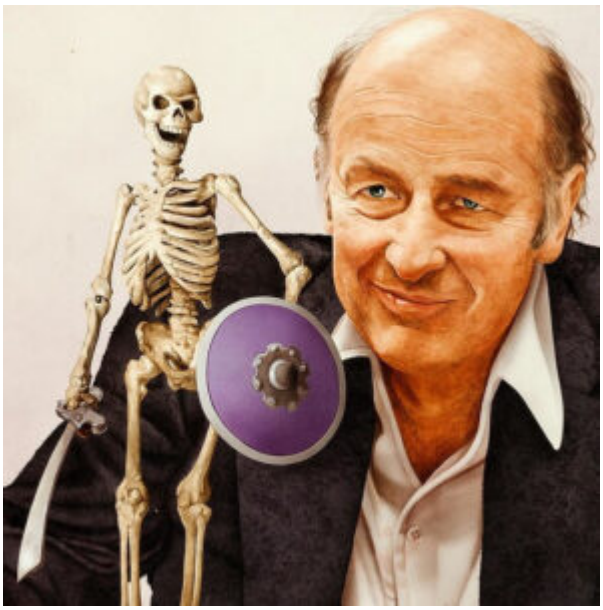
Fictive Realism in Visualisation

written by Jeremy Huggett | 04/01/2021



Ray Harryhausen by David Voigt (1999). Adapted from original image by Bob Sinclair (CC BY-NC 2.0)

Michael Shanks has recently blogged about Ray Harryhausen and his stop-motion animation (Shanks 2020), sparked by an exhibition at the Scottish National Gallery of Modern Art (currently shut as a result of coronavirus restrictions). Harryhausen's work proved inspirational to many film directors over the years, but might his technique also be inspirational for archaeological visualisation?

For example, Shanks draws a sharp distinction between the stop motion creations of Harryhausen and computer-generated imagery in the way that the technique of stop motion animation never quite disappears into the background which is part of both its charm and effect, unlike the emphasis on photorealistic models in CGI.

> In CGI the objective is often to have the imagery fabricated by the computer blend in so one doesn't notice where the fabrication begins or ends. The rhetorical purpose of CGI is to fool, to deceive. Harryhausen's models don't look "real". More precisely, they don't look "natural". No one need be fooled. One admires the craft in their making. (Shanks 2020)

Shanks suggests that CGI is a naturalistic way of reproducing the world on a superficial level focused on appearance, whereas stop motion is related more to the structure or causation of the visual experience – a form of realism that goes beyond simply appearance and acknowledges its

mode of production.

> The rhetorical purposes of naturalism and realism are different. Naturalism says – here is the way things appear. Realism says – here is how things work, maybe, depending upon your interest. (Shanks 2020)

Shanks calls this approach 'fictive realism' and suggests that stop motion animation offers some lessons for how we reconstruct and remodel the past. Although the context for his Harryhausen-related thoughts is Futures Literacy, including ways and means of imagining the future through archaeology, the point seems equally true from the more prosaic perspective of how we approach the creation of our archaeological visualisations of the past.

As Shanks describes it, CGI attempts to disguise itself, seeking to blend the boundaries between the constructed and the real so that the viewer cannot distinguish between them. This is frequently a key objective of archaeological reconstruction, and it's something we're getting very good at – see, for instance, the way in which real world imagery is blended with archaeological reconstructions of the Caterthuns hillforts (Baxter 2016) or early medieval Rhynie (Baxter, Duncan and Watterson 2018). Photorealism is increasingly emphasised in the pursuit of convincing and realistic experiences for virtual and augmented reality applications in the face of incomplete and ambiguous archaeological knowledge (e.g. Unger *et al.* 2020).

Shanks' image of 'fictive realism' resists this approach, and in many respects parallels what I've described elsewhere (Huggett 2020) as 'loose realism' (borrowing the concept from Karl Kullmann (2014)) in which the problematic expectations of truth and accuracy implicit in photorealistic imagery are offset by methods of presentation which are more closely connected to their underlying methods of construction. Among the methods for achieving this, I suggested that a more artistic approach, akin to classic analog archaeological visualisations, might take archaeological digital data and present it in an analog style, similar to the rotoscope animation methods used in films and pop videos, for instance (Huggett 2020, 7). Following Shank's discussion, one might equally add in stop motion animation here. I also suggested adopting a collage approach to creating visualisations. The multiple data sources commonly used within an archaeological reconstruction are normally hidden or disguised in the pursuit of photorealism, whereas a collage uses the boundaries and differences between the different sources as an integral part of the visualisation rather than attempting to minimise them (Huggett 2020, 7). By way of an example, I imagined what the effect might be of such an approach to Alice Watterson's visualisation of Skara Brae (Watterson 2014, see also Watterson 2015). A key aspect of the success of her visualisation is in the way in which it seamlessly blends kite photography, laser scan data, and live action, disguising the transitions between the different datasets within an artistic narrative. But what is real, what is constructed, what is imagined, and where do the boundaries between them lie? What if paradoxically those seams were emphasised to explicitly draw attention to where those datasets began and ended, and where the borders between the real versus the surveyed versus the interpreted lay? Breaking down the naturalism and focusing on the (fictive) realism of the modes of data collection and model construction etc. can help to sidestep the problems commonly associated with archaeological visualisations where photorealism or hyperreality are promoted at the expense of creating false expectations of authenticity, truth, and accuracy in the resulting models.

Shanks points out that such fictive realism actually benefits from the kinds of imperfections that create the weirdness of the 'uncanny valley' in CGI which abruptly disrupts a sense of immersion in the model. So instead of being seen as problems to be overcome, such disjunctions or weirdness support the experience of the visualisation. He also suggests that fictive realism reduces alienation, since the maker and manufacture of the model is not deliberately occluded, in contrast to CGI where considerable effort goes into concealment in the attempt to heighten photorealism. Significantly, he points out that Harryhausen's models invite one to believe and at the same time to be aware of their fabrication, which would seem to be important to strive for in an archaeological visualisation: something that is both convincing and clearly manufactured and interpretative at the same time, and perhaps a more ethical approach in some respects.

The concepts behind fictive realism and loose realism applied to archaeological visualisation usefully encapsulate a range of different methodological and media approaches, all of which in various ways seek to enhance the presentation, interpretation, and subsequent use of such visualisations. In particular, they counter the drive for photorealism and hyperreality which has increasingly seemed necessary and inevitable given, for instance, the impressive virtual reconstructions experienced in historical computer games which become benchmarks against which archaeological visualisations are judged in the public domain. Fictive or loose realism offers a different way of approaching visualisation that does not rely on these traditional approaches to accuracy and authenticity but provides an alternate narrative and a different kind of authenticity altogether. Aspects of this can be seen in the digital renderings of lithics recently demonstrated by Paul Reilly (Reilly 2020), generated using a combination of RTI imaging and neural networks to create unfamiliar yet strangely authentic images of flint tools, as well as in the semi-abstract paintings of archaeological features and landscapes created by Rose Ferraby (e.g. Ferraby and St John 2020). In different ways, each change the nature of our engagement with an archaeological reality.

So loose or fictive realism is an approach to visualisations that (adapting Shanks' conclusion) seeks to retain, incorporate, and present – even highlight – their performative aspects instead of being primarily focused on providing a largely unambiguous description of what is there (or is thought to have existed at some point in the past) which is displayed as a finalised, polished production with its sheen of truth and authenticity.

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