

Fantastic Plastics

A Master Class for Social History Curators

London, 23 May 2014



Colin showing participants items from his collection.
Image courtesy of Helen Taylor

When the *Fantastic Plastics* seminar was advertised we had recently been discussing with our Senior Curator the possibility of adding plastics to our collection, to fill a gap. We knew a lot of plastics were manufactured in the Black County - British Industrial Plastics started in Walsall and later expanded to Oldbury - but we had few plastic objects in the collection. For us, the seminar was timely, so I merrily made my way to London, to the Dana centre, close to the Science Museum, to find out more.

The first talk was given by Dr Sue Mossman, Materials Science Specialist at the Science Museum. She gave a really useful introduction to what a plastic is and made the distinction between natural plastics (e.g. amber and horn), semi synthetic plastics (such as vulcanite and celluloid), and fully synthetic which includes Bakelite and PVC. She then presented a history of plastics with a plastics timeline (if you want a good overview of the history of plastics, see the timeline in the link on the following page).

The timeline made me realise that plastics had been used for a lot longer than I had realised. Natural plastics like horn and tortoise shell have been in use since around 2000 BC. Dr Mossman's historical overview of plastics also highlighted some common objects to be found in many social history collections, including decorative pieces made from shellac, buttons made from horn, and early dolls made from PVC. After looking at the history of plastics, it really makes you think about the continued use of plastics. Sitting at my desk, I can spot at least ten modern objects made from some sort of plastic.

The second talk was given by Dr Brenda Keneghan, Polymer Scientist in the Victoria & Albert Museum's Conservation Department. She talked about the care of plastics, how they can be damaged, and signs of damage to look and smell for. When plastics deteriorate they can give off particular smells; cellulose acetate smells vinegary while cellulose nitrate smells like camphor. She emphasised the importance of keeping plastics (like all objects) at stable temperatures, and also

recommended that plastics are stored away from other objects. She showed us images of plastics that had deteriorated, triggered by a slight change in heat or humidity. The heartbreaking thing for any curator, who has to care for plastics, is that once deterioration has started there is often nothing to be done to stop the process. Dr Keneghan stressed the importance of moving deteriorating objects away from other objects to prevent them also deteriorating.

After lunch, a group of us headed to the Science Museum where, on the first floor, the *Challenge of Materials* gallery explores every material imaginable and has a lot of interactive elements; perfect for a big kid like me! On a serious note, it was good to see examples of the plastics we had been talking about all morning. It was still a challenge to try and identify them though.

The last element of the day was a hands-on workshop delivered by Colin Williamson, an expert on and avid collector of all things plastic. He explained the processes of identifying a plastic object by touch, look and smell; some plastics make particular sounds when tapped. He also explained if you are able to date an object, you can more than likely figure out the type of plastic used - here is where the plastic timeline comes in useful. I learnt to look more closely at plastic objects; some plastics were designed to imitate other materials (ebonite or vulcanised rubber was manufactured specifically to imitate ebony). Colin also talked about manufacturing techniques, which can be another way to help identify the type of plastic.

Colin had brought along a wide variety of objects representing many types of plastics and manufacturing techniques, from early plastics through to more modern examples. We got to pick up the objects, look at them and try to identify them. We also saw examples of plastics that had deteriorated or had been damaged. Colin stayed at the end of the session to help people who had brought objects from their own museums.

I really enjoyed my day in London learning all about 'Fantastic



Participants handling items from Colin's collection.

Image courtesy of Helen Taylor

Plastics', and I now feel armed and ready for when we begin to collect more plastics at the Black Country Living Museum. After typing up my notes from the day and creating a plastics timeline, complete with pretty pictures, my colleagues have decided that I must now be the new plastics 'expert' of the team!

Find out more:

www.plastics.specialistnetwork.org.uk/proof/home (the Plastics Subject Specialist Network)

www.plastics.specialistnetwork.org.uk/proof/asset_arena/textual/4.manual.doc (an e-manual to help you make the most of plastics in your collection, including a timeline)

www.modip.ac.uk (the Museum of Design in Plastics at the Arts University Bournemouth)

www.plastiquarian.com (the Plastics Historical Society)

Helen Taylor

Assistant Curator
(Collections Access)
Black Country Living Museum
helen.taylor@bclm.com