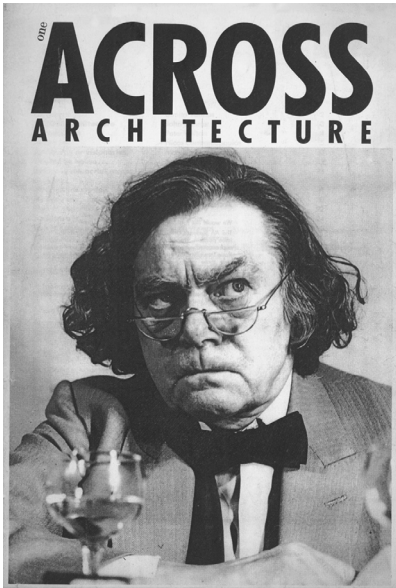


CARNEGIE MELLON —ARCHITECTURE



Gordon Pask on the cover of the first issue of Across Architecture (AcAr), a magazine published by the students of the Architectural Association (AA), School of Architecture, 1984, Gordon Pask Archive, University of Vienna

48-619: Machine Intelligence, Cybernetics and Design

Units: 9

Instructors: Ensar Temizel, Paul Pangaro

Artificial intelligence is not the first technology to hold promise for creative collaboration. The history of attempts is rich and yet the full potential is unrealized. This course invites students to extend that history into new directions for human-machine interaction in architecture and design based on cybernetic epistemology, concepts, and models. The dominance of artificial intelligence, especially with the substitution of machine learning for the broader meanings of AI and more so for machine intelligence, has limited our view of what computation can afford architecture and design, as well as the rapidly evolving techno-culture, and no less society and culture more broadly. Against this current, this course will expose students to cybernetic approaches to machine intelligence, encouraging them to question the human and non-human agencies involved in the relationship of users/inhabitants with architectural/design environments. The course is structured in two major modules. The seminar module focuses on the intricate relationship between the fields of architecture/design and cybernetics, dwelling on their intermeshed histories spanning more than six decades. The studio module provides an opportunity for students to apply cybernetic concepts and ideas via a collectively designed and fabricated architectural installation.

