Conservation of Architectural Ironwork

This was the title of a thoroughly informative course I attended in York last November, run by the National Heritage Ironwork Group (www.nhig.org.uk). As well as those with an interest in metals, participants included architects, conservation officers and planning advisors. I was able to attend following a generous grant from the Historical Metallurgy Society's R.H.Tylecote Memorial Fund, for which I would like to say a big 'thank you'.

Day one was lead by Chris Topp, a smith with a lot of experience in restoring ironwork. He took us through the history of architectural iron, from the twelfth century ornate iron hinges in Stillingfleet Church (near Selby), through the golden age of the eighteenth century when Tijou created beautiful iron screens for Hampton Court, right up to the nineteenth century foundries making station buildings and bridges.

This was followed by a discussion of the metallurgy of iron and steel, highlighting the different qualities of the metals and different manufacturing techniques through the ages. The key focus was how to identify what materials and techniques had been used through visual assessment of historic ironwork. Clues come from marks left on the surface during manufacture, how the piece was fixed together, and how an item has corroded or suffered damaged with time. Wrought ironwork can be bent without breaking, unlike cast items.

The third session of the day looked at how ironwork might be repaired. Using lots of examples we were taken through a summary of the key techniques and pitfalls to avoid. For example, forged spindles in a length of railing will all be slightly different in size/shape and will only go back in the order they came out so numbering them saves a lot of trial and error. To test our new observation skills we then we went for a walk around York assessing the ironwork we passed and discussing what repairs could be carried out.

Day two, lead by another conservation practitioner Geoff Wallis, began with a look at specifications and standards for repairs. As with other forms of conservation, key features include minimal and reversible interventions that should aim to ensure long-term survival. Further to yesterday's session on repairs, we discussed protective coatings and paints that might be applied to the surface of ironwork. Comparisons were made with coatings used in the nineteenth century to prevent fresh castings from corrosion. Interestingly, the restoration process reveals coating were also used to disguise defects in the work. In one case, holes in the surface of an object had been filled with plaster and then painted over!

Geoff presented numerous and varied examples of contracts he has undertaken and described the work carried out. This lead to an interesting discussion about how to decide what is worthy of preservation and, often very expensive, repairs. English Heritage, in their conservation guidelines, suggest that 'heritage value' is a measure of the evidential, historic, aesthetic and communal values that an item holds.

However, judging these can be a very difficult task and we couldn't all agree on the examples we were given to debate.

The afternoon finished with a tour of York Minster, making a close inspection of the doors, screens, grills and railings within. Again Chris and Geoff challenged us to use our new knowledge, avoiding the red herrings. We discovered that several older items of ironwork have been moved around in the church and re-fixed using modern screws!

In summary this was a brilliant course that has been of enormous benefit to someone with an interest in street ironwork, items that surround us everyday but are usually overlooked. HMS plans to hold a conference on Street Furniture in 2015. I hope we'll be able to tempt you to come along and find out more about this fascinating topic.

By Rachel Cubitt
Finds Officer for the York Archaeological Trust

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