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Architecting Zoë: On Haunting Homes

Poised to shape the fabric of *bare life* (Zoë), our 21st century design toolsets are setting the stage for an emerging era of ‘living’ architectures that merge living and non-living material expressions, each ‘haunting’ the other. *Architecting Zoë*, incorporates ‘living’ technologies and substrates into our buildings, which range from dynamic chemistries, to microbial colonies and artificial intelligence. Such human-designed infrastructures-for-living confer these spaces with some of the characteristics of *bare life* like sensitivity, growth and self-repair. Exemplified by the *Living Architecture* project (Armstrong et al., 2017), a building system that enables reciprocal exchanges between humans, machines and microbes, more-than-human relations are facilitated through a currency of electrons – whose constant, orchestrated flow is equated with “life” (McFarland, 2016). Mediated through life-bearing systems such as bio-electrically active biofilms, our homes and buildings are no longer inert spaces but lively assemblages that coexist through the waste streams, habits, preferences and peculiarities of multi-species inhabitants. Sensing change in our behaviours, accordingly, artificial intelligence-enhanced microbial processing “organs” alter the electronic outputs and chemical transformations with the *holobiontic*¹ system, establishing a condition of mutual care and interdependency. With the occupant’s own microbiome seeding such infrastructures, ‘living’ architectures can be considered an extension of the human body. Conferred with a unique character and life force, they may even ‘remember’ the traces and trends of a person’s lifestyle and continue to respond to, or emulate them, long after the occupant has gone.

References

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¹ Lynne Margulis coined the term *holobiont* to refer to any physical association between individuals of different species to form a coherent ecological unit (Margulis, 1998). This definition has since changed to incorporate more eco-systemic bodies like corals and trees with mycorrhiza, which is in keeping with the present usage of the term.