AI & Architecture: A manifesto for the alchemy of space

We stand at the threshold of an era where lines of code sketch our skyline. But what kind of world are we scripting? One of sterile hyper-efficiency, or one where buildings breathe with the pulse of human life?

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I.   AI as a cognitive collaborator in architecture

Against the cult of speed, I propose slow AI, a deliberate, reflective collaboration with machines.

- AI augments design by enabling heuristic, customized, and augmented paradigms (FUGenerator at Tongji University).

- Risks: Over-reliance on AI may erode human creativity and cultural depth (Purini's critique of "Esperanto" architecture).

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I.   Human-centered design vs. technological dominance

AI is neither savior nor villain, it is a mirror. It reflects our priorities back at us.

- Steward Brand: Advocates for adaptive architecture, buildings that evolve with users, mirroring organic growth.
- Franco Purini: Critiques global architecture's lack of meaning; calls for a "new vanguard" blending tradition, local identity, and poetic depth.
- Carlo Ratti: Proposes "collective intelligence," where AI enhances human-centric design without displacing social bonds.

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I. Ethical and social challenges

- Durkheim's Anomie: Rapid AI adoption risks fracturing community ties and cultural identity.
- Black Box Problem: AI's opaque decision-making lacks embodied human experience (Muntañola's "intersubjective net").

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I.   Practical applications of AI in architecture

- Tools: BIM, 3D printing, VR/AR, and IoT optimize efficiency but require human oversight.
- Statistics: 74% of architects plan to increase AI use, yet 86% agree it cannot replace human intuition.

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My stance?

- AI as collaborator, not author, it should amplify human creativity, not standardize it.
- Design for adaptation, not perfection, buildings must evolve with their inhabitants.
- Social responsibility over technological mastery, the real "smart" city is one that fosters connection, not just efficiency.

Proposed practical project: The Whole Earth Catalog for socially responsible AI in architecture