

Resilient Universities for Turbulent Times

PEKING-TAMPERE ONLINE LECTURE SERIES ON ORGANIZATION AND
MANAGEMENT IN HIGHER EDUCATION

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AGENDA

- ▶ First things first (analytical lens):
 - ▶ *Systems thinking & resilience*
 - ▶ *Resilience & the Social Sciences*
- ▶ Why such an interest on resilience now?
- ▶ Resilience in Higher Education
 - ▶ *The university as a resilient entity*
 - ▶ *The rise of the post-entrepreneurial university*
 - ▶ *Academic core adaptations*
- ▶ Conclusive thoughts & Epilogue

SYSTEMS THINKING & RESILIENCE I

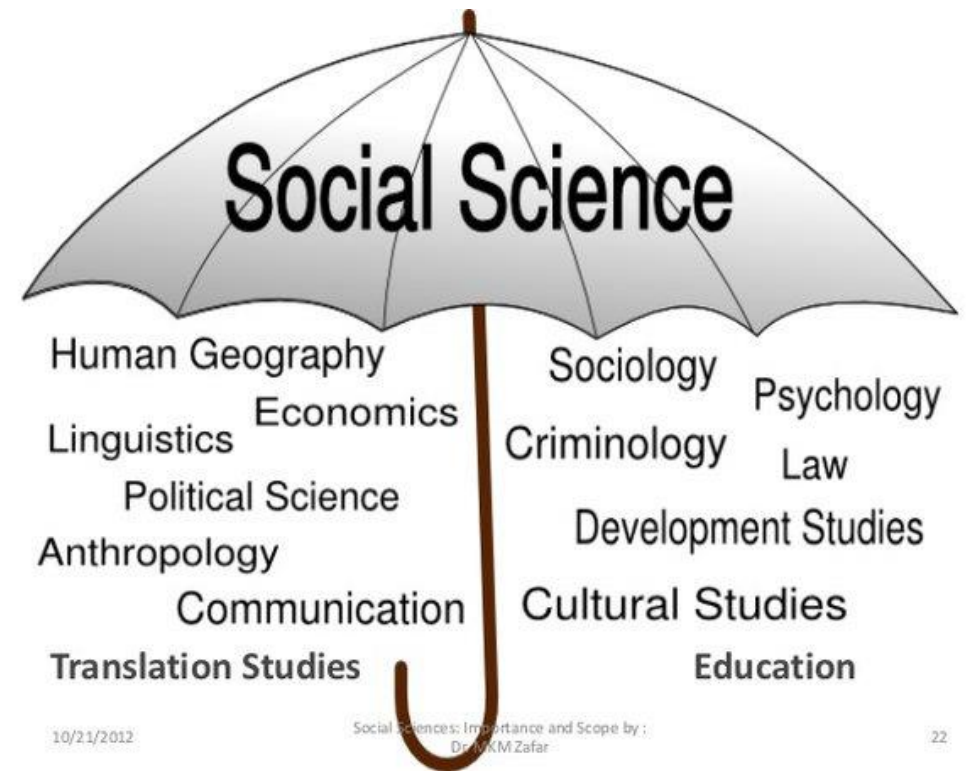
- ▶ Ecologist C. S. Holling – ‘Systems thinking’
 - ▶ *System* = “an interconnected set of elements that is coherently organized in a way that achieves something [function or purpose]” (Meadows 2008: p. 11)
 - ▶ *Resilience* = “the persistence of relationships within a system and a measure of the ability of these systems to absorb changes ... and still persist” (Holling 1973:17)
 - ▶ “Resilience thinking is systems thinking” (Walker & Salt 2006: 11)
 - ▶ Def. Resilience: Ability to retain both function and identity whilst adapting to emerging circumstances (ibid.)
- ▶ Scientific paradigm that criticises Newtonian (‘normal’) science
 - ▶ ‘analytical reductionism’:
 - ▶ Isolated parts rather than wholes & inter-relations (e.g. heart vs- cardiovascular system)

SYSTEMS THINKING & RESILIENCE II

- ▶ Central themes
 - ▶ Thresholds and “regime shifts” (e.g. forest to desert)
 - ▶ Feedback loops (positive & negative)
 - ▶ Adaptive cycles – ‘system dynamics’ (change over time)
 - ▶ Incremental = normal (adaptive mechanisms); radical change = regime shift
- ▶ Key concepts/mechanisms:
 - ▶ Diversity
 - ▶ Slack
 - ▶ Loose-coupling
 - ▶ Self-organisation
 - ▶ Emergence (non-linearity)

RESILIENCE & THE SOCIAL SCIENCES I

- ▶ Engineering & physics (early adopters):
 - ▶ “Elasticity under pressure” (Giustiniano et al. 2018: 14)
 - ▶ Stretch the limits of a material; steel in high temperatures, bridge vibrations, etc.
 - ▶ ‘Bouncing back to a previous state’
 - ▶ **Efficiency of function** (Holling 1973)
- ▶ Ecosystem- and social resilience:
 - ▶ Focus is on re-organisation and persistence
 - ▶ ‘Bouncing forward’: retaining function & identity
 - ▶ **Maintenance of function** (Holling 1973)



RESILIENCE & THE SOCIAL SCIENCES II

- *Individuals, groups, organizations & societies*

▶ Organizing **principles for resilience** (Frigotto et al. 2022)

▶ **Stability & Change**

- ▶ Requires adaptation (degree of change) not mere survival
- ▶ Radical change is not resilience since neither essence (identity) nor function are retained

▶ **Adversity & Novelty**

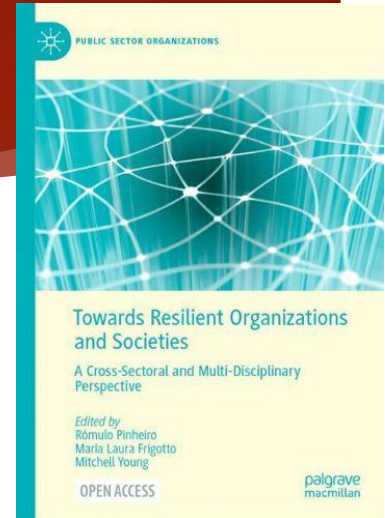
- ▶ Absorptive (Low), Adaptive (Medium) & Transformative (High) resilience ('ideal types)

▶ **Temporality**

- ▶ Foresight (ex-ante/before), mechanisms (in-situ/during), outcomes (ex-post/after)

▶ **Scales of resilience**

- ▶ Individual (micro), organisation (meso), system (macro)



WHY RESILIENCE AND WHY NOW?

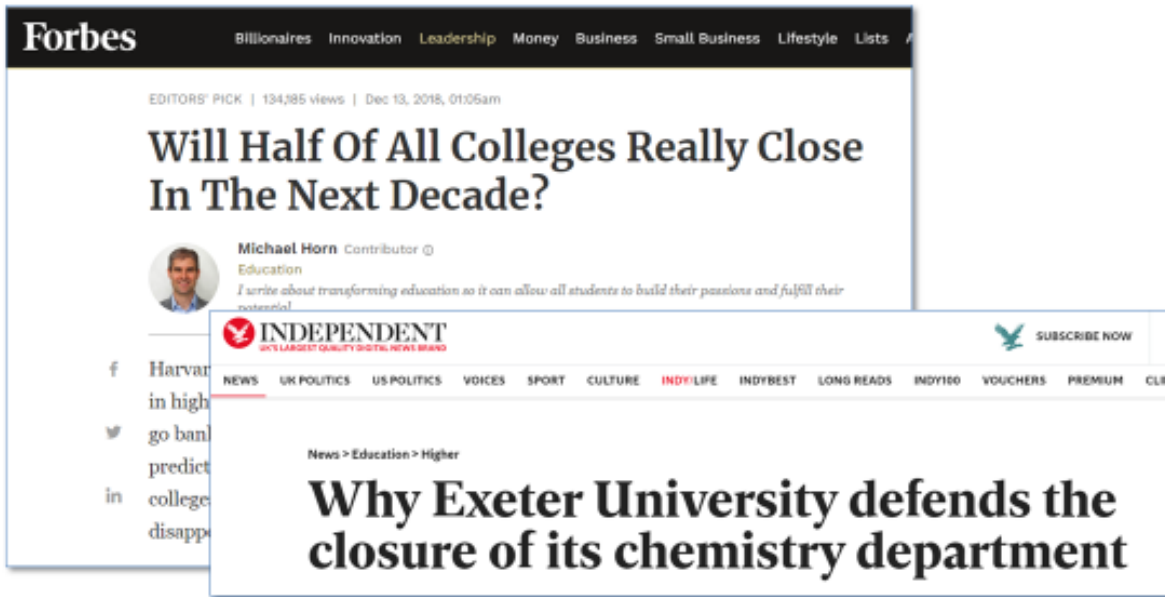
- ▶ Growing policy interest on resilience following polycrises (last 15 years):
 - ▶ 2008 global financial & 2009 Euro crisis (financialization of global economy)
 - ▶ Brexit & migration crisis (EU integration/solidarity and growing differentiation)
 - ▶ Right wing populism and democratic backsliding (EU, USA/Trump, UK/Brexit, etc)
 - ▶ Nested crisis: COVID-19 (health-economics-social) & Ukraine war (geopolitics, food & energy)
- ▶ Inability of current (hegemonic) models & theories:
 - ▶ Neo-classic economics (shaping neo-liberal policies):
 - ▶ Market as the 'silver bullet'!
 - ▶ Shift from GDP to well-being to sustainable inclusive growth
 - ▶ the return (new role) of the state (Jacobs & Mazzucato 2016)
 - ▶ Unable to deal with nested- phenomenon & policy domains, e.g. inequality-migration-climate
 - ▶ Turbulent environments & the need to 'manage' complexity (Trondal et al. 2022)
 - ▶ Wicked problems (Head 2008), requiring systemic thinking & inter/multi-disciplinary approaches

RESILIENCE & PUBLIC SECTOR GOVERNANCE & MANAGEMENT

- ▶ From government to *governance* (Rhoades 1996)
 - ▶ Multiple actors with competing interests and agendas
 - ▶ Polycentric & multi-level governance (cf. Thiel et al. 2019)
 - ▶ From internal hierarchies to external (nested) networks
 - ▶ Reform as routine (Brunsson 2009)
 - ▶ Unintended effects of reform processes (vicious cycle)

- ▶ Adaptability within thresholds
 - ▶ Public sector requires *continuity* (function) whilst adapting to new demands
 - ▶ *Reforms (last 20 years) = Hybrid organisations and systems* (Johansson & Vakkuri 2018)
 - ▶ Co-existence of multiple professional norms, identities & local traditions
 - ▶ Clash of institutional logics (market, state, community, etc.)
 - ▶ Hybrid systems rather difficult to steer! (governance dilemma)

Resilience in Higher Education *Change Drivers*



- 1990s: New Public Management(NPM) reforms; efficiency & accountability
- 2000s: Global competition; students, staff, funding & prestige
- 2010s: Digital Transformation (online)
- Mechanisms: performance management, internal re-structuring (cut slack), mergers & strategic alliances, online campuses, etc.

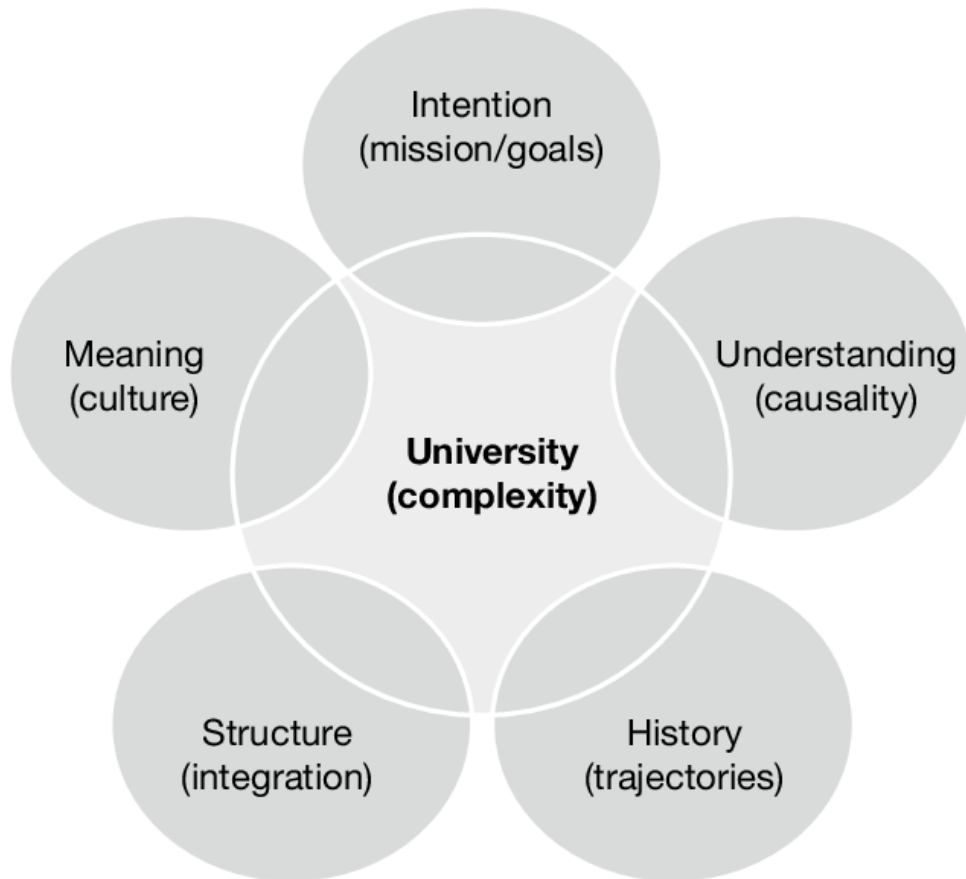
Western University Models (Ideal Types)

	Traditional*	Entrepreneurial	Post-Entrepreneurial
Dominant Logic	Equality (Primus inter-pares)	Efficiency (Managerialism)	Resilience (Adaptive behaviour)
Modus operandi	Social Pact (Trust) Teaching-Research Nexus	Rationalization: (plan, steer/control, compete)	Cherish complexity (foster emergence, self-organize, co- evolve, tolerate slack & failure)
Internal governance	Collegiality (organized anarchy)	Unified, Top-down control	Loosely coupled (autonomous but aligned sub-units)
Positional objective	Through societal decoupling/ Preserve Autonomy	Through global competition/ Winning	Through requisite variety/ Thriving

* 19th century Humboldtian model (Northern-Europe/America), cf. Nybom (2003)

Source: adapted from Pinheiro and Young (2022)

University: Complex organisation & fiduciary (autonomous) institution



<i>Type of ambiguity</i>	<i>Key feature</i>	<i>Dimensions under investigation</i>
Ambiguity of history	Path-dependencies	History of engagement Image of HE in the region
Ambiguity of intention	Strategic framework	Mission/vision, goals, objectives and priorities
Ambiguity of understanding	Rationalisation and formalisation	Institutional profile Organisational matrix Resource dependencies and financial allocations Reward and incentive systems
Ambiguity of structure	Leadership structures Work integration	Role of the 'steering core' Links between units/tasks
Ambiguity of meaning	Local culture(s)	Dominant cultural ethos Normative postures

Source: Adapted from Pinheiro (2011)

Universities historical adaptations

Social change driver	Core tasks or social mandate	'Idea'(I) of university
<i>Agricultural revolution</i>	Reproducing religious administrators	Cloister (11th C Italy)
<i>Emergence of nobility</i>	Educating loyal administrators for courtly life	Free cloister (12th C France)
<i>Urbanisation</i>	Educated administrative elite to manage trade	Catholic University of Leuven (15th C)
<i>Sustaining national communities</i>	Validating the state by imagining the nation	Newman's idea (from 17thC onwards)
<i>Nation building</i>	Creating a technical elite alongside the administrative elite	Humboldtian (19th C Germany)
<i>Promoting Progress</i>	Creating economically useful knowledge	Land Grant Universities (19th-20th C USA) Europe: Technical Universities (SWE), Univ. Applied Sciences (NL) & Red Brick (UK)
<i>Supporting democracy</i>	Creating elites for non-traditional societal groups	Dutch Catholic Univs (20th C NL)
<i>Globalisation</i>	Economic growth, job creation & innovation in the context of a globalised economy	Entrepreneurial University (1990s onwards) – Stanford, MIT, etc.

Source: Adapted from Benneworth (2014)



Unpacking University Resilience: Academic Core Adaptation

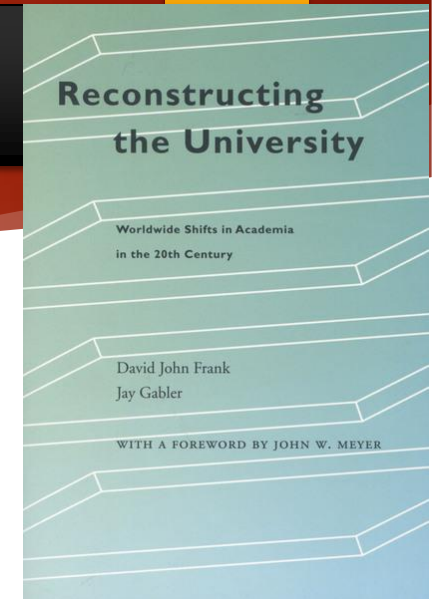
together with M. Young & A. Avramovic
(forthcoming, *publication under peer review*)

Empirical Study

- ▶ Two 'Flagship' Comprehensive/Research-intensive Universities in Nordics:
 - ▶ University of Copenhagen, DK (1479) & University of Oslo, NO (1813)
- ▶ Timeframe: 2000-2019 (20 years)
- ▶ Nordic University Context (Turbulence)
 - ▶ Strong Neoliberal / NPM bent - reflects 'Entrepreneurial Turn'
 - ▶ Norway: consolidation through mergers, binary to integrated unitary system that is vertically differentiated through institutional profiling, performance indicators, etc.
 - ▶ Denmark: radical reforms, major budget cuts to universities, resizing initiative based on (un)employability, and required reduction in English-language students

Data and Methods

- ▶ BA & MA Degree Programmes
 - ▶ RQ: What changes are happening in the program offerings?
 - ▶ 3 data points: 2003, 2009, 2019
 - ▶ Source: official figures, university web sites and wayback machine
 - ▶ Coded by: *Branch* (Humanities, N. Sciences, S.Sciences) & *Type* (Applied, Basic, Interdisciplinary)
- ▶ Student and Faculty numbers
 - ▶ By faculty from annual reports/national statistics, 2007-2019
- ▶ Descriptive analysis (no sophisticated stats so far!)
- ▶ Builds & extends the seminal work by Frank & Gabler (2006)



	University of Copenhagen	University of Oslo
Established	1479	1813
Number of Students (2019)	39,000 (Merger in 2007)	28,000 (No merger!)
Number of Faculty (2019)	5,000 (SSR: 7.8)	6,600 (SSR: 4.2)
Faculties	(6) Medicine; Law; Theology; Humanities; Natural Sciences; Social Sciences	(8) Medicine; Dentistry; Law; Theology; Humanities; Mathematics and Natural Sciences; Social Sciences; Education Sciences
Ranking AARW (2003/2018)	65/29	63/62
Ranking THE (2003/2018)	63/116	101/146



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Synthesis – Academic core findings

- **Program offerings** – a trend towards increasing natural sciences, applied and interdisciplinary; stability patterns in humanities & social sciences, decline basic
- **Student and Faculty numbers:** increasing in natural sciences, decreasing in other branches
- **Absorptive Resilience:**
 - Natural sciences at UiO – growth in enrollments as legitimate basis for ‘continuity of essence’ (why change when you are popular?)
- **Adaptive Resilience:**
 - Social Sciences & Humanities at UiC: old offerings alongside new programs (exploitation combined with exploration strategies, March 1991)
- **Transformative Resilience:**
 - Social Sciences at UiO and Natural Sciences & interdisciplinary prog. at UiC

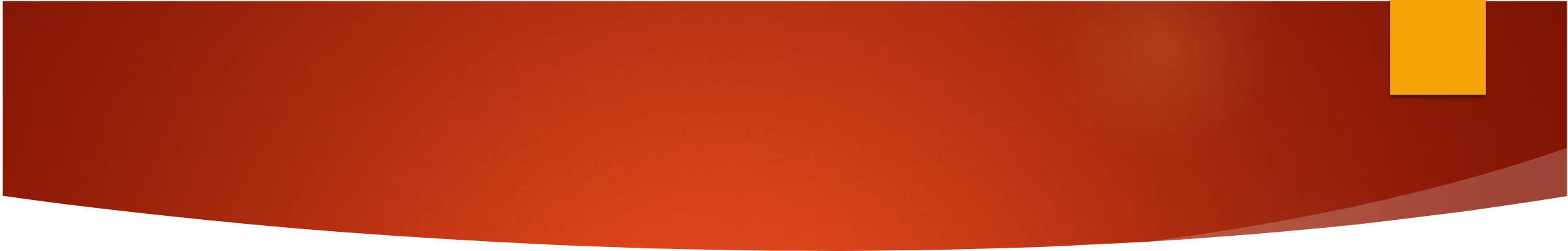
CONCLUSIVE THOUGHTS I

- ▶ **Systems & resilience thinking** as useful analytical lenses to unpack complexity facing systems (e.g. organisations) operating in turbulent conditions (internally and externally)
- ▶ **Universities have in-built resilient features**, but these have been the target of recent 'modernisation reforms' aimed at 'efficiency of function' rather than 'maintenance of function' under adversity (may affect negatively long term adaptability!)
- ▶ **Changes in academic core** provide critical insights on degrees of adaptation (resilience types) at the micro (program) level
 - ▶ Universities' overall (meso-) resilience is a function of resilience at the sub-system or micro levels; sub-units, tasks, degree programs, staff, etc.

EPILOGUE: HOW TO NURTURE RESILIENCE ?

Governance & Managerial views

- ▶ Shift from efficient to ***anti-fragil or adaptive systems***
 - ▶ Embrace complexity & randomness (Taleb 2012)
 - ▶ Tolerate failures & build repositories of slack (Trondal et al. 2022)
 - ▶ Adversity as strenght: *dynamic resilience* or 'bouncing forward' (Frigotto et al. 2022)
- ▶ Foster ***collective learning***:
 - ▶ Balancing Exploitation with Exploration (March 1991)
 - ▶ From routine- to novel learning – 'adaptive mental models' (Kayes 2015)
- ▶ Nurture ***mutual trust***:
 - ▶ Leaders 'create' the conditions for resilience to emerge (Boin 2010)
 - ▶ Resilience as an *emergent property*, not something that can be managed or steered top-down

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- ▶ Thank you for your attention!
 - ▶ 感谢您的关注