

# MISQ Archivist

## Technology as Routine Capability

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### Abstract

While technology is most commonly associated with material things, tools, or artifacts, it is also associated as a concept with routines, patterns of action that provide capabilities. Researchers have struggled to bring these interpretations together. Drawing from Schatzki's practice theory, we offer an overarching perspective that ties tools as devices to routines in a broader social context, yielding insights into what is termed *technology as routine capability* in the advancement of practices. How change in technology occurs both within and among practices is examined from this perspective. Four principal *modes of change* are identified: (1) *design*, in creating new devices and routines; (2) *execution*, in operating devices and performing routines; (3) *diffusion*, in spreading devices and routines to a population's members; and (4) *shift*, in adapting devices and routines to change among a world's practices. Change is seen to be closely intertwined among the modes, suggesting that future research examine cross-modal change, in particular, to gain a better understanding of how new technology advances practices. Overall, our new perspective provides a lens that ties together previous strands of research, allowing insights from multiple studies to accumulate in a way that both illuminates and motivates further work. Enlarging on current interpretations, it suggests that routines are integral to technology itself.

**Keywords:** Technology, artifacts, routines, practices, technological change, information