In this paper, we argue that the use of technology is structured not only by users, technology, and social context, but also by onlookers (i.e., actors for whom the use is visible, but who are not directly involved in the activities of use themselves). Building on the “technology-in-practice” lens and insights of an ethnographic study in operating rooms where nurses used mobile technology for various work-related and recreational purposes, we show how onlookers contribute to structuring collective patterns of technology use. We conceptualize their role as the “onlooker effect,” which means that onlookers’ inferences, judgments, and reactions trigger users to reflect on consequences and adjust the use in front of others, a phenomenon which is activated by the cues unintentionally given off when using technology. By identifying the role of onlookers in technology use, this study goes beyond user-centric and feature-centric perspectives on information technology use, illustrating that it does not happen in the physical vacuum, but often draws in unintended audiences. The onlooker effect provides a more in-depth explanation for unexpected patterns of technology use emerging in the workplace.

Keywords: Technology use, technology-in-practice, structuration theory, the onlooker effect, visibility, human agency, physical materiality, dual structuration