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Luke Jerram’s *Glass Microbiology*

In an exploration of our relationship with disease, sculptor Luke Jerram has produced a series of intricate glass sculptures of virus molecules. Jerram’s ‘Glass Microbiology’ is part of a long tradition of artistic fascination with medicine that dates back to the eighteenth century and beyond. His pieces have been exhibited at the 2011 Venice Biennale, the American Museum of Glass (2011), the Wellcome Collection in London (2010), and at the Mori Gallery at Tokyo, Japan (2009). Jerram’s work successfully expresses his desire to investigate how viruses are visually represented to the public. In terms of Jerram’s other works, ‘Glass Microbiology’ is characteristic of Jerram’s working practice to produce a set of objects to explore particular ideas. Indeed, the format of ‘Glass Microbiology’, is reminiscent of previous explorations of particular concepts, such as his ‘Play Me, I’m Yours’ series, which involved placing pianos on the streets of cities, for example Birmingham, Sydney, and Barcelona. These works and others of Jerram’s can be viewed on his website ([http://www.lukejerram.com](http://www.lukejerram.com)).

‘Glass Microbiology’ is an ongoing series of artworks that is influenced by contemporary news broadcasts and the media’s fascination with particular diseases. Jerram’s aim is to help people understand the nature and form of viruses, how they change and mutate. His sculptures also raise the question of whether beauty should only be associated with objects and processes that are good for us. His work also effectively highlights the productive nature of interdisciplinary collaboration between the arts and sciences.

At first glance Jerram’s objects are static representations of subjects that by their nature change and mutate. The Swine Flu virus, for example, is recognised as being particularly amorphous and as having no fixed shape (Fig. 1). However, Jerram overcomes this difficult
element by producing more than one version of the sculpture.\textsuperscript{1} With his sculpture of the HIV virus Jerram further exhibits his intention to help people better understand the nature and form of the viruses and how they change and mutate. His representation of the HIV virus is particularly interesting, as the visualisation of this virus has changed along with improvements in scientific equipment, such as increasingly powerful microscopes. Furthermore, the actual makeup of the virus in question can change. Thus, Jerram’s depiction of HIV shows the virus at several different stages, a three-dimensional snapshot of how the virus mutates. This is very much like taking a video of the mutating virus, and deriving several motion prints to see how the virus has changed.

\begin{figure}[h]
\centering
\includegraphics[width=0.8\textwidth]{HIV}
\caption{HIV}
\end{figure}

Though in part affected by Jerram being colourblind, the lack of colour in his ‘Glass Microbiology’ sculptures, like his one of the HIV virus, reflects other key issues he explores in these works. For example, how does the artificial colouring of scientific images affect how we see these viruses? Certainly in recent news coverage of HIV and Swine Flu, our visualisation of these images is deeply affected by the colours within the image (Fig. 2). It could be suggested that the aesthetic beauty of Jerram’s glass visualisations of such diseases only serve to reinforce the destructive reality of viruses and disease. By adding an element of visual beauty to these diseases we are forced to reconsider how destructive they actually are.

Fig. 2: Swine Flu

The use of glass-blowing as a medium is also significant. It places Jerram’s ‘Glass Microbiology’ within a revival of interest in more craft-based art, as opposed to the traditional fine arts. This situates Jerram’s work alongside other examples of craft-based art such as
Grayson Perry’s ceramics, which are accepted by the art establishment, and are regularly displayed at the Royal Academy’s Summer Exhibition. However, Glass has an essential quality that is particularly suited to Jerram’s project. The intricacy available in the three dimensional medium of glass sculpture gives the ‘Glass Microbiology’ sculptures a visual power that would perhaps not be as effective in more traditional sculptural mediums such as wood or marble.

However, it is clear that the main motivation behind Jerram’s use of glass as a medium is his investigation of perception rather than colour, hence the use of clear rather than coloured glass. Arguably, the absence of colour allows a greater exploration of depth and the three dimensions available in sculpture, as the eye is not distracted by colour. As such, the use of clear glass is a relatively simple medium through which the complex nature of viruses can be explored.

To understand Jerram’s work, it is important to recognise the interdisciplinary nature of what he does. In the ‘Glass Microbiology’ series, the individual works were produced in consultation with virologists and scientists, and in response to Jerram’s research on the media’s reaction to each virus. Perhaps because of their media tag as ‘pandemics’, the sculptures of the HIV and Swine Flu viruses resonate more with the public due to their notoriety.

The boundaries between media, science and what is perceived as art are blurred in Jerram’s works. This perhaps points to what is most interesting about the pieces: as a series of works that make links between areas of popular and specialist culture, they challenge the traditional conceptual boundaries between art and science. Overall, there is a transmission of ideas represented in ‘Glass Microbiology’, which captures the possibilities opened up by an interdisciplinary conversation between the arts and the sciences.

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