

The Entrepreneurial University: New Horizons for Innovation in Europe

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International Triple Helix Institute

www.triplehelix.net

Concentric Circles of Academic Entrepreneurship: broad->specific

- Active University: seeks resources from multiple sources
- Engaged University: assists stakeholders in solving problems they present
- Entrepreneurial University: Proactive role in translating knowledge into economic and social development

Entrepreneurship and Innovation Education, Research and Practice

Beyond Moocs: Project-Based Learning-Allborg
University; Stanford ME 310, D-School; NYU Abu
Dhabi Idea Lab

Knowledge and
technology transfer, incubation and firm-formation as
third academic mission

The Entrepreneurial University can be built on a
teaching as well as a research university base

Novum Trivium

- Model for reform of undergraduate education
- Update classical Trivium of grammar, rhetoric and dialectics
- Structure:
 - A Traditional Discipline
 - Innovation and Entrepreneurship
 - Another Language and Culture

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

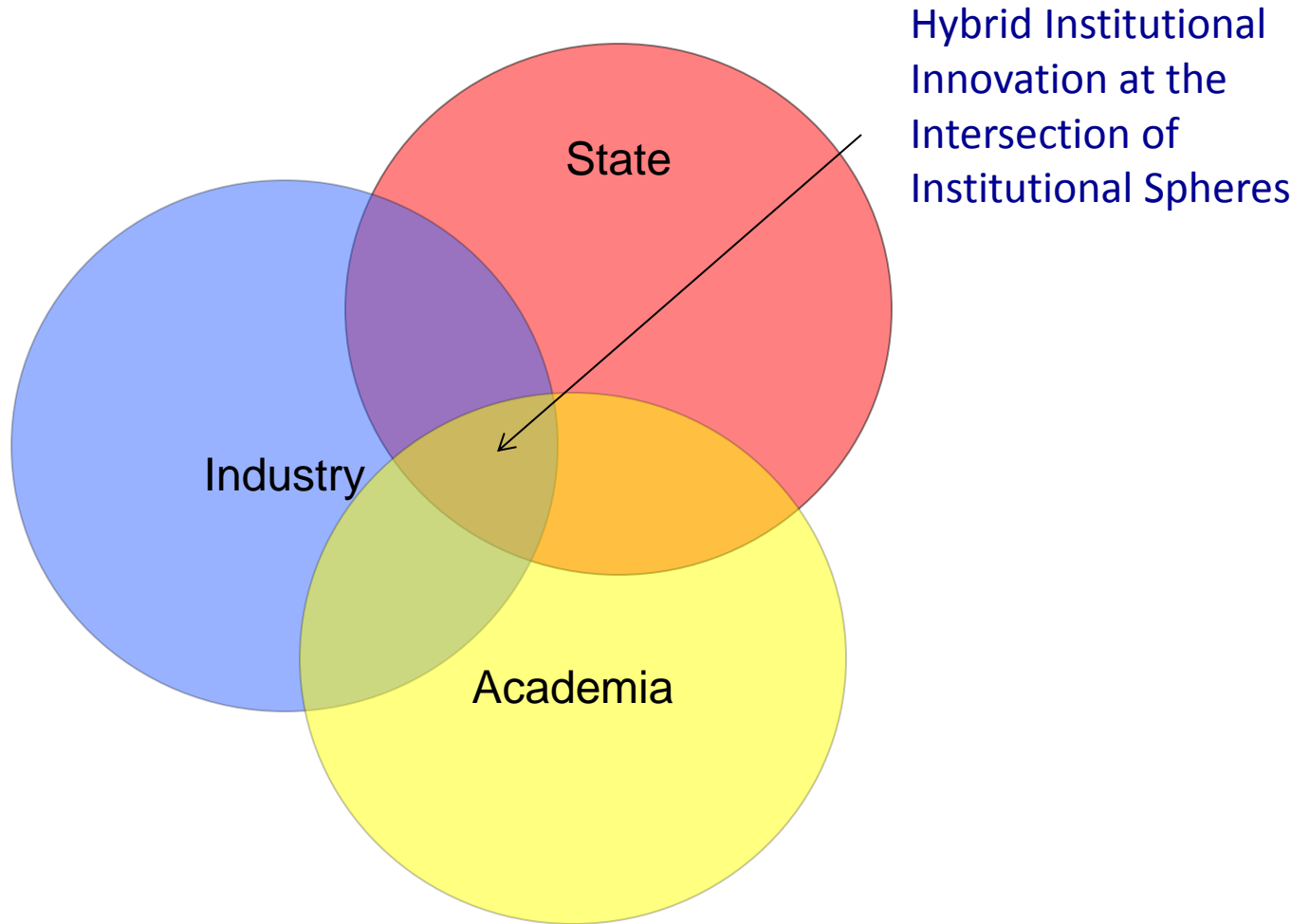
Bi-Evolution of University Missions

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

Entrepreneurial Universities

- MIT
- Brownfield Site
- mid 19th century
- Public/private
- Consulting Controversy
- Invention of 1/5th rule
- WW II Rad Lab
- Invention of VC model
- Mini-computer industry
- Bio-tech follow-on
- Stanford
- Greenfield Site
- Late 19th century
- Private
- Create industrial penumbra
- Steeple of Excellence
- Tech transfer strategy
- Capitalise land; invention science park

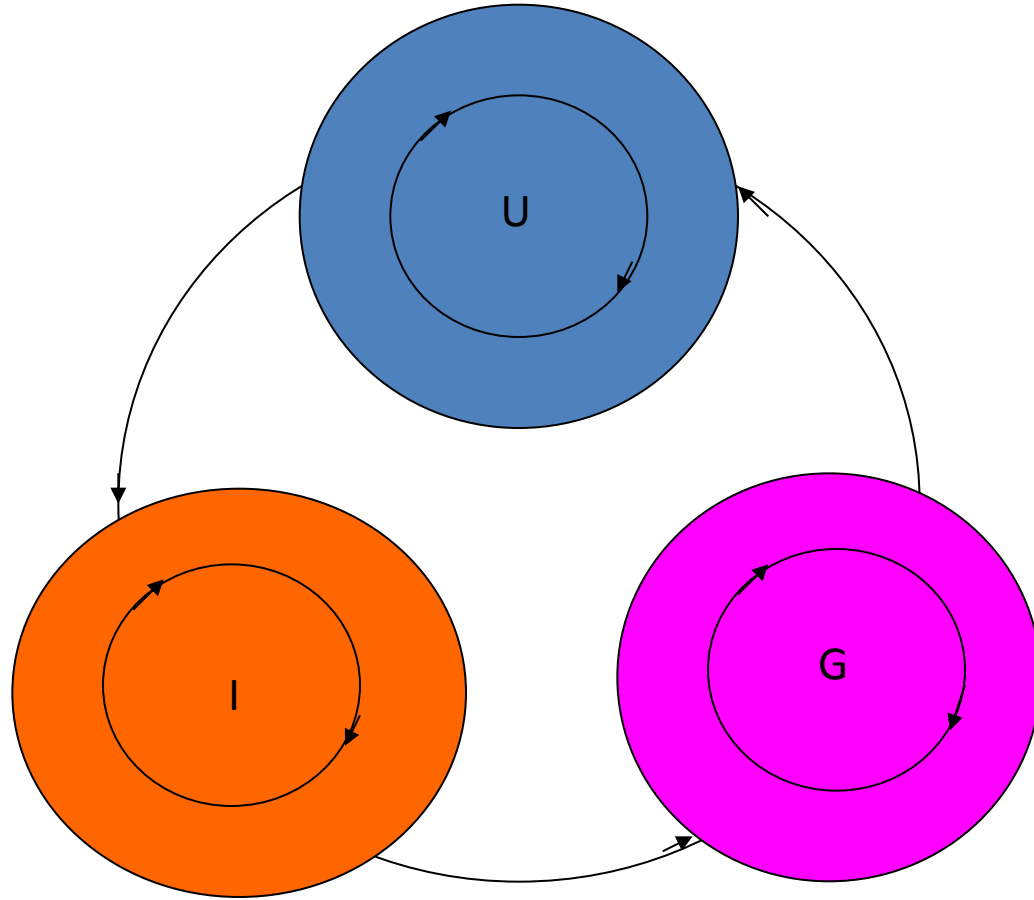
Optimum Triple Helix



From Boundary Lines to Boundary Spaces

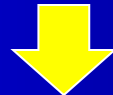
- Integrative Boundaries
- Shift in Opposite directions depending upon Triple Helix Configuration
- from Solid to Porous and from boundary absence to membrane with Selective and Assistive Features
- Nantes Atlantapole
- Stanford StartX
- Chinese University Run Enterprises (URE'S) ->spinoffs

Circulation in a Triple Helix



Professors of Practice (PoPs)

- Turns traditional PoP model “on its head” from teaching to research
- PoP Types:
 - Forward linear: faculty entrepreneurs moving $\frac{1}{2}$ time to Industry
 - Reverse linear: Industry entrepreneurs (PhDs) moving $\frac{1}{2}$ time to University
- Entrepreneurial role models for students and faculty
- Develop large-scale projects, strengthen ties with business, retain faculty entrepreneurs in university



Self-sustaining virtuous circle between University and Industry

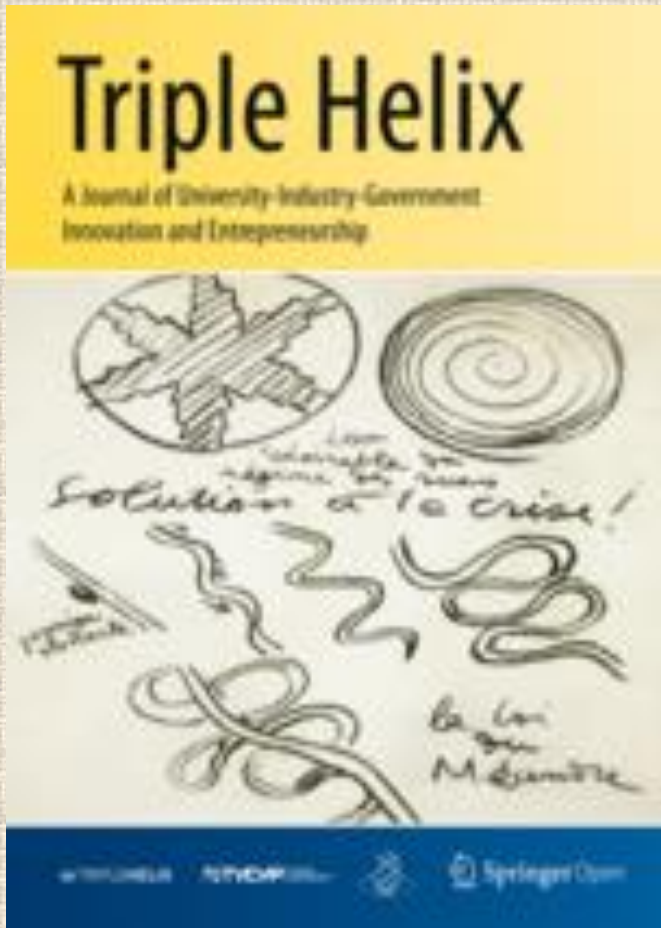
Researchers of Practice (RoPs)

- Link academic and business sides of university
- 1/2 time in Academic Unit e.g. Business School, Engineering, Medicine etc
- 1/2 time in Tech transfer office, incubator, science park
- Junior faculty (assistant profs) mentored by PoPs
- Hypothesis: more productive than traditional academics: two sources of inspiration (theory and practice)
- PoPs + RoPs: seamless web from firm to university and from academic to business development

Triple Helix Association (THA)

www.triplehelixassociation.org

- **International Conference Series: Tsingua University Beijing, 21-23 August 2005; Theme "Triple Helix in Fast Developing Countries**
- **Chapters: Russia, Greece, Brazil, South Asia**
- **Webinars, Thematic Research Groups**
- **Helice: Quarterly Magazine**
- **Triple Helix: A Journal of University-Industry-Innovation and Entrepreneurship, Springer: Triple Open Access**



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