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# **CRITICAL REFLECTION**

## **LISTENING CUPS: A CASE OF DATA TACTILITY AND DATA STORIES**

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Github repository URL: <https://github.com/Liu-WenYue/cart360-2019>

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In this fast-paced world, we are surrounded by data at every moment of daily life. A prediction on data stated that human-created data will reach 44 trillion gigabytes by the year of 2020. And around 88% of the data today are not even analyzed [1]. People are not aware of the data that they created every day, so I think this project is very meaningful by making data tangible in a design context. As the format the data changes, the data is no longer pieces of information, they become an artwork and an independent representation of a story. By giving the collected data a physical form, it makes it possible for people to further imagine and reflect on the data. The meaningfulness of the data changed with the form of the data.

In this project, the authors used ceramic as the form to communicate their data and story. They first collected the sound data from their surrounding environment using a free mobile application. And then the author used Excel to arrange and prepare the G-code that will be used for 3D printing later. After a few experiments, the author also found that they can directly create the G-code they need using Grasshopper and Python. Unlike other 3D printing projects, the use of clay and the finished process of glazing and firing make these objects to have some weight and to have a different tactile experience. The texture on the cup varies according to how long the pause time is. And it can be affected by any external factors, for instance, the machine may have some debris at its nozzle which may accumulate exceeding clay, or the object may bump into other objects before glazing and firing. However, as the author said, these accidents did not mean any failure, but it gives these objects new meaning. It opens up space for people to imagine what happened with the object, or even the data.

The purpose of this project is to experiment with the intersection between the digital and material worlds. And it focuses on how data tactility changes the meaning of data. Data materiality is not only meaning change the data into a physical presence but also changed it to related ways in which the data becomes more meaningful and significant [2]. In the form of a functioning cup, people are allowed to hold in their hands and feel the texture with their palm and fingers. People turn to think when they drink water and hold the cup in their hands, and now with this cup, people can have some time with themselves and this texture cup. Moreover, people can store information that they desired and feel it every moment they want. As a sociologist, Lupton stated in one of her articles that, "The ways in which their personal details are translated from digital data into material form are important to people's sensory engagements with their data" [3]. Collecting data and transform it into an art piece will make the

people connect more with the data and have a deeper understanding of the data. Textures are now connected to people's memories. I believe this project is very successful and achieved its original purpose.

## **Bibliography**

[1] <https://digitalmarketingphilippines.com/big-data-8-surprising-facts-to-know-infographic/>

[2] <http://www.bbk.ac.uk/birmac/2018/11/14/date-materiality/>

[3] Deborah Lupton, <https://simplysociology.wordpress.com/tag/data-materialisation/>

[4] <https://dlnext.acm.org/doi/10.1145/3322276.3323694>