Expanding our research into the creation of digital doubles, Brass Art worked with scientists at UCLAN & Glasgow University to investigate 3D & 4D facial stereophotogrammetry as a highly detailed method of self-capture. Applications of this data were explored through processes of 3D printing and 2D pattern making and digital video.

This enquiry informed the 3metre research prototype: translating 3D body scan data into a pattern for a large inflatable sculpture. Utilising source data, a ‘mean average’ of the artists’ heads was produced, output as a 2D pattern and stitched together to form a 7metre 3D, inflatable sculpture, entitled Trine Messenger.
The fabric was weather-tested and different arrangements of vents were tried for efficiency with the fan and timer for self-inflation. Alterations were made to scale and aspects of the facial features and interior strapping to retain form and detail. After initial tests solar-charging batteries were chosen to power the fan and the automatic inflation and deflation of the sculpture.

This novel work combines the tradition of surreal self-portraiture with expertise in bio-medical data gathering within contemporary art. Playful manipulation of the body’s anatomical boundaries, through metamorphosis and narrative tableaux, enables the artists’ portraits to shift between the real and the virtual, evidenced through a body of research\(^1\). Our selection for 2012 Tatton Park Biennial\(^2\) by Danielle Arnaud and Jordan Kaplan places our practice alongside acclaimed international artists\(^3\) in site-specific and new media practices.
The production of miniature 3D prints **The Messengers** for ‘Inside Out: Sculpture in the Digital Age’\(^4\) along with conference paper **Wonder and the Digital Double** at 2\(^{nd}\) International Body Scanning Conference\(^5\) in Lugano, informed our conceptualization of the **Trine Messenger** at Tatton Park Biennial and together have yielded new knowledge for application to XYZN at SIGGRAPH in 2013.
2 2012 Tatton Park Biennial attracted 400,000 visitors
3 [www.tattonparkbiennial.org/artists](http://www.tattonparkbiennial.org/artists)
4 ISBN: 9781857214093
5 See published proceedings