

UNIVERSITÉ PARIS CITÉ DESIGN WORKSHOP

15-16 NOVEMBER
2022

SOME NOTES

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The Tower of Babel, Lucas van Valckenborch (1595)





DISCLAIMER

EXPECT THE UNEXPECTED

‘All things are in flux, like a river . . .
Everything flows’

‘Whoever cannot seek the unforeseen,
sees nothing. The known way is an
impasse.’

~ *Heraclitus of Ephesus (544-484 BCE)*



THE EMERGING SETTING

- Ecological, demographic and social disorder. Large populations moving and local communities under unprecedented pressure
- Reassertion of the state
- De-prioritisation of the economy
- Fragmentation of public infrastructures
- Further politicisation of communications
- Global universities in global cities, and central to European project, have unprecedented centrality
- Unprecedented political pressure on universities

Fred and Ginger, Frank Gehry building in Prague



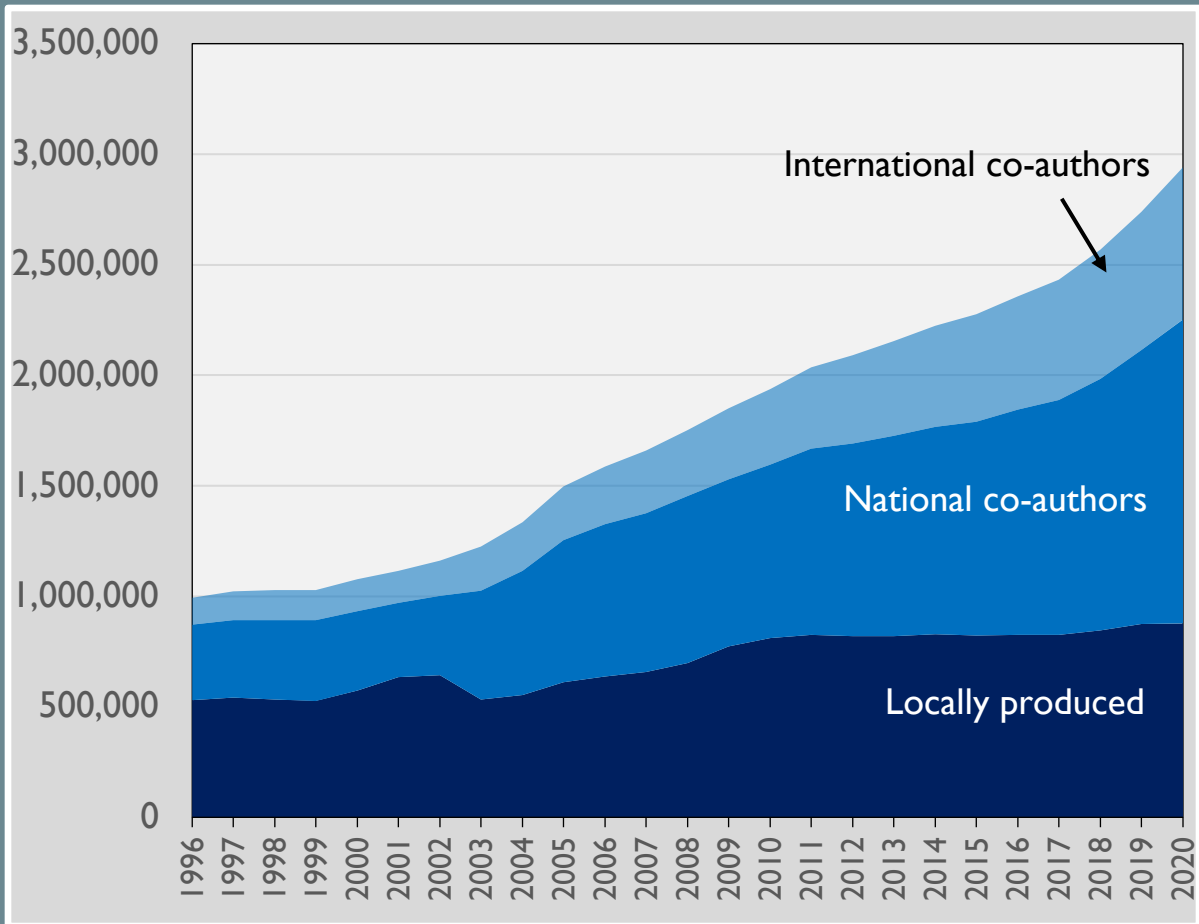
GLOBAL SCIENCE

- The global system, based on networked collaboration not articulated by nation-states, is dominant in science. We have become natural globalists
- Rapid growth: much of science is bottom up and not shaped by strategic priorities of universities
- Open networking and partnerships work better than university consortia
- Spectacular rise of China, Singapore and South Korea. European science is increasingly strong. Dispersion of science systems to middle and lower income countries
- International environment is competitive for governments but less so for universities. But security minded states can limit free global knowledge flows

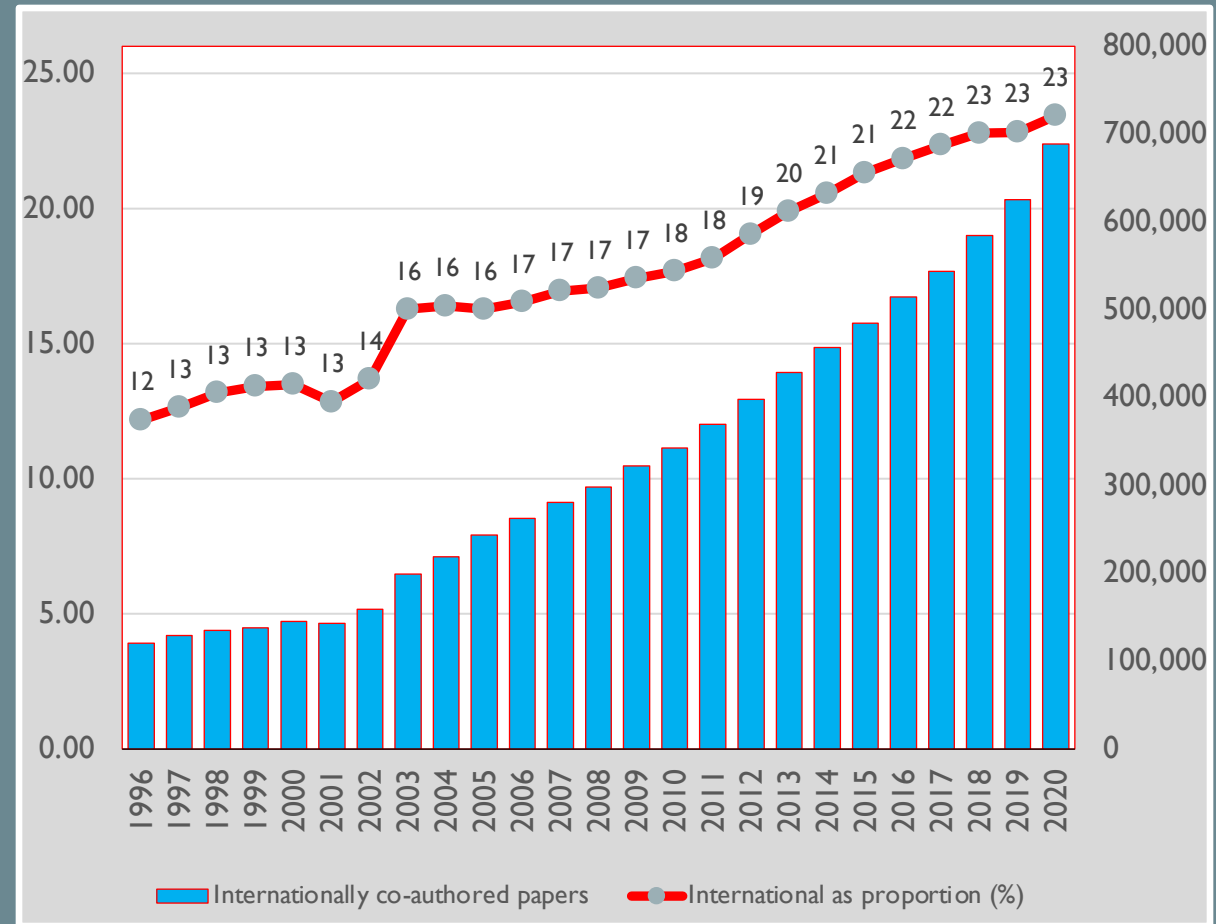


SCIENCE PAPERS IN SCOPUS, BY TYPE OF COLLABORATION, WORLD: 1996-2020

– US NATIONAL SCIENCE BOARD DATA COMPILATION



NUMBER AND PROPORTION OF INTERNATIONALLY CO-AUTHORED PAPERS, WORLD: 1996-2020

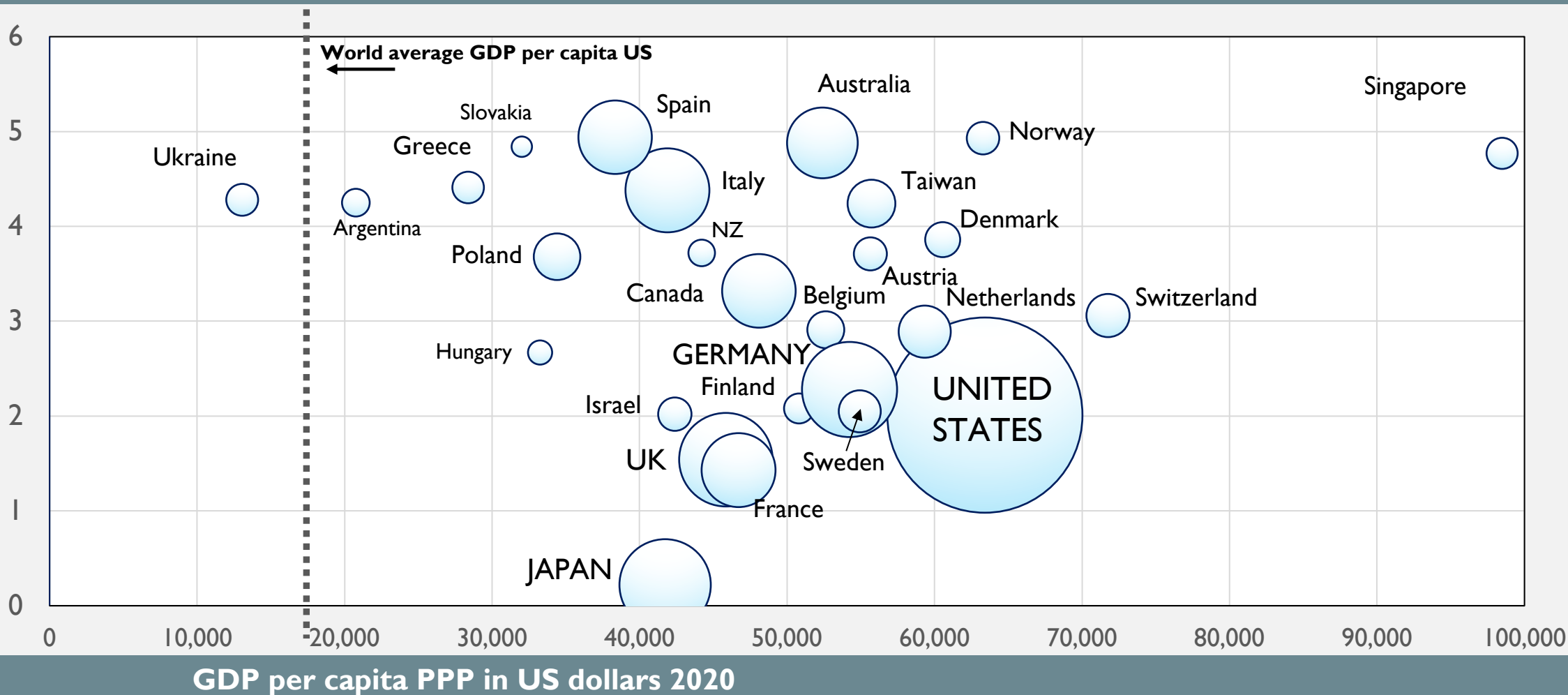


SLOWER GROWING SCIENCE SYSTEMS IN THE PERIOD 2000-2020

NATIONAL OUTPUT OF SCIENCE PAPERS GREW SLOWER THAN THE WORLD AVERAGE RATE OF 5.15% PER YEAR BETWEEN 2000 AND 2020 - COMPARED TO WORLD AVERAGE GDP PER CAPITA PPP (US \$17,083 IN 2020)

Science systems with 5,000 papers or more in 2020. Scopus data, fractional counting (NSF 2021). Current price GDP, PPP = purchasing power parity (World Bank 2022).

Growth
p.a.(%)
science
papers

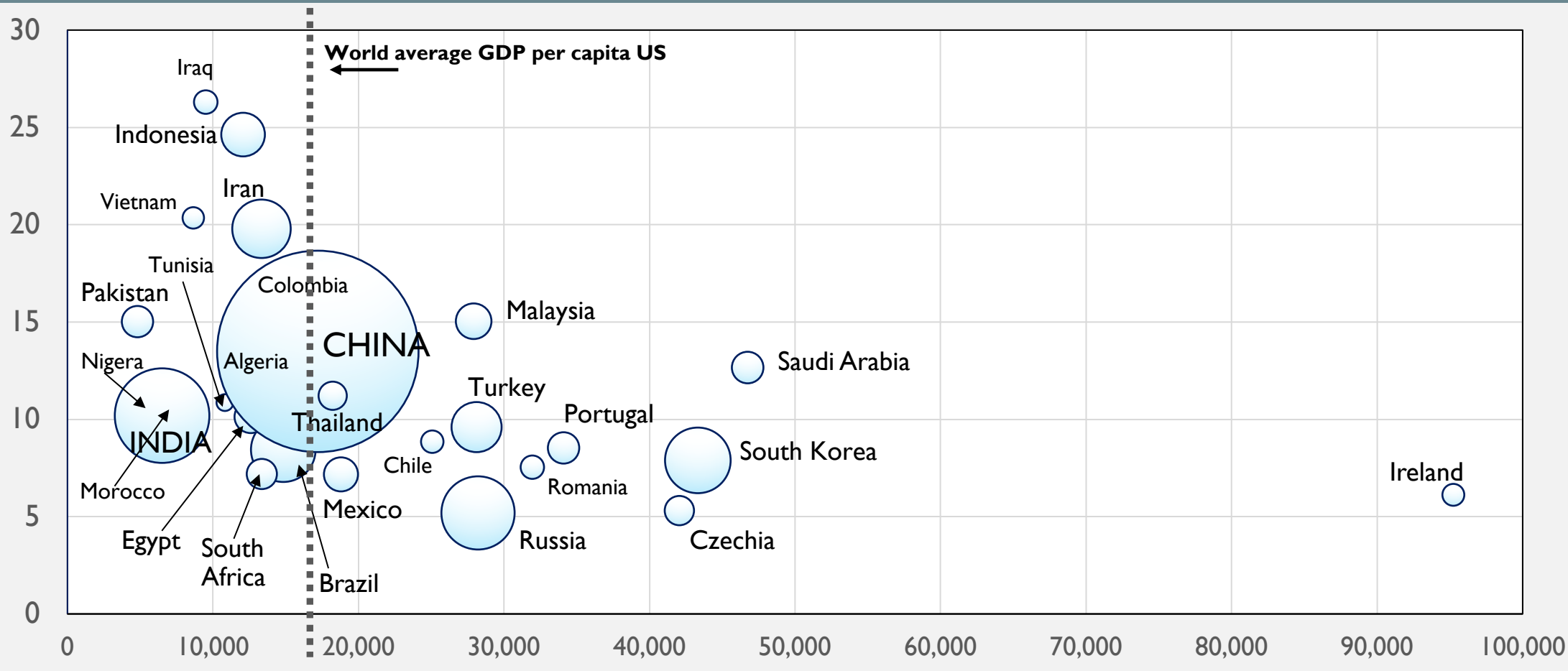


FAST GROWING SCIENCE SYSTEMS IN THE PERIOD 2000-2020

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GDP per capita PPP in US dollars 2020

RESEARCH UNIVERSITIES BUILD 'QUANTITY OF QUALITY'

(Leiden ranking, universities with most top 5% papers by citation rate, 2017-2020, original data Web of Science)

university	country	top 5% papers	all papers	% of papers in top 5%	cross-border papers	% of papers cross-border
Harvard U	USA	4276	35,050	12.2%	44,930	54.4%
Stanford U	USA	2140	17,187	12.5%	20,174	47.6%
U Toronto	CANADA	1773	24,260	7.3%	29,586	59.1%
Tsinghua U	CHINA	1726	22,311	7.7%	16,668	37.7%
U Oxford	UK	1722	16,499	10.4%	30,755	71.1%
Zhejiang U	CHINA	1640	29,091	5.6%	15,727	31.8%
U Michigan	USA	1508	19,609	7.7%	17,999	41.2%
MIT	USA	1501	10,503	14.3%	17,621	58.8%
U College London	UK	1446	15,560	9.3%	29,131	68.2%
U Cambridge	UK	1425	14,268	10.0%	26,130	71.6%
Shanghai Jiao Tong U	CHINA	1405	28,703	4.9%	16,014	31.4%
Johns Hopkins U	USA	1404	17,708	7.9%	21,048	47.0%
Huazhong U S&T	CHINA	1311	21,654	6.1%	9,823	28.0%
U Pennsylvania	USA	1290	14,100	9.1%	13,628	38.9%
U Washington, Seattle	USA	1267	14,847	8.5%	17,542	44.5%
Columbia U	USA	1249	12,891	9.7%	17,092	49.5%

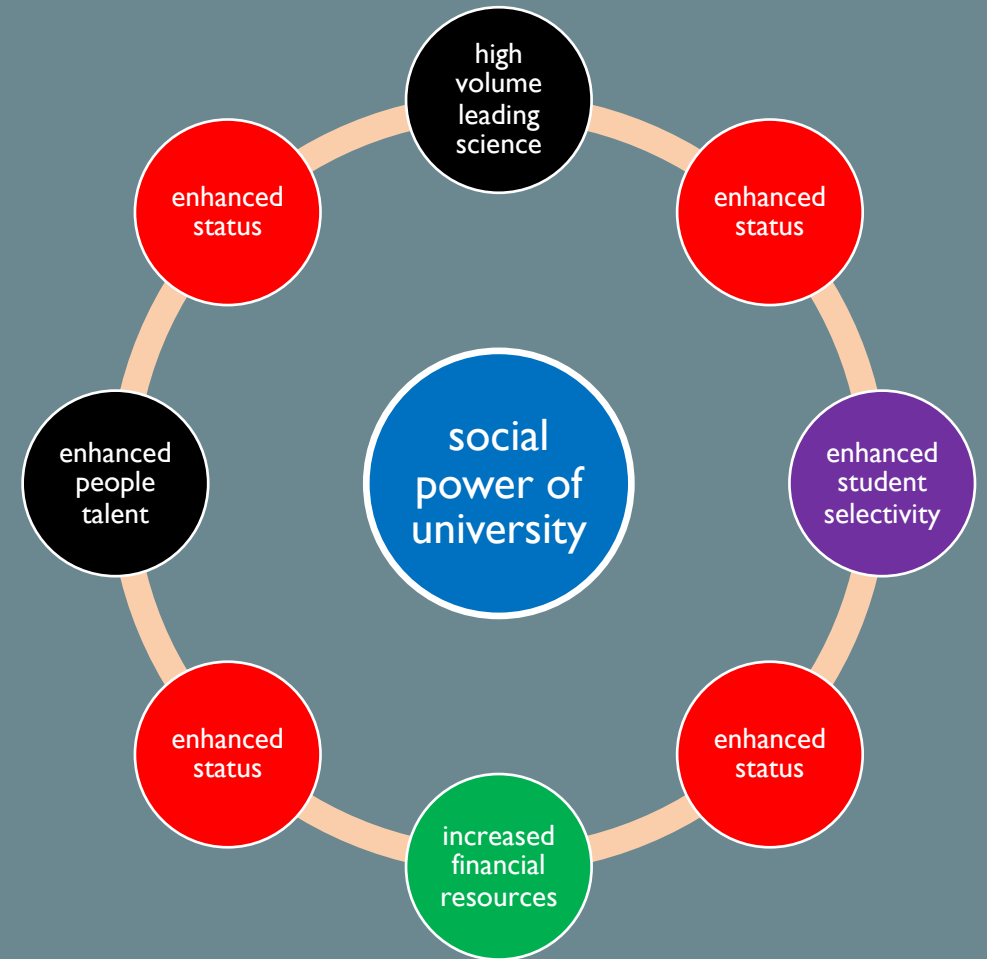
TOP UNIVERSITIES IN STEM RESEARCH, LEIDEN RANKING

PAPERS IN TOP 5% BY CITATION RATE, 2017-20, (1) PHYSICAL SCIENCES &ENGINEERING, (2) MATHEMATICS & COMPUTING:

University	System	(1) Physical sciences & Engineering	(2) Mathematics & Computing	All STEM fields
Tsinghua U	CHINA	988	342	1,330
Zhejiang U	CHINA	670	204	874
Harbin IT	CHINA	578	283	861
Huazhong U S&T	CHINA	600	253	853
Massachusetts IT	USA	633	177	810
Shanghai Jiao Tong U	CHINA	601	196	797
Nanyang UT	SINGAPORE	567	205	772
U S&T	CHINA	619	130	749
Xi'an Jiaotong U	CHINA	562	174	736
National U Singapore	SINGAPORE	512	173	685
Stanford U	USA	529	153	682
Tianjin U	CHINA	523	153	676
Hunan U	CHINA	536	127	663
Central Southern U	CHINA	502	148	650

UNIVERSITIES AS INSTITUTIONS

- Universities as institutions are driven by prestige and the accumulation of social power
- Triumph of the multiversity: the large multi-field institution, often on multiple sites
- Most not all leading universities tend to grow
- Universities combine two heterogeneous elements: (1) leadership and administrative/professional core sustains organisational coherence, and identity, (2) faculty with primary loyalty to disciplinary networks
- Rectors and academic middle managers are key
- ‘World-Class University’ essentials: money, talent (the most important), governance that fosters outcomes
- Status makes the university go round!



SOME IMPLICATIONS

- Pace of change and pressure to adapt and be flexible: mergers free up possibilities for structural change
- All the geographical scales becoming very active – global, European regional, national, local institution – leaders must be multi-scalar, at home in all settings and moving easily between them
- Perpetual need for more and better academic talent, suggests total openness to international recruitment
- University leaders will be drawn closer to states
- Public political contest over science will be crucial
- Media and social media debate will shape conditions, importance of communicative public engagement





‘IF TIME UNFOLDS AS CHANGE, THEN SPACE
UNFOLDS AS INTERACTION’ – DOREEN MASSEY

BUILDING A CORE LEADERSHIP TEAM BASED ON TRUST, COLLABORATION AND ACTION

- Division of labour (Dutch system)
- Successful mergers depend on seamless integration in leadership and governance
- Trust: mutual agreement or need?



CREATING A COLLECTIVE IDENTITY AND VALUES SHARED AND LIVED BY ITS LEADERS

- The environment is heterogenous and that is an asset
- Spare and authentic core values that resonate emotionally
- Building common culture is useful up to a point – building mutual respect is more important (especially in merged institutions)

Joan Miro, *The garden* (1925)



UNIVERSITÉ PARIS CITÉ VALUES

- Freedom of thought and speech
- Respect and promotion of equal rights, Innovation and creativity
- Service to society and the common good,
- Openness to the world, the city and the environment
- Scientific integrity and ethics

Simplifying this, the values that have the most 'pull' are freedom of thought and speech, and creativity and innovation. This suggests:

- Free creativity, *OR* Free and open creativity
- Innovation for the common good



FACILITATING RESEARCH-INFORMED LEADERSHIP FOCUSED ON UNIVERSITIES

- Transversal leadership versus specialist roles: both are needed in a leadership team, e.g. legal and financial specialisms
- All leadership roles require intensified training
- ... including training in avoiding mistakes
- The key information needs are understanding the environment, context, interpersonal relations and group dynamics
- Don't overestimate the role of formal research – most situations are complex-multi-stranded, contextual, and require complex judgment – data are always needed but judgment calls are not amenable to social science type universal rules



INCENTIVISING TALENTED ACADEMIC LEADERS TO TAKE UP LEADERSHIP ROLES

- Unsolveable. Zero-sum competing needs – some people should stay as leaders in disciplines and some should just be intellectual leaders
- Can function as an attractive temporary break time after 10-20 years. But academic leaders have to be persuaded to throw everything into it and need to recognise that it requires different skills and sensibilities – scientific truth and a healthy flourishing organisation are different goals
- New academic leaders lack training and must face their fate in solitude ... give them strong, tailored training, and nurturing mentoring



GENERATING EMPATHY AMONG ACADEMIC AND ADMINISTRATIVE LEADERS

CLARIFYING ROLES AND RESPONSIBILITIES TO BUILD ON EACH OTHER'S STRENGTHS

- This is an area where gains can be made – it can make a large difference in a merged institution
- Making the essential dualism, the heterogeneity, at the heart of the university work
- Fostering mutual respect and an understanding of each other's differing temporality
- Expand pairs (tandems) especially for new leaders
- Distinguish shared responsibilities clearly from individualised responsibilities



CREATING COHERENCE ACROSS THE CENTRAL, FACULTY AND DEPARTMENTAL LEVELS

- Problem of harmonising autonomous creative academic units with strategic objectives at centre? The essential dualism again. This is not a trade-off – they have different functions within the organisation, they co-exist. Academic autonomy is not an obstacle it is an instrument.
- No rules about the number of layers (Divisions/ Faculties/ Departments) but discipline based organisation is essential
- Top down must add value – opportunities, resources, support, status. Bottom up must generate solutions not problems – not ‘my resources are deficient’, but ‘if you gave me X I could do Y’
- When merged units have incompatible parts, leaders must change – such problems are more difficult to resolve in academic units than in administrative units (but academic units can split)



SIMPLIFYING DECISION MAKING PROCESSES WHILE STAYING INCLUSIVE

- A decision-making strategy is a communication and consultation strategy
- Less meeting time
- Online meetings, especially for multi-campus organisation
- A lot more things should be left to (transparent) middle academic managers and administrators



BRIDGING ADMINISTRATIVE SILOS TO ANSWER SPECIFIC USER NEEDS

- A division of labour is of course necessary but someone has to know it all ...
- No firm rules about which people services should be handled across the institution and which should be devolved to academic units – a case by case problem
- Problem based coordination across student services is an area where universities can make major gains
- Safe spaces can be crucial for some students
- Problems of racism are often under-recognised; this conditions the university experience of many



IMPROVING ONBOARDING OF ADMINISTRATIVE LEADERS TO HELP THEM ADAPT

INCREASING ADMINISTRATIVE STAFF MOBILITY TO OPEN UP NEW PERSPECTIVES

- Building a professional culture grounded in dignity of the work (if not already established) is key to the performance of the institutional core
- Includes training, status, career ladders, networks beyond the university, events
- Pairing, mentoring of new staff



OFFERING AN EVOLVING TRAINING PORTFOLIO TO STAY RELEVANT AND ENGAGING

- Unless training builds ongoing reflexivity it fails
- Generic training has limited value except in areas of generic function. Relevance = contextualisation!
- Some training of middle level academic leaders and professional staff can be usefully integrated
- Institutional identity and awareness can be built in training 'retreats' shared by different academic units (engineering and music, law and biology, etc)



FINAL THOUGHTS

- Importance of reading the environment (Singapore example)
- Expect the unexpected
- Willingness to change, flexibility, responsiveness
- Communication is a main aspect of almost every organisational process
- Communication is increasingly vital to the public politics of universities
- Success drives success in universities, providing that it accumulates institutional and individual status



FINAL FINAL THOUGHTS

- A university is combinatory and multiple. Combines heterogenous pairs – fixedness and mobility, specificity and universality, teaching and research, administrative and academic
- Values and identity of institution are sustained by leaders and professional staff – faculty (at best) will bask in its sun but their loyalty is to their discipline, their colleagues and their students
- Academic and administrative units have different logics but both are needed and reducing one to the logic of the other is counter-productive, e.g. homogenising research. No necessary trade-off between autonomy and organisational coherence It's all about maximising agency, both institutional and individual
- ***Self-managed high performing faculty talent is the key to a high performing university***

