The Fabrication of Art and Beyond:
Making and Inventing in Digital Culture
CHArt 30th conference

Stephen Mumberson (Middlesex University, UK)
Invalid Geometry

A long term desire I have has been to be able to print on three dimensional surfaces or unconventional materials. My early extend practice was carried out using relief processes and printing either directly or by attaching printed tissues to a 3D surfaces. During time I found myself working within printmaking, drawing and collage as interchangeable practices which lead to my interest in 3D printing.

For fine artists, printmaking is valued for the particular qualities in the production of a work - not just as a means of creating multiples. At Middlesex University I had the opportunity to work with a 3D Printer, which has been a hard road, with the software aimed at engineers rather than artists, discovering how easy it is to lose a drawing by not paying full attention, the slightest mistake and a day's work is easily lost. Given time I have mastered a basic understanding of the process. This is a strange world for my generation where what you draw virtually becomes a solid thing - a printed object. It is a fusion of sculpture, printmaking and drawing seems magical but achieved through rational process. Like many traditional printmaking means those not prepared to learn and gain the skills needed, see it as simple, a creation on a screen, 'a push button creation'. 3D printmaking, to anyone used to using their mind, hands and eyes, it is still a challenging printmaking approach. It throws up problems that I only ever consider when casting metal, yet still has a very direct relationship to the original drawing (much as the wax original to the cast object in the lost wax process).

Invalid Geometry is a default notice that occurred regularly when drawing up a form in the 3D soft ware where for constructional reasons the form can not be printed. It is title of 6.45 min video of my activities using the 3D printer. The video consists of an edited interview of me describing the work, approach and process. The imagery is a mix of live action, animation of the original soft ware on screen drawings and the finial printed objects. The video is in the finial edit and would form my presentation.

Biography:
Stephen Mumberson studied Fine Art Printmaking at Brighton Polytechnic and the Royal College of Art but it was a period at the Cite Des Arts, Paris that I first had the idea to make prints on a 3D surface or somehow cast a print. This was before the arrival of digital means hence I made many experiment with flat printed mimics, silk screen transfer images over a ceramic base and many unsuccessful trails. I started teaching in Middlesex Polytechnic in 1987, now Middlesex University and carried on my printed form interests. Within teaching Fine Art Print I set up a digital set up, when computer developed enough memory and capability to deal with image software. During this time I was wrapping printed tissue paper printed by various means and glued over forms/clothes. The computer had become a means of creation for me, the arrival of a 3D printer and the associated software in the mid 2000's opened up the direct production of printed forms. At last I could draw a virtual image that would be printed out as a solid form - the imagined conjuror, magic but rational.