

The Organizational Complex 1945-present

Reinhold Martin
ARCH A4497

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Wednesday 11:00-1:00

408 Avery Hall

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Office hours: Th 3pm-5pm

Buell Center, 3rd fl. Buell Hall

This seminar will consider the emergence of an “organizational complex” from the corporate architecture of the post-World War II period to the present, in the United States and elsewhere. This “complex,” which includes but is not limited to corporations, universities, office buildings, research laboratories, digital technologies, new forms of labor, performative gender roles, networked infrastructures, visual diagrams, etc., can be understood as the aesthetic and technological extension of the military-industrial complex.

The seminar will follow the historical development of techniques, systems, and processes of spatiotemporal organization in architectural discourse and production initiated during this period, including the development, within the modern corporation, of a managerial culture, the wartime consolidation of military command and control, and the postwar emergence of a corporate modern architecture. We will further consider buildings and the discourse around them in the context of the new, feedback-driven, network-based technologies of control and communication developed during the Second World War, as well as the postulation of the corporation as a model of social life, in a new, systems-based organicism. Topics covered include: the architectural symbolic; horizontality and verticality; centralization and decentralization; modularity; architecture and information machines; cybernetics and communications theory; and systems models of space.

A central text will be Reinhold Martin, The Organizational Complex: Architecture, Media, and Corporate Space (2003), the arguments of which we will revisit, critique, and develop from the perspective of recent scholarship in architectural history, media history, science and technology studies, and elsewhere.

Students are expected to participate in class discussion, present one or more selected architectural projects or other visual material in class, and write a research paper related to at least one set of readings, the subject of which is to be determined in individual meetings during office hours.

Readings

NOTE: All required readings are available on Courseworks except as noted.

* Required

** Required—available at Bookculture

Week 1: Introduction

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* Alfred D. Chandler Jr., The Visible Hand: The Managerial Revolution in American Business (Cambridge, MA: Harvard University Press, 1977), "Introduction," 1-12,

* Friedrich A. Kittler, Discourse Networks 1800 / 1900, trans. M. Meteer with C. Cullens (Stanford: Stanford University Press, 1990), "Afterword to the Second Printing," 367-372.

* Friedrich Kittler, Gramophone, Film, Typewriter, trans. G. Winthrop-Young and M. Wutz (Stanford: Stanford University Press, 1999), "Introduction," 1-19.

** Reinhold Martin, The Organizational Complex: Architecture, Media, and Corporate Space (Cambridge, MA: MIT Press, 2003), "Introduction," 2-13.

Week 2: Precursors

1/28

* Alfred D. Chandler Jr., The Visible Hand: The Managerial Revolution in American Business (Cambridge, MA: Harvard University Press, 1977), Part V, "The Management and Growth of Modern Industrial Enterprise," 377-483; "Conclusion: The Managerial Revolution in American Business," 484-500.

* Michael Osman, "Preserved Assets" in Aggregate, eds. Governing by Design: Architecture, Economy, and Politics in the Twentieth Century (Pittsburgh: University of Pittsburgh Press, 2012), 1-20.

* Martin J. Sklar, The Corporate Reconstruction of American Capitalism, 1890-1916: The Market, The Law, and Politics (Cambridge: Cambridge University Press, 1988), "Introduction: Corporate Capitalism and Corporate Liberalism," 1-40.

Anson Rabinbach, The Human Motor: Energy, Fatigue, and the Origins of Modernity (Berkeley: University of California Press, 1992), Chap. 4, "Time and Motion: Etienne-Jules Marey and the Mechanics of the Body," 84-119.

Martin J. Sklar, The United States as a Developing Country: Studies in U.S. History in the Progressive Era and the 1920s (Cambridge: Cambridge University Press, 1992), Chap. V, "Some Political and Cultural Consequences of the Disaccumulation of Capital: Origins of Postindustrial Development in the 1920s," 143-196.

Week 3: **Cybernetics and Space**

2/4

* Peter Galison, "The Ontology of the Enemy: Norbert Wiener and the Cybernetic Vision," Critical Inquiry, 21, no. 1 (Autumn 1994): 228-267. JSTOR

* Steve J. Heims, The Cybernetics Group (Cambridge, MA: MIT Press, 1991), Chap. 1, "Midcentury USA," and Chap. 2, "March 8-9, 1946," 1-30.

** Reinhold Martin, The Organizational Complex: Architecture, Media, and Corporate Space (Cambridge, MA: MIT Press, 2003), Chap. 1, "The Organizational Complex," 14-41.

Bernard Dionysius Geohegan, "From Information Theory to French Theory: Jakobson, Lévi-Strauss, and the Cybernetic Apparatus," Critical Inquiry 38, no. 1 (Autumn 2011): 96-126. JSTOR

Orit Halpern, "Dreams of Our Perpetual Present: Temporality, Storage, and Interactivity in Cybernetics," Configurations 13, no. 2 (Spring 2005): 283-319. MUSE

Week 4: **Patterns**

2/11

* Orit Halpern, Beautiful Data: A History of Vision and Reason since 1945 (Durham, NC: Duke University Press, 2015), selections

** Reinhold Martin, The Organizational Complex: Architecture, Media, and Corporate Space (Cambridge, MA: MIT Press, 2003), Chap. 2, "Pattern-Seeing," 42-79.

* Anna Vallye, "The Middleman: Kepes's Instruments," in Arindam Dutta ed., A Second Modernism: MIT, Architecture, and the "Techno-Social" Moment (Cambridge, MA: MIT Press, 2013), 144-185.

James Sloan Allen, The Romance of Commerce and Culture: Capitalism, Modernism, and the Chicago-Aspen Crusade for Cultural Reform (Chicago: University of Chicago Press, 1983), Chap. 2, "Marketing Modernism: Moholy-Nagy and the Bauhaus in America," 35-77.

Anna Vallye, "The Strategic Universality of trans/formation, 1950-1952," Grey Room 35 (Spring 2009): 28-57. JSTOR

Week 5: **Modules**

2/18

* Markus Krajewski, Paper Machines: About Cards and Catalogs, trans. Peter Krapp (Cambridge, MA: MIT Press, 2011), Chap. 8, "Paper Slip Economy," 123-142.

** Reinhold Martin, The Organizational Complex: Architecture, Media, and Corporate Space (Cambridge, MA: MIT Press, 2003), Chap. 3, "The Physiognomy of the Office," 80-121.

* Nader Vossoughian, "Standardization Reconsidered: Normierung in and after Ernst Neufert's Bauentwurfslehre (1936)," Grey Room 54 (Winter 2014): 24-55. JSTOR

C. Wright Mills, White Collar: The American Middle Classes (New York: Oxford University Press, 1951), Chap. 9 "The Enormous File," 189-212.

Week 6: **Design**

2/25

** John Harwood, The Interface: IBM and the Transformation of Corporate Design 1945-1976 (Minneapolis: University of Minnesota Press, 2011), Chap. 1, "Eliot Noyes, Paul Rand, and the Beginnings of the IBM Design Program," 17-58..

** Reinhold Martin, The Organizational Complex: Architecture, Media, and Corporate Space (Cambridge, MA: MIT Press, 2003), Chap. 4, "Organic Style," 122-155.

Christina Cogdell, Eugenic Design: Streamlining America in the 1930s (Philadelphia: University of Pennsylvania Press, 2004), Chap. 1, "Products or Bodies? Streamline Design and Eugenics as Applied Biology," 33-83.

Week 7: **Computers**

3/4

** John Harwood, The Interface: IBM and the Transformation of Corporate Design 1945-1976 (Minneapolis: University of Minnesota Press, 2011), Chap. 2, "The Architecture of the Computer," 59-100; Further reading (not required): Chap. 3, "IBM Architecture: The Multinational Counterenvironment," 101-159, and Chap. 4, "Naturalizing the Computer: IBM Spectacles," 161-215.

** Reinhold Martin, The Organizational Complex: Architecture, Media, and Corporate Space (Cambridge, MA: MIT Press, 2003), Chap. 5, "Computer Architectures," 156-181.

Alan M. Turing, "Computing Machinery and Intelligence," Mind 59, No. 236 (October 1950), 433-460. JSTOR

Week 8: **Laboratories**

3/11

* Peter Galison, "Introduction: The Many Faces of Big Science," in Peter Galison and Bruce Hevly, eds., Big Science: The Growth of Large-Scale Research (Stanford: Stanford University Press, 1992), 1-17.

** Reinhold Martin, The Organizational Complex: Architecture, Media, and Corporate Space (Cambridge, MA: MIT Press, 2003), Chap. 6, "The Topologies of Knowledge," 182-211.

* William J. Rankin, "The Epistemology of the Suburbs: Knowledge, Production, and Corporate Laboratory Design," Critical Inquiry 36, no. 4 (Summer 2010): 771-806. JSTOR

Bruno Latour and Steve Woolgar, Laboratory Life: The Construction of Scientific Facts (Princeton: Princeton University Press, 1986), selections

Week 9: Landscapes

3/25

* Paul N. Edwards, The Closed World: Computers and the Politics of Discourse in Cold War America (Cambridge: MIT Press, 1996), Chap. 3, "SAGE," 74-111.

* Louise A. Mazingo, Pastoral Capitalism: A History of Suburban Corporate Landscapes, Chap. 3, "The Corporate Campus," 45-99.

* Peter Galison, "War against the Center," Grey Room 04 (Summer 2001): 6-33. JSTOR

Robert Kargon, Stuart W. Leslie, and Erica Schoenberger, "Far Beyond Big Science: Science Regions and the Organization of Research and Development," in Peter Galison and Bruce Hevly, eds., Big Science: The Growth of Large-Scale Research (Stanford: Stanford University Press, 1992), 334-354.

Week 10: Machines, Organisms, and Subjects

4/1

* Gilles Deleuze, "Postscript on the Societies of Control," October 59 (Winter 1992): 3-7. JSTOR

* Gilles Deleuze and Félix Guattari, A Thousand Plateaus: Capitalism and Schizophrenia, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987), Chap. 6, "November 28, 1947: How Do You Make Yourself a Body Without Organs?," 149-166.

* Donna Haraway, "A Cyborg Manifesto: Science, Technology and Socialist-Feminism in the Late Twentieth Century," in Simians, Cyborgs, and Women: The Reinvention of Nature (New York: Routledge, 1991), 149-181.

Anson Rabinbach, "The Biopolitics of Work," in A. Heller, S.O. Riekman, eds. Biopolitics. The Politics of the Body, Race and Nature (Brookfield, MA: Avebury, 1996), 95-111.

Week 11: Before and After

4/8

* Reinhold Martin, "One or More," Grey Room 07, Special issue, On 9/11 (Spring 2002): 114-123. JSTOR

* Manfredo Tafuri, "The Disenchanted Mountain: The Skyscraper and the City," in G. Ciucci, F. Dal Co, M. Manieri-Elia, M. Tafuri, The American City: From The Civil War to the New Deal, trans. Barbara L. La Penta (Cambridge, MA: MIT Press, 1979), 389-503.

* Reinhold Martin, Utopia's Ghost: Architecture and Postmodernism, Again (Minneapolis: University of Minnesota Press, 2010), Chap. 4, "Materiality: Mirrors," 93-122.

Stewart W. Leslie and Robert H. Kargon, "Selling Silicon Valley: Frederick Terman's Model for Regional Advantage," The Business History Review 70, no. 4 (Winter 1996): 435-472. JSTOR

Margaret Pugh O'Mara, Cities of Knowledge: Cold War Science and the Search for the Next Silicon Valley (Princeton: Princeton University Press, 2005), "Introduction: Discovering the City of Knowledge," 1-13.

Michael J. Piore and Charles F. Sabel, The Second Industrial Divide: Possibilities for Prosperity (New York: Basic Books, 1984), Chap. 8, "Corporate Responses to the Crisis," 194-250.

Week 12: **Disseminations**

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* Giovanni Arrighi, Adam Smith in Beijing: Lineages of the Twentieth Century ((New York: Verson, 2007), Chap. 1, "Marx in Detroit, Smith in Beijing," 13-39.

* Joshua Barkan, Corporate Sovereignty: Law and Governance under Capitalism (Minneapolis: University of Minnesota Press, 2013), Chap. 3, "Personhood," 65-86; Chap. 4, "Territory," 87-109.

Timothy Lenoir, "Inventing the Entrepreneurial University: Stanford and the Co-Evolution of Silicon Valley," in Thomas J. Allen and Rory O'Shea, eds., Building Technology Transfer within Research Universities: An Entrepreneurial Approach (Cambridge: Cambridge University Press, 2014). EBOOK

Louise A. Mazingo, Pastoral Capitalism: A History of Suburban Corporate Landscapes, Chap. 6, "Global Pastoral Capitalism," 194-223.

Week 13: **Reflections**

4/22

* Joshua Barkan, Corporate Sovereignty: Law and Governance under Capitalism (Minneapolis: University of Minnesota Press, 2013), Chap. 3, “Personhood,” 65-86; Chap. 6, “The Corporate University,” 139-160.

* Arindam Dutta, “Linguistics, Not Grammatology: Architecture’s *A Prioris* and Architecture’s Priorities,” Introduction to Dutta ed., A Second Modernism: MIT, Architecture, and the “Techno-Social” Moment (Cambridge, MA: MIT Press, 2013), 1-69.

John Harwood, The Interface: IBM and the Transformation of Corporate Design 1945-1976 (Minneapolis: University of Minnesota Press, 2011), “Conclusion: Virtual Paradoxes,” 217-227.

Reinhold Martin, The Organizational Complex: Architecture, Media, and Corporate Space (Cambridge, MA: MIT Press, 2003), “Epilogue: Hallucinations,” 212-231.