Angela Tait and Ian Clegg on taking their ceramic camera to Italy

As a photographer and a sculptor, we are constantly negotiating the differences between our two disciplines. The artist's brain vs the designer's and two dimensions vs three; even occasionally gender bias are examples of the potential for friction. For a number of years we have been experimenting with attaching, collaging and distortion of images onto ceramics. A natural progression from this research was the creation of a ceramic camera. With ambitions to create a camera that functioned in a mechanical way as well as sculpturally, we have been building slip cast cameras from our own original models. These models are loosely based upon lan's quirky illustrations, which regularly find their way into our practice.

Using the basic fundamentals of photography, we construct the most rudimentary of machines. No lens, simply exploring the capture of light reflecting off our subjects. Externally the camera is glazed for aesthetic reasons. We play with decorative effects ranging from coloured slips to smoke firing. Inside a matt black glaze prevents the reflection of light which may distort and spoil the photographic result.

Our project 'Reciprocity/Reciprocita' was conceived following an invite to present our research to the Academia de Belle Arte in Macerata, Italy.

We find there is an inherent duality in our work. This could be inevitable when two artists collaborate; so we wanted to embed this idea into the project. Two bodies of work, two sets of subjects and two shows in different countries. We photographed students from the University of Salford and their counterparts in Italy, leaving our ceramic business card with each sitter as 'pseudo' payment, making each subject both complicit and explicit in the portraits. This cycle of borrowing/repaying our participants and viewers expands upon some of our previous ideas and work. Decades old Polaroid equipment was our photographic medium. This made the portrait sittings about three to nine seconds each depending upon the levels of light. The processing is then both immediate and performative. Our sitters were so engaged they wanted to hold the developing Polaroid between their hands for warmth to help the phptograph develop and then peel apart the layers to watch the image emerge.

Following the portrait sittings we transferred the images onto ceramic plates resembling the original Polaroid negatives. Using our methods of distortion, and experimenting with temperature fluctuations, we started to achieve results resembling historic wet plate prints. Architecture within the images was overlaid with exaggerated crackles in the glaze, an exclusively ceramic based process, and a unique visual language started to emerge. In the process we had used the medium to make permanent something which is inherently temporary.

The scope of the camera is now growing. Landscapes, still life, group portraits and architecture have been new subjects. The pinhole process creates images with no depth of field, giving a soft naivety which can be magnified hundreds of times without being lost. This gives us options for the future to make large scale installations from many smaller ceramic pieces, and abstract parts of the image to make pages for our ceramic 'books'.