

SKINNING: This work investigates the creative potential of using 3D scanning and printing techniques (machine learning) not just to replicate/reproduce originals, but to transform scales and spaces to generate a new genre of (design/sculptural) artefacts. It deals with embodied data, singularly unique to every object, space and the individual and continues an interest in immersive art and design practice: *Pete Quinn Davis* 



The research outputs consists of a developmental sequences of four large-scale experimental artefacts exhibited internationally, in Holland, Italy and Canada. These have been produced by working through an over-arching research question that investigates the creative potential of using 3D scanning and printing techniques (machine learning) not just to replicate/ reproduce originals, but to transform scales and spaces to generate a new genre of (design/sculptural) artefact. The significance of the research question has been focused through the digital re-interpretation of a group of 18th-century porcelain figurines by William Cookworthy; which themselves represent an historic Plymouth-based technological breakthrough. Taking these figurines as model objects for the digital re-creation of new artefacts enables the research to draw on and re-interpret the heritage of core philosophies of place-based making, use of materials, and museological practices, as applied to technological innovation in art, design, and manufacture. This research and dissemination agenda is closely aligned with the mission of the V&A Research Institute, which has hosted the latest development of the work.

The research rigor has revealed new insights and generated new geospatial forms, through unique scaling and data-combinations. These use generative and iterative design processes, specific and in relationship to the original artefacts of the 18-century. The scanning and data capture alongside additive robotic milling techniques transforms the originals into sculptural artefacts that do not need physical moulds. This can be seen as creating 'virtual' moulds' with much greater creative flexibility for transformation, and especially scaling, via machine printing. This design technology research has been further informed by historical and museological research into the technical and cultural contexts of the original figurines which has shed new light on their dating and the use of non-invasive scanning techniques for the conservation of ceramic and museologics.

I have always engaged in immersive experiences that cannot be 'switched off', which are in essence 360 degrees, it is the phenomenological observations I can make while in these situations of the place, space, sound, materials, textures and technologies, that influence decision making later through studio practice, I find this can amplify my awareness and expand and transform sensation into ideas, thoughts and design/artworks. You can see other examples of my practice at www.quinndavis.uk & www.p2quinndavis.instagram.com

