little progress was evident until sufficient materials had been prepared for the erection of the single storey house frame on Day 8. Less skilled labour could then be employed to weave hazel withies to form the wattle infill panels freeing up the more skilled workers to concentrate on other tasks. The two storey frame was erected on day 10 and sawn log floors were installed on Day 11. Wattle weaving also continued throughout this time. Daub plastering began on Day 12 while work began on the erection of gables and roof timbers on both houses. The plastering operation also employed relatively unskilled labour with some supervision.

By Day 15, sufficient roof timbers were in place for the first attempt at thatching to be made. The method chosen aimed to reproduce winter reed thatch by stripping leaves from reeds gathered in the summer. This approach did not produce a satisfactory final product, consumed a great deal of material and was quite labour intensive. Once this became apparent, the method was altered to make better use of the material available and work continued on thatching until the end of the construction project. The construction project finished after 18 days. Some work to complete the thatching of the two storey building and to decorate both buildings continued after this.