Network Idealizations and the Prospect of an Associationist Phenomenology

An early dream of cognitive science was that, although it would begin as an interdisciplinary study, it would one day culminate in a unified theory of animal, human, and machine intelligence. A survey across the disciplines indicates that this has not yet happened and, in fact, there may even be more divergence now than before. In retrospect, this outcome must seem inevitable. Given the development of the individual disciplines, each with its own goals, domains, research methods, and linguistic communities, it seems unlikely that a unified theory of intelligence could emerge from a practice that by design adopts incidental congruencies from the various sciences yet pays an often-unacknowledged cost by ignoring vast and important differences. To move forward on a unified understanding of cognition and experience, paradigmatic changes that challenge foundational insights from more than one discipline are surely necessary.

In this talk, I will address one place where the need for multi-disciplinary paradigmatic work seems particularly necessary; this concerns how network idealizations, loosely adopted from neuroscience and applied to artificial intelligence with mixed success, affect questions concerning cognition and experience. Specifically, I will suggest that common idealizations create their own impasse on the way to understanding experience and, further, that re-arranging basic suppositions may help to clear that path. The result will suggest a phenomenology of experience that follows associationist, rather than transcendental, lines. Making the needed moves, however, may mean having to change (or reinterpret) paradigms in two or more disciplines. Given current scientific practice, under what conditions could such a thing be allowed to happen?