

MISQ Archivist

Synthetic Knowing: The Politics of the Internet of Things

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Abstract

All knowing is material. The challenge for Information Systems research is to specify *how* knowing is material by drawing on theoretical characterizations of the digital. Synthetic knowing is knowing informed by theorizing digital materiality. We focus on two defining qualities: *liquefaction* (unhinging digital representations from physical objects, qualities, or processes) and *open-endedness* (extendable and generative). The Internet of Things (IoT) is crucial because sensors *are* vehicles of liquefaction. Their expanding scope for real-time “seeing,” “hearing,” “tasting,” “smelling,” and “touching” increasingly mimics phenomenologically perceived reality. Empirically, we present a longitudinal case study of IoT-rendered marine environmental monitoring by an oil and gas company operating in the politically contested Arctic. We characterize synthetic knowing into four concepts, the first three tied to liquefaction and the final to open-endedness: (1) the objects of knowing are algorithmic phenomena; (2) the sensors increasingly conjure up phenomenological reality; (3) knowing is scoped (configurable); and (4) open knowing/data is politically charged.

Keywords: Knowing, synthetic situation, Internet of Things (IoT), digitalization, politics