Hannes Bend | Unrealized proposal | AI-assisted visualizations 2026



The body does not end at the skin. A dark surface waits in a public passage; the proposed encounter begins when someone approaches.



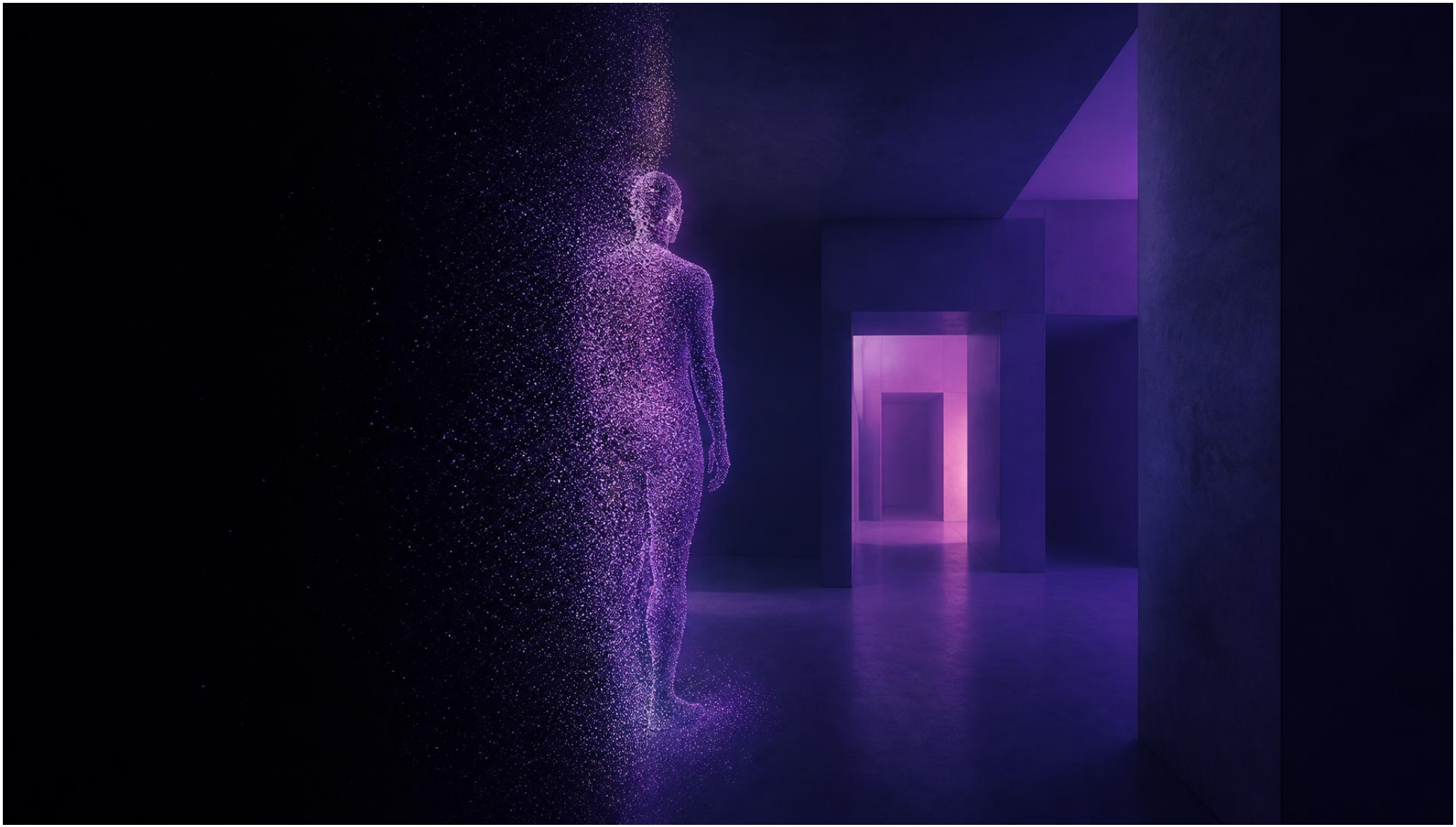
A free-standing surface interrupts an everyday passage. This installation study suggests scale, movement and proximity; it is not a photograph of a built artwork.



The body emits infrared radiation beyond unaided human vision. Proposed thermal and depth sensing would translate heat and movement into a changing visual field. Colour is an artistic mapping, not a measured heat image.

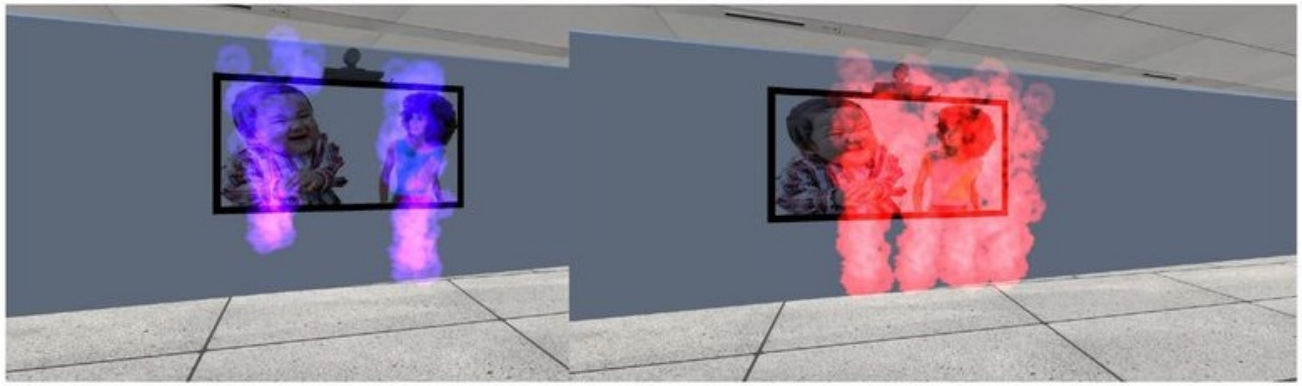


Several people would contribute to one formation. Their sensed fields would become shared visual material: a relation between participants, rather than a portrait or diagnosis of any individual.



After sustained presence, the proposed surface would open into a virtual architecture navigated through bodily movement. Its intended sensing, transition and participant experience remain untested.

Development



Figures 3 and 4: Illustration of *FORMLITH* project, thermal clouds of two people detected by a infrared camera in front of screen

Project *FORMLITH*

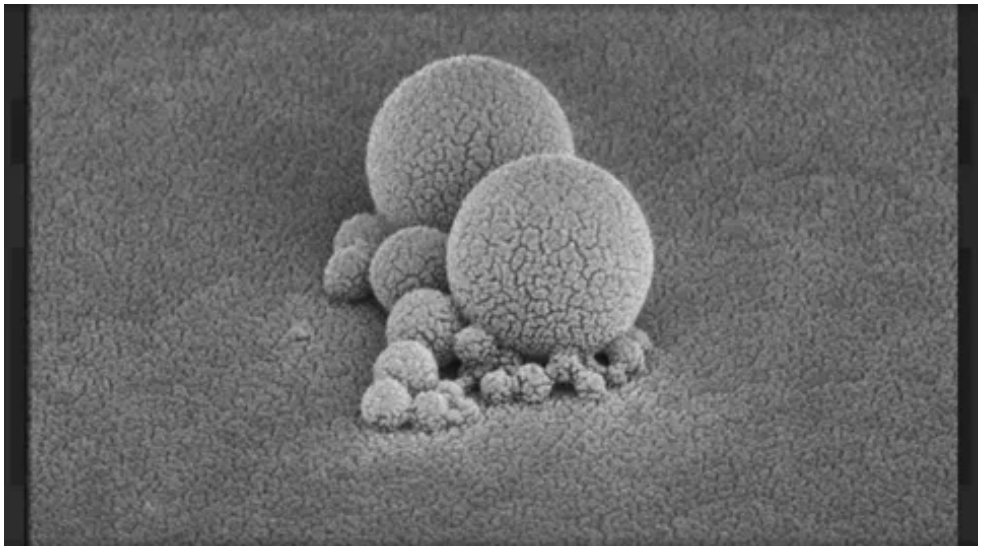
The project explores a fusion of real and virtual realities by converging multiple sensory information including thermal imaging and persistent, online, multi-user virtual environments. We aim to analyze the effects of virtual environments on performance in physical environments, and to enable new possibilities for situational experience and telepresence. We develop a motion and thermal wavelength detecting interface to create a shared space with interactions between the physical biological response and virtual representation. Wavelengths of the electromagnetic spectrum perceivable to the human sensory perception are essential for human cognition and interpretation of reality, and the focus is to access, sonify and visualize wavelengths and realms of reality only accessible through technology.

Original FORMLITH detail from the 2016 Mindful Technologies research poster, presented at the AAAI Spring Symposium at Stanford University. Early proposal illustrations and text; the installation was never realized.

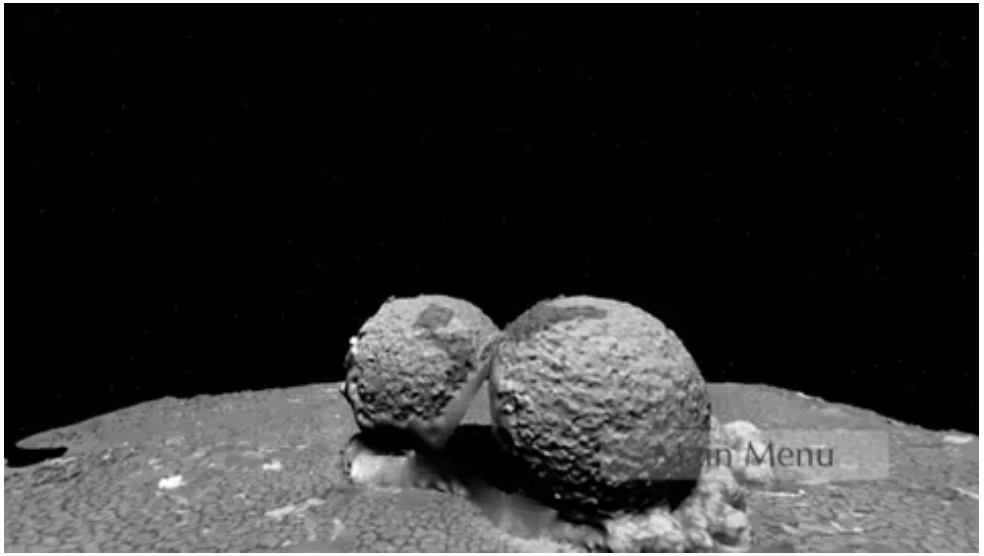
Research paper and poster record

Science, art and perception

Hannes Bend | Archival research / completed VR



Microscopy source imagery, CAMCOR, University of Oregon, 2014-2016.



Nanoscape, mYndful, 2015-2016. Nanoscale structures translated into VR.

Published research. I initiated Metaverses at the University of Oregon and first-authored Mindful Technologies: Research and Developments in Science and Art (2016, pp. 329-331). Its dedicated FORMLITH section describes motion and thermal-sensing research with Virginia Tech. The presentation received a Best Presentation Award at the AAAI 2016 Spring Symposium on Well-Being Computing, Stanford University.

Attention, body and environment. The wider programme connected visual perception, exploratory EEG/fMRI meditation studies and realized biofeedback environments. FORMLITH carries that inquiry into shared space through body heat. Future evaluation would need to examine the sensing, the participant experience and the limits of the representation. FORMLITH has never been built or clinically evaluated.

Published paper / FORMLITH section: p. 330 Research and VR documentation