Ceramics and the Archive

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The SSHRC research proposal investigates the possibilities to create a ceramic object by using computer technologies exclusively. The intent of this research is to merge together two forms of archive: ceramics, a material incredibly resistant to time and thus a form of cultural archive, and computer technology, another form of archive, one that has not proven its historical potential yet.

The first year of the project, intensive web research took place to find out the current state of research and development in ceramics using computers in their materialization, worldwide, in the work of artists, designers, industrial applications as well as curriculum in various institutions. The present state of software and hardware development applicable to the research has also been researched. An interactive website was created to organize that information and make it available readily. This research is ongoing over the three years of the project.

The second year of the project, virtual forms were created using Computer Assisted Design (CAD) software. Virtual surfaces, either from photographic sources or original, are also then mapped on these forms. The forms and the surfaces are directly informed by the digital process and are specific to that process.

The third year, using Computer Assisted Modeling (CAM), actual ceramic forms are produced by rapid prototyping using a digital 3D printer that has been modified to produce ceramic objects. Over these forms, a digitally produced, designed and printed ceramic surface is then transferred. The intent is to create a ceramic object with a specific form and a specific surface, both completely generated digitally. That object, due to the material characteristics of ceramics, in its form and its surface, will become an archive of a specific moment in time, now.