WHERE THE SIDEWALK ENDS
Architecture in the Age of Semi-Autonomous Machines

An Honors Thesis (HONRS 499)

By

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ABSTRACT

At the heart of the "American" psyche is an engrained urge to roam. From the original colonial settlers to manifest destiny and from highways to the moon landing, the great American future has always existed somewhere just beyond the horizon. As the 21st century closes its first tenth, the proliferation of semi-autonomous and autonomous machines – funded by the Department of Defense via the Defense Advanced Research Projects Agency (DARPA) – indicates the potential for larger structures to move semi-autonomously in the near future. (That is architectural typologies will emerge as semi-autonomous, mobile entities. As there is an estimated U.S. population of 3 million people who live primarily in mobile recreational vehicles, it is not absurd to imagine a transition from houses on wheels to houses on legs.) Because architecture currently faces the overwhelming burdens of energy reliance, infrastructural sprawl, and cultural differences it is perhaps time to introduce a radical solution and postulate to its theoretical limits in order to catalyze impetus for meaningful change. If only there were a gizmo to help get us out of here… It is the uniquely American obsession with technology, which Reyner Banham details in The Great Gizmo, that has fueled the most critical transitions through history and it is technology that informs the premise of this thesis. According to the DARPA website, "throughout history technical challenges have inspired generations". Through a combination of research, creative work, reality, and philosophical projection Where the Sidewalk Ends provides insight and possible solutions for a tumultuous era. This thesis contains a creative composition and selection of coursework from ARCH 402 with Michael Silver as well as additional narrative and reflection. Narrative, images, processes, and end products are combined into a book to capture the topic and selected activities from ARCH 402 for the benefit of future Ball State students.

ACKNOWLEDGEMENTS

AUTHOR'S STATEMENT

As I began pursuing a degree in architecture the profession, the curriculum, and the pressure seemed enormous. The first year was frantic and afterwards, it was time to begin the official architecture course load. Throughout the second year, I felt that I had been initiated into the field and that my journey was truly beginning. With each challenge that I met, I felt a great deal of accomplishment as well as personal growth. From travelling for one week through Canada with my new colleagues and professors to completing the 40+ year traditional contest ICMA, I was growing closer to the profession I set out to pursue. Second year was both the initiation and the high point of my illusions about my education. Each subsequent year carried a bit less weight and the load above my head seemed to grow ever smaller. While courses like structures became more comprehensive and likewise more difficult, the aura of "Architecture" became less mysterious and the obligations began to vanish; I felt increasing freedom both within the curriculum and within the field itself.

During each project, I strived to work outside my comfort level in order to push the boundaries that are currently drawn in architectural design and professional practice. In order to pursue a new paradigm, it is necessary to understand the current paradigm and to refuse to settle for it. As I entered the final semester of my undergraduate career, I felt an unparalleled freedom and control over my future. On the Palm Springs trip, I finally felt the duality of architecture: simultaneous nothingness and all encompassing prospect. Perhaps because of the vast desert, escape from Indiana winter, or some other Cali-mysticism I felt irregularly free. As we set up scans of radically singular site conditions, I sensed vast opportunity as a nearly graduated young architect. Similarly, I felt released from the preconceptions I once had of the profession. As these previously defined roles dissolved, I realized that architecture entails endless freedom too. The following is but one way to exercise that freedom.

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