

Digital Materiality of the Internet-of-Things

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The crafting of physical artefacts with Internet connectivity allows for the embodiment of a congruent digital shadow. These hybrid artefacts are then transcendent across the physical and the digital, between the material and the immaterial. However, current Internet-of-Things interpretations has tended to focus on utilitarian artefacts. Instead, how can we understand their material culture, and what forms of experience they could encode rather than facilitate. Beyond the provenance of the materials and the traditions embedded in the making process. We suggest understanding their digital materiality as part of the multi-materialities embodied in complex artefacts. Furthermore, we offer the potential of sculptures made of glass to offer fresh insights into encoding digital experiences within artefacts. Including, how crafting with transparent materials to encode materialities, could inform crafting with the intangible digital to encode digital materialism. We note a number of equivalences between these materialities: performativity (by the viewer); reflexivity (responding to situations); encoding (of the creative process); styling by the maker (within the structure of the material); hybrid/multiple functionality (recreational, devotional, narrative etc.); apparent simplicity/transparency. We then consider what additional forms of experience artefacts with digital materiality could offer. By considering how artefacts could encode digital cultures, the practices and socio-cultural meanings emerging from the use of digital, through digital materiality. For example, experiences possible from the property of omnipresence (being present everywhere at the same time). Also, experiences that would arise from identification without ambiguity, transmission without loss and repetition without originality. We conclude by considering the implications of our understanding for the anticipated shift as society adopts the Internet-of-Things paradigm, for which approaches are emerging for connecting all human made objects in the world to the Internet, ubiquitous embodiment of digital materiality could come to change our understanding of material culture.