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3D PRINTING : VIRTUAL DRAPING THE NEW MOULAGE

This practice-based enquiry aims to examine design and manufacturing possibilities using 3D CAD and 3D printing and to systematically test a range of materials in order to establish those appropriate for 3D printing fashion. The feasibility of draping and sculpting materials virtually onto the body using Rhino (3D CAD software) will be explored. Unlike former virtual 3D modelling where a pattern could be made from the draped fabric on an avatar, this enquiry will explore whether printing the material directly from the software can eliminate the need for traditional pattern cutting in this process. Since 2012 3D printing has emerged as a new method of manufacture for clothing. This is mainly evident in experimental sculptural forms for women. Working in collaboration with 3D Systems (the founding company of 3D printing), will ensure precise and well informed results and these will be fed back through this investigation.

Key words: 3D Printing, 3D CAD, Virtual Design, Virtual Pattern Cutting, Avatar, Rhino, Modelling