**Spatial Conception of Activities: A Socio-Cognitive Perspective for Simulating Work Practices**

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People conceive their everyday affairs (their practices) as social actors in activities, in which they perceive, infer, move, manipulate objects, and communicate in some physical setting (e.g., going to the grocery to buy dinner). These behaviors are conceptually choreographed in an ongoing, usually tacit understanding of “what I’m doing now,” encapsulating *roles* (“who I'm being now”), *norms* (“what I should be doing”; “how I should be dressed/talking/sitting”), and *progress appraisals* (“how well I’m doing”).  Activity motives and modalities vary widely (e.g., waiting in line, listening to music, sleeping), all of which require time and occur in particular settings.  Brahms is a multiagent work systems design tool for modeling and simulating activities, used extensively to design aerospace work systems.  For example, the Generalized Überlingen Model (Brahms-GÜM) simulates air transportation practices, focusing on how pilots and air traffic controllers interact with automated systems in safety-critical, time-pressured encounters. Spatial cognition is pervasive: Scanning displays of multiple workstations, coordinating airspaces and flight paths, while timing interventions to maintain aircraft separations. Brahms-GÜM demonstrates how events may become unpredictable when aspects of the work system are missing or malfunctioning, making a routinely complicated system into one that is *cognitively complex* and thus out of human control.  Normally asynchronous processes become coupled in space and time, leading to difficulty comprehending the situation (“what is happening now”) as a familiar multi-modal flow of events. Such examples illustrate the dynamics of spatial cognition inherent in our *conceptually situated* experience—our consciousness—of who we are and what we are doing.