Questions for the Spatially Enabled Smart Person on a Smart Campus

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For much of my professional career, I have promoted the importance of documenting and understanding the diurnal space-time patterns of human movements and activities in cities (e.g., see Janelle, Goodchild, and Klinkenberg 1998; Janelle 2012). The recent research focus on smart cities has demonstrated the theoretical insights and practical benefits that can be derived from such documentation (e.g., Harrison, et al., 2010; Batty, et al., 2012). Clearly, the integration of information and communications technologies (ICT) with geographically embedded and mobile sensors has enabled flexible temporal and geographical referencing of data to display information of all kinds—opening a plethora of research and problem-solving capabilities not thought possible as few as ten years ago, much less four decades ago when I initiated research on the space-time geographies of cities. But, now, I wonder—Where is this technology taking us? Are there downsides? What are we giving up? What are the risks? In addressing these questions, it is ironic that my responses are in the form of more questions. In large part, these concerns derive from humanistic fears of change and from threats to the values embedded in existing socio-economic structures and in traditional problem-solving practices. The questions listed below are exemplary rather than exhaustive; I hope to add to this collection of queries over the course of the specialist meeting.

What should we guard against?
- How can we make use of automated handheld, wearable, and vehicle navigation/information tools without losing our innate human capabilities to think spatially?
- How can the individual exercise control over information access without being overwhelmed by targeted automated information services?
- Do we seek ICT-tethered dependence in structuring and carrying out our daily routines and lifetime trajectories or can these technologies be designed to enhance our individual autonomy over space and time?

Of course, the smart (cities/campuses/buildings/etc.) movement has emerged with a primary focus to enable opportunities to bring our lives in better alignment with environmental and social constraints. Indeed, there are enormous opportunities, some already underway, and others not yet on the drawing boards. As educators, we need to be conversant in how these technologies intersect with intellectual perspectives and to nurture those that promote
opportunities to engage students productively and creatively. There are significant opportunities to use local campus environments as platforms for students to learn problem solving, research approaches, and collaborative skills from a broad range of disciplinary perspectives that will equip them for a lifetime of innovative and thoughtful engagement.

What opportunities should we nurture?

- Seeing time as a critical non-renewable resource in the context of the human life span, how can the smart campus be an incubator where ICT design and deployment enhances general human efficiency and effectiveness?
- How do we move beyond our home-based smart campus to the global integration of smart campuses?
- In what ways can we contextualize the campus environment to address broader regional, national, and global issues (including environmental sustainability, cognitive clarity, and social cohesion)?
- How can we create and demonstrate in the campus setting collaborative systems of knowledge integration for framing and solving problems?
- Can the campus position itself as an incubator for innovation through smart technologies, especially by engaging students in conception, design, implementation, and evaluation?

I trust that this specialist meeting will address such questions and draw attention to the need for integrating smart people in smart ways with smart infrastructures for smart outcomes.

References


