

Complexity, Resilience, Regeneration: New Directions for Sustainable Human Settlements

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ABSTRACT

Purpose of the paper

To present part of the findings of an extensive interdisciplinary meta-review of literature into the attributes of an ecological worldview and its relationship with the sustainability discourse as it pertains to the built environment and its implications for built environment research.

Methodological approach

A qualitative research strategy was followed, based on ontology of constructivist realism, a transdisciplinary and interpretive epistemology and a hybrid methodology grounded in critical theory, grounded theory and wide reflective equilibrium.

Findings

The project suggested an understanding that human settlements should be seen as complex adaptive social-ecological systems and that sustainability interventions within this framework would centre on the twin approaches of resilience and regeneration.

Practical implications

The discussion culminates in the identification of a high-level built environment research agenda that opens up a new approach to current pressing questions in sustainable human settlement development such as climate change adaptation, municipal service delivery and food security.

Originality

It presents an integrated and transdisciplinary research framework based on a synthesis of existing research areas that open up new possibilities for research in the linkages and dependencies between these different areas.

Keywords: Sustainable Construction, Resilience, Regenerative Design, Social-ecological Systems, Sustainable Human Settlements