ARCH 603/726 History and Theory of Design Health

Human Factors in the Anthropocene

Winter 2020 / 3 credits
Room 3154, A&AB
Wed 1:00pm - 4:00pm

Instructor:
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Since World War II, the field of ergonomics has presented the ideal relation between human and machine as promoting task completion without fatigue. The joining of medicine, operations research, psychology, and other fields that studied human factors cemented a set of ideas about the proper relation of humans that had been developing through the industrial revolution. The International Ergonomics Association defines human factors as "the scientific discipline concerned with the understanding of interactions among humans and other elements of a system, and the profession that applies theory, principles, data and methods to design in order to optimize human well-being and overall system performance." This course will explore the slippery meaning of all the above terms (science, theory, data, and human well-being among others) and ask what a critical use of ergonomics might mean for the study of architecture.

In what ways has the conversation about health and design been shaped by the military research of the 20th century and how might it shift in the 21st? Occupants, users, populations, and multitudes are all constrained and enabled by the designed environment. We are always already designed but the challenges of the uneven application of design surround us. From the elite, high-technology, heavily monitored environment of a robotically-assisted operating theater to an urban village in need of sanitation to suit its growing population the application of design is uneven. For whom should we design: humans, nonhuman animals, machines, all of the above? Whose health matters and how has that conversation been shaped by the actions of those who came before? To what extent is our conception of architecture inherently anthropocentric, oligarchic, machine centered, or none of the above?