

## Knowing Together

Rosalie Yu and Charles Berret

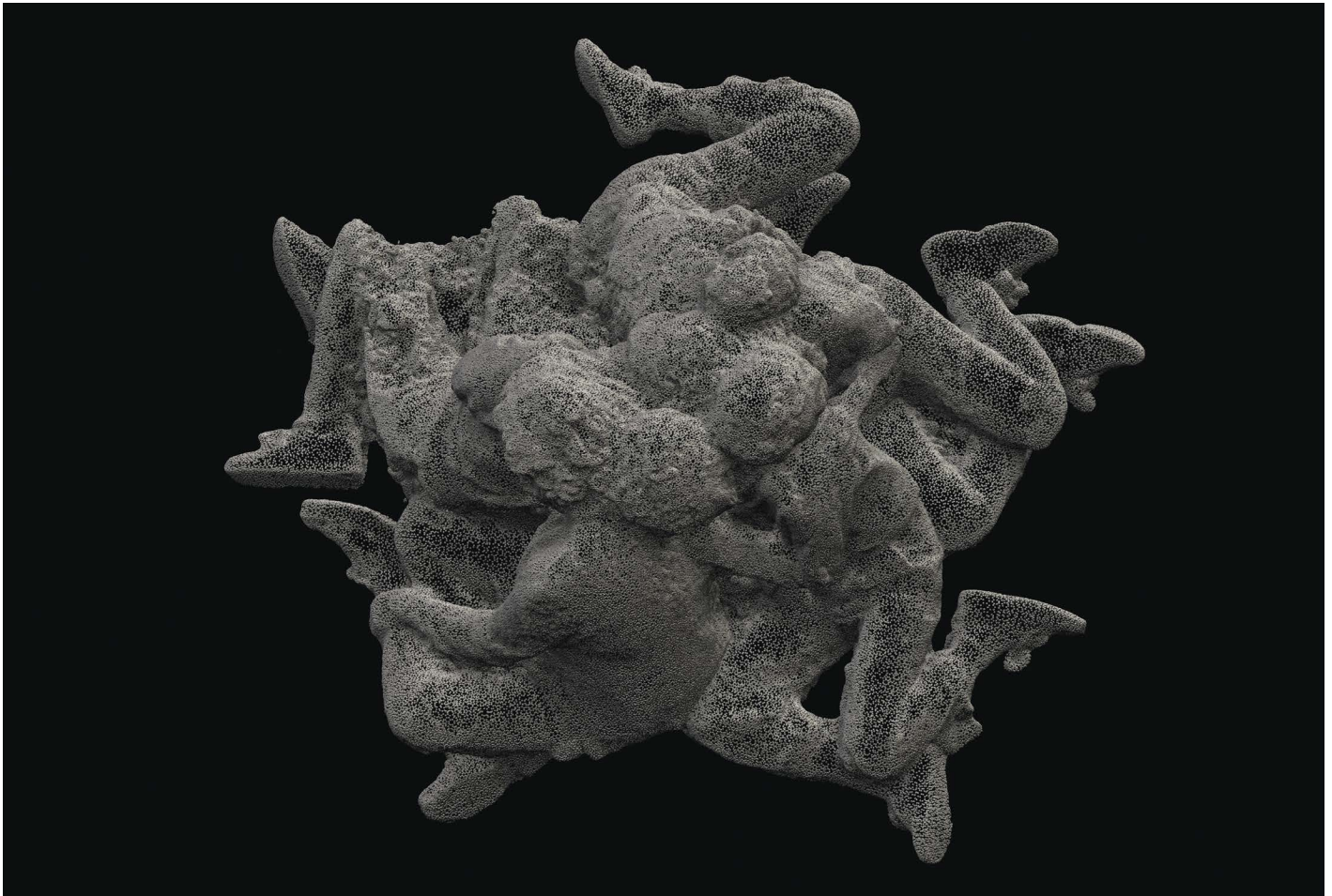
*Knowing Together* is an experiment in collaborative photography and the expression of embodied experience in three-dimensional art. This experiment is intended to probe beyond the typical limits of photogrammetry, a technique for creating 3D models by combining multiple photographs taken of an object from different angles.

The focal point of *Knowing Together* was a workshop on photogrammetry, followed by a therapeutic exercise in which subjects platonically embraced in pairs or small groups for several minutes at a time, staging a display of discomfort in transgressing conventional boundaries of physical intimacy. As they embraced at the center of a circle formed by the remaining participants, the group forming the circle passed a camera around and progressively captured a series of photos to make our 3D models. These source photos are displayed alongside data diagrams indicating capture sequence, position and elevation.

In photogrammetry, an object is typically expected to remain completely still, but most people in the workshop found this difficult during the 5-to-10-minute process of embracing. Over time, the initial emotional challenge of spontaneous intimacy gave way to physical strain. Some fidgeted, shifted their

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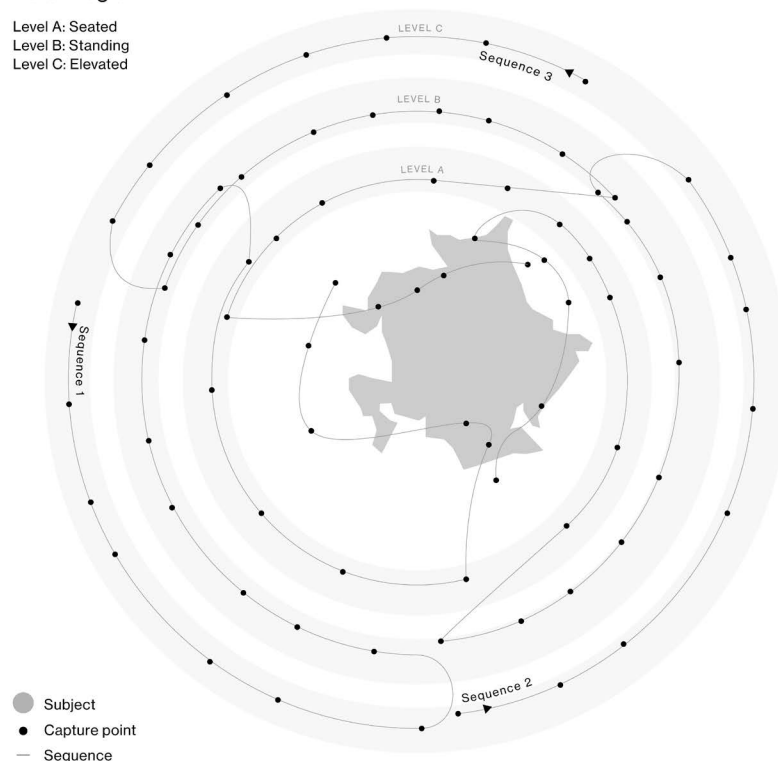
*Knowing Together*, Output No. 7. The final 3D rendering from this series depicts five people sitting on the floor, leaning inward, 2018.  
(3D rendering: Rosalie Yu)

weight or slumped with fatigue. As a result of this movement, as well as uncontrolled factors in the surrounding environment, the output of these scans often drifts from the sharp, familiar, coherent surface one might expect. These aberrations remain in our 3D-printed sculptures, which are suspended in clear globes of acrylic resin to better preserve these features.

Above all, *Knowing Together* has been a collaborative work. Those involved have been more than just participants; they are also agents, witnesses and ultimately creators, decentering the solitary photographer in favor of bearing witness collectively. The people sharing this experience have together created something more expressive and personally meaningful through photogrammetry than mere photorealism.

#### Data Diagram

Level A: Seated  
Level B: Standing  
Level C: Elevated



**Output No. 7 was composed through collaborative photogrammetry using 77 images captured by 30 participants over the course of 11 minutes, 2018. (Design: Kimberly Gim)**

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**Rosalie Yu** is an artist who uses alternative capturing techniques to explore the limits of perception and memory, to reflect upon archiving practices, to transfigure everyday experience through rituals and to interrogate the process of capturing depth in photography. Her projects have framed these concerns within broader narratives like the dynamics of physical intimacy in East Asian culture and the history of colonial sugar production. She is a creative technologist and artistic fellow at Columbia University's Brown Institute for Media Innovation. Her work has been supported by fellowships and residencies at Pioneer Works, EdLab at Teachers College and NYU's Interactive Telecommunications Program.

**Charles Berret** recently joined the University of British Columbia as an assistant professor after completing his Ph.D. in Communications at Columbia University. Charles's research has been funded by grants and fellowships from the Brown Institute for Media Innovation, the Knight Foundation and the Tow Center for Digital Journalism. His scholarly work has been published in the *Journal of Visual Culture* and the *Journal of Communication Inquiry*.