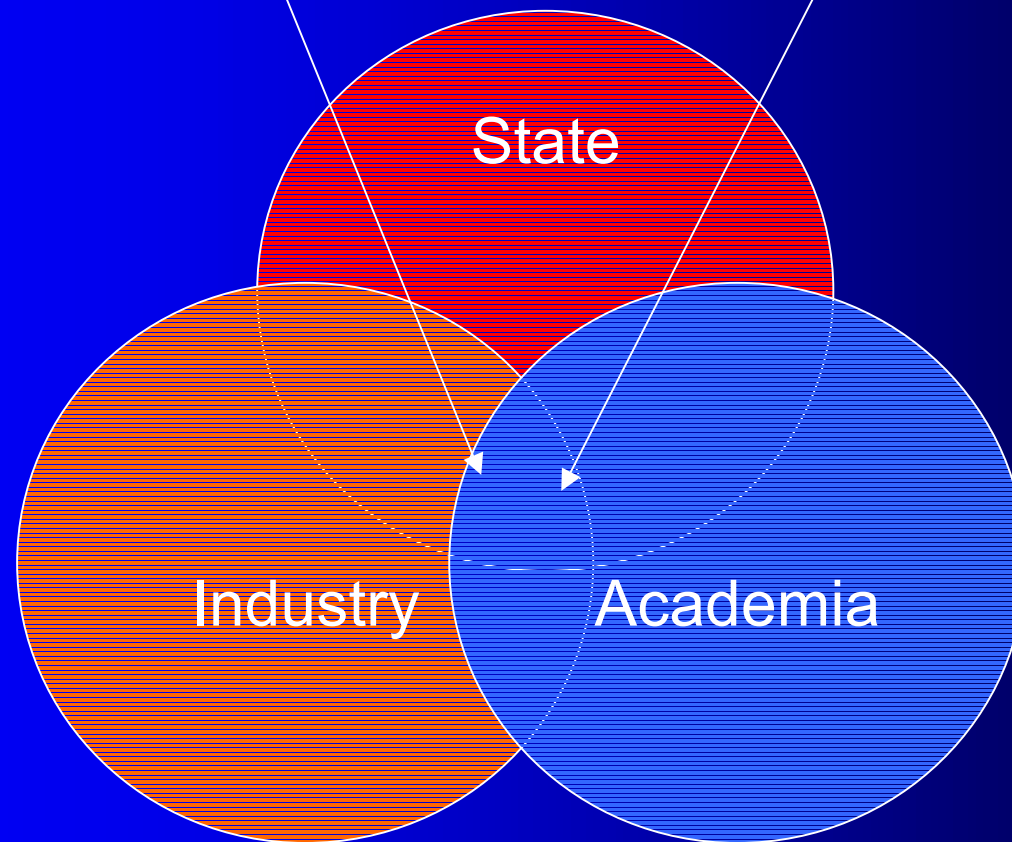


Between Neo-liberalism and
Statism:

The Triple Helix of
Development

Henry Etzkowitz
University of Newcastle-upon-Tyne

Hybrid Organizations and Actions *e.g. Incubator Movements*



Triple Helix

- University-industry-government collaborations created in crises
- University Plays leading role in Knowledge-based Society
- Triple Helix Process:
Knowledge, Consensus and Innovation Spaces

Knowledge Space

- Universities and Research Institutes
- Underutilized Potential
- Research Projects with economic and social relevance

Consensus Space

- Fora to Generate Ideas and Strategies
- Triple Helix Meeting Place
- e.g. New England Council; Niteroi Technopole; Amsterdam Knowledge Circle

Innovation Space

- Regional Innovation Organizer (RIO)
- Organizational Experiments
- Invention of Venture Capital Firm

The Entrepreneurial University

- Not the Industrialized University
- Incorporates Ivory Tower and Humboldtian models
- Independence based on generating income
- University as source of spin-offs

University Missions

The First Academic Revolution

late 19th century; ongoing

The Research University

research groups and centers

The Second Academic Revolution

20th century; ongoing

The Entrepreneurial University

new firms and networks

Bi-Evolution of University Missions

- Teaching: Individuals and Organizations
- Research: Individual and Group
- Economic and Social Development:
Companies and Region

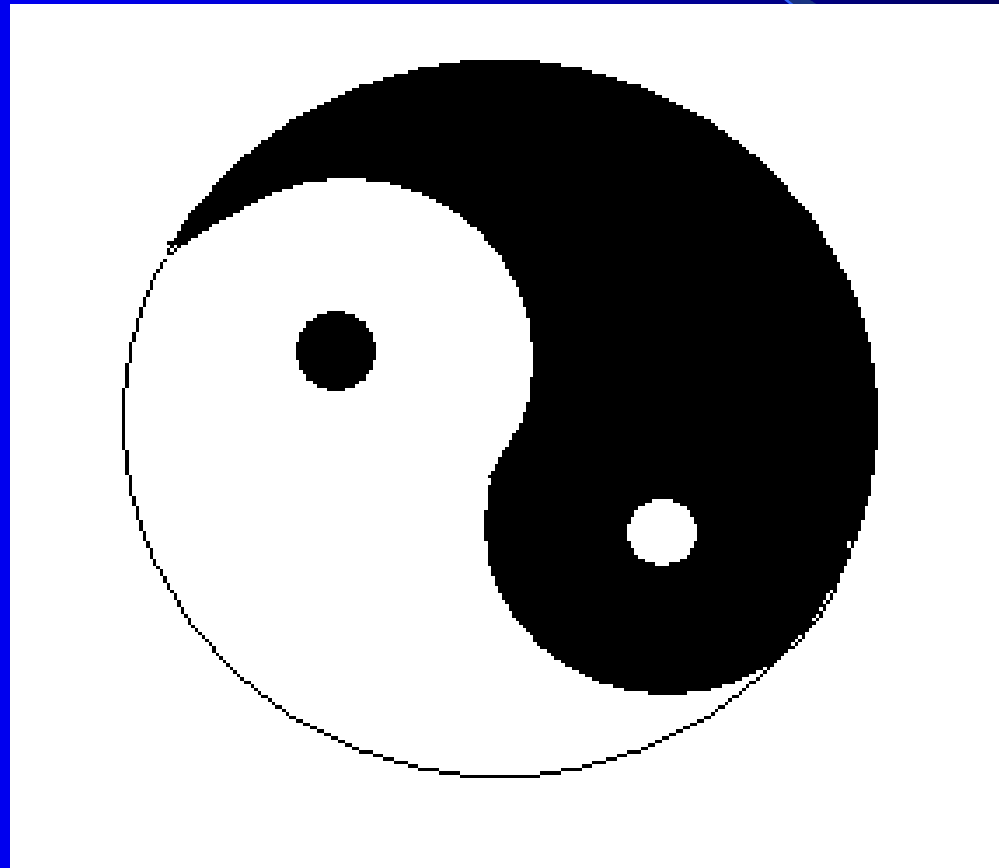
Silicon Valley Ecosystem

- Networks of Technical Entrepreneurs
- Serial Entrepreneurs as Gatekeepers
- Business Angels and Science Angels
- Spread of Entrepreneurship from Electrical Engineering to Computer Science, Medical School, Music Department
- Import and Export of Intellectual, Social and Financial Capitals

From Ecosystem to Planetary System

- Powerful Entities with Gravitational Fields pull startups into their orbits
- Some Networks Pulled Apart; others persist
- Multiple Technological Paradigms

Triple Helix Twins Yin-Yang Taiji: Innovation and Sustainability



Triple Helix Twins

