

INTERNATIONAL HIGHER EDUCATION RESEARCH AND DEVELOPMENT

A geography-led perspective on cross-border activity

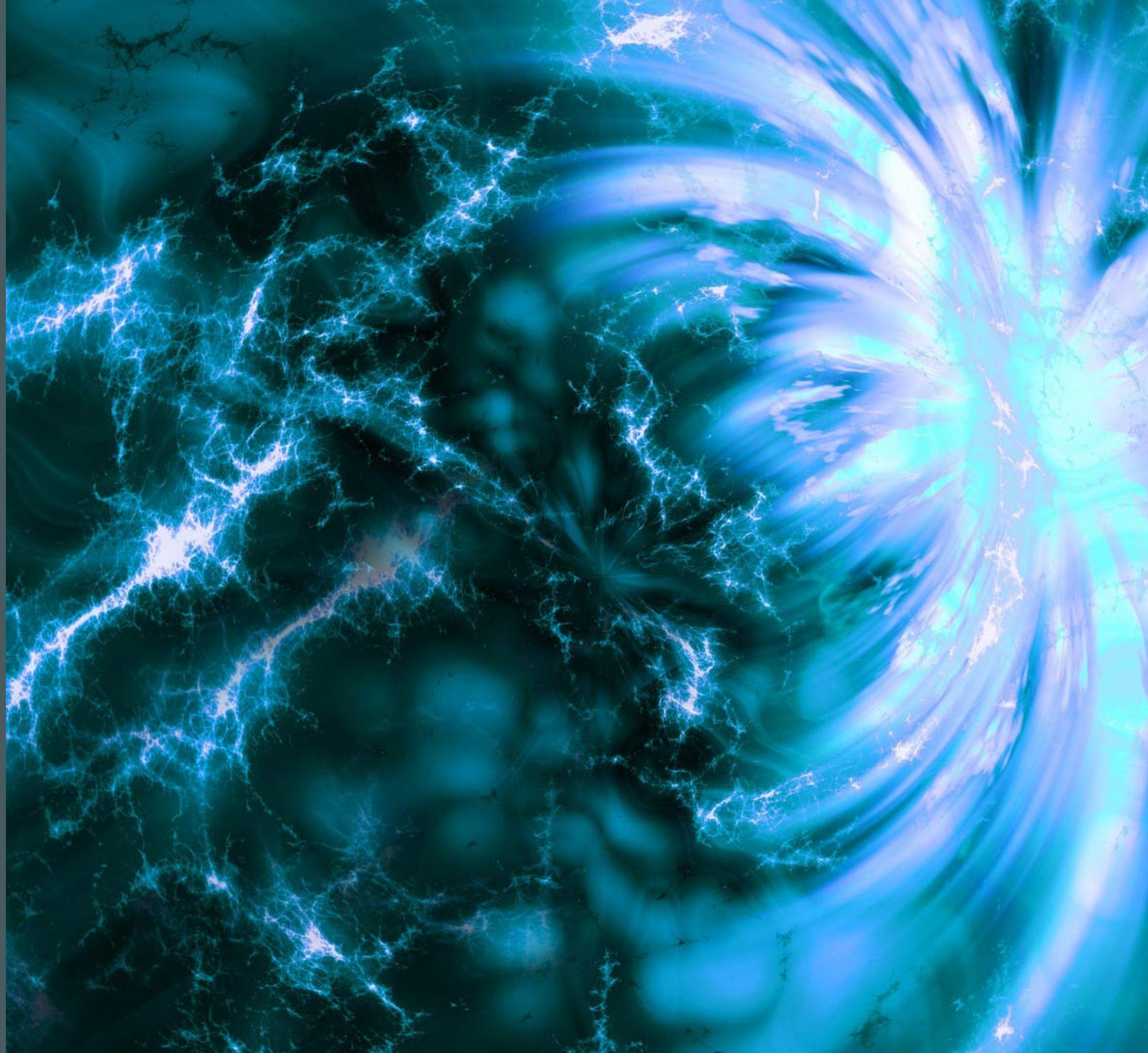
Simon Marginson, University of Oxford, UK

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INTERNATIONAL HIGHER EDUCATION RESEARCH AND DEVELOPMENT

- Introduction
- Cross-border developments in higher education and science
- Definitions of globalisation and internationalisation
- Problems of the standard definition
- Overcoming Western-centrism
- Conclusions



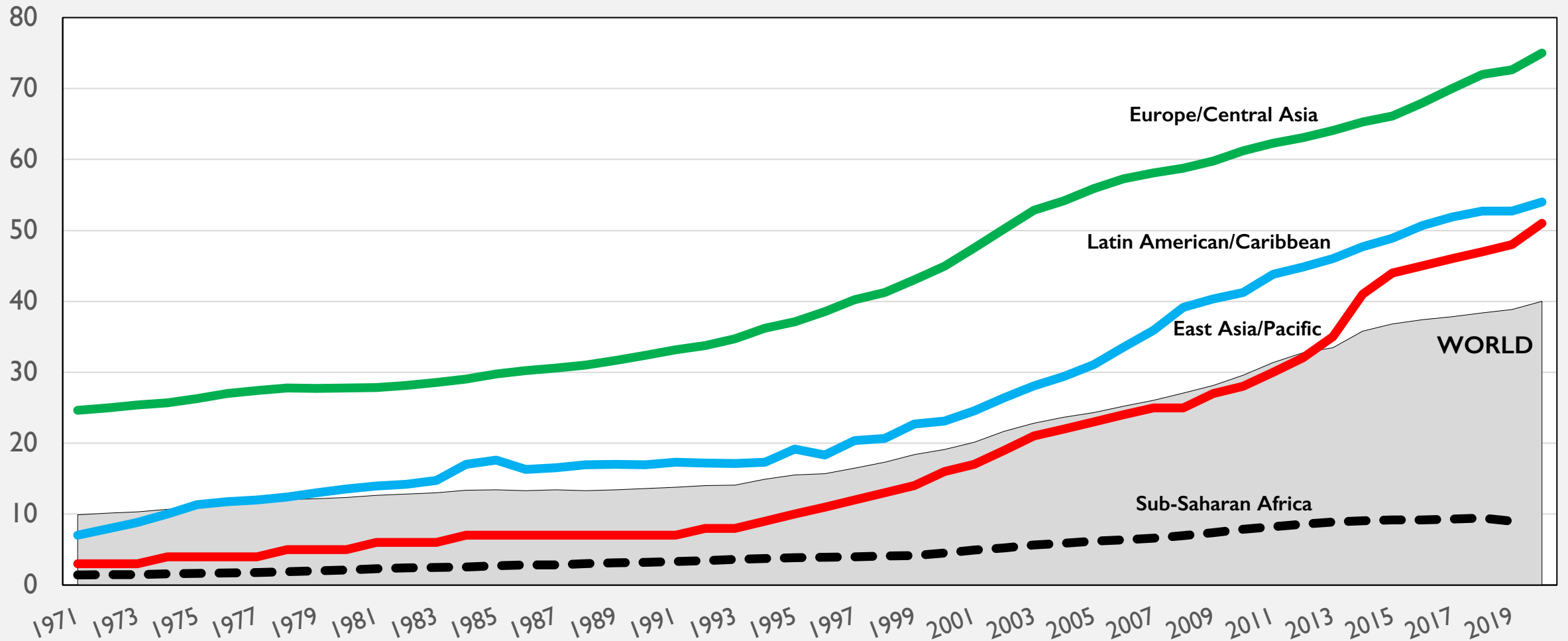
SINCE THE INTERNET BEGAN AND PARTICIPATION STARTED TO GROW RAPIDLY IN THE 1990S, GLOBAL, REGIONAL, NATIONAL AND LOCAL HIGHER EDUCATION HAVE FLOURISHED IN MOST COUNTRIES



Zhejiang University, China

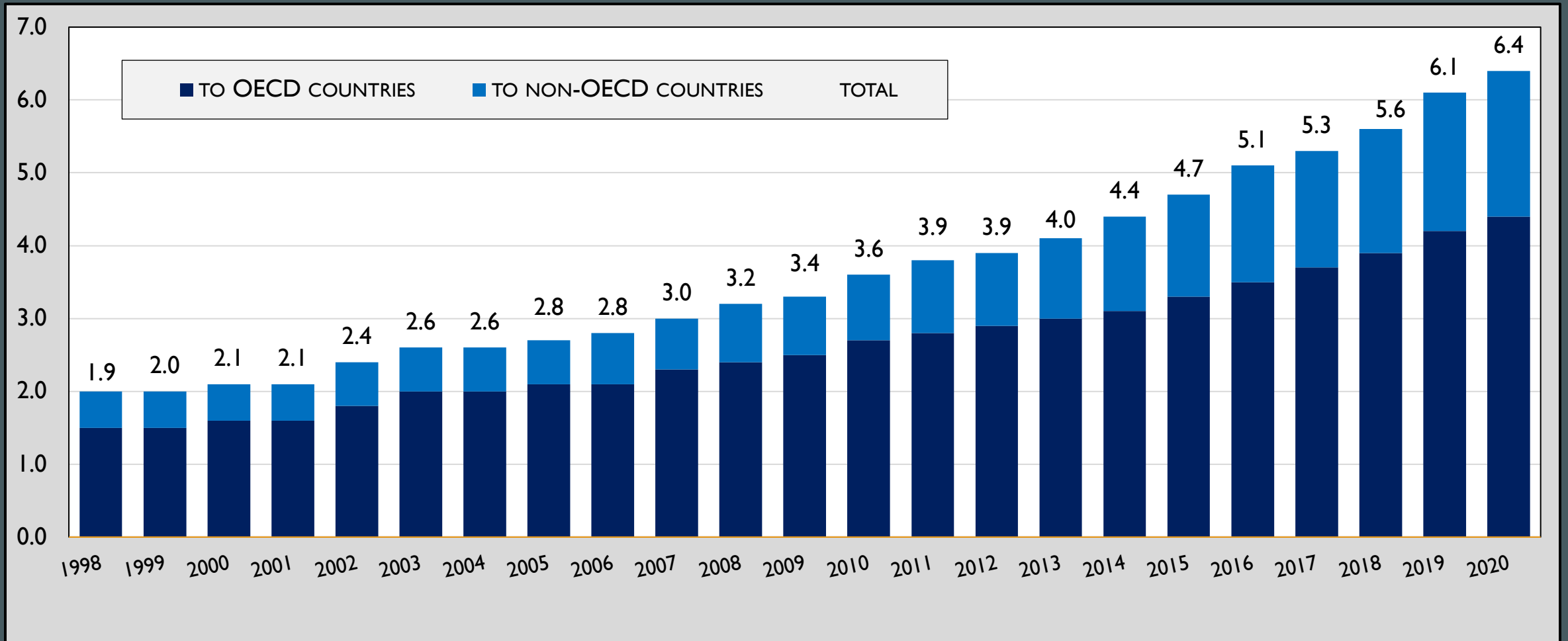
PARTICIPATION (%) WORLD AND SELECTED REGIONS 1971-2020

Gross Tertiary Enrolment Ratio (UNESCO data)



MOBILE STUDENTS INCREASED BY 5.65% PER ANNUM 1998-2020

INTERNATIONAL OR FOREIGN STUDENTS, TERTIARY EDUCATION, WORLD (MILLIONS) – UNESCO DATA



EXPANDING ROLE OF ON-LINE HIGHER EDUCATION



Many developments in online education higher education during the COVID-19 pandemic are ongoing



The MOOC format has enabled a high participation content rich e-learning space

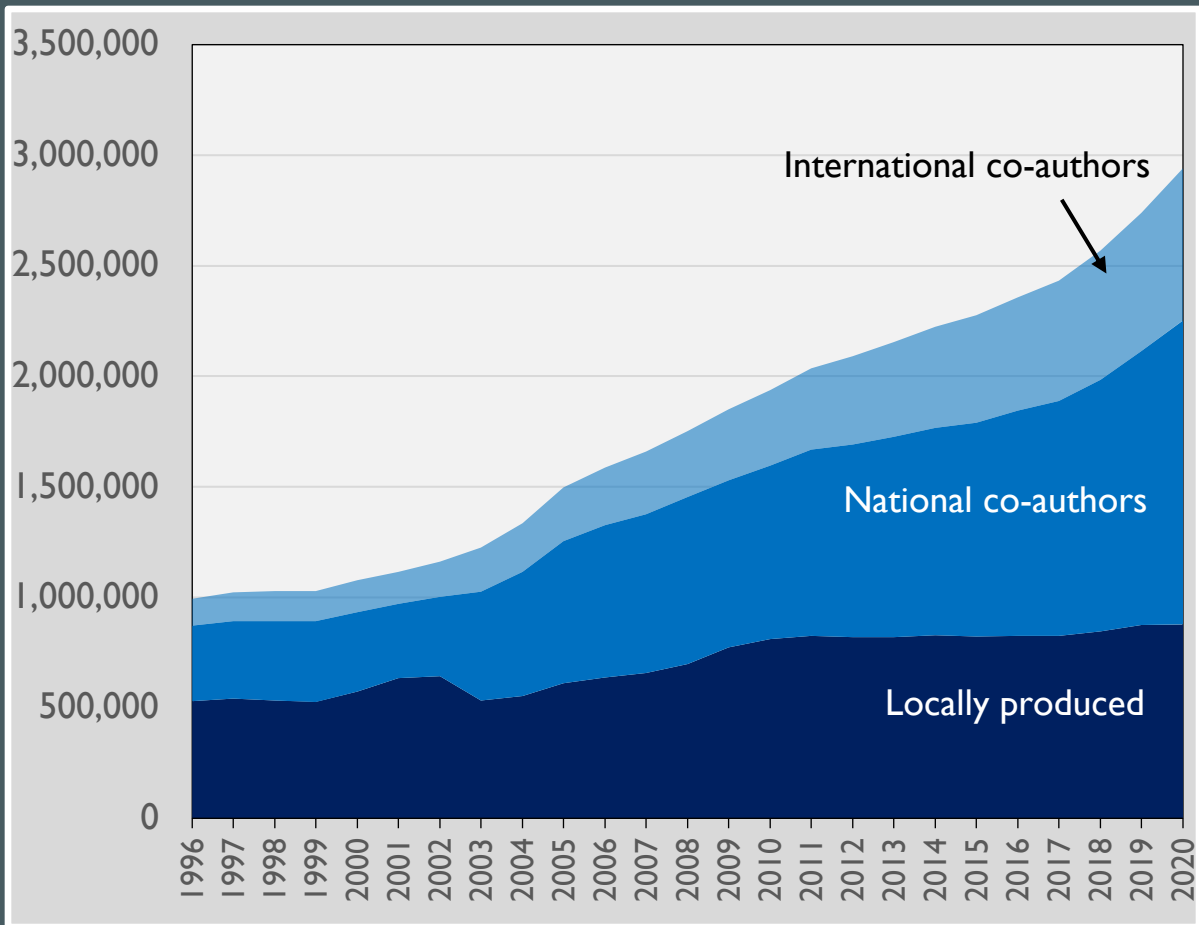


RISE OF GLOBAL SCIENCE

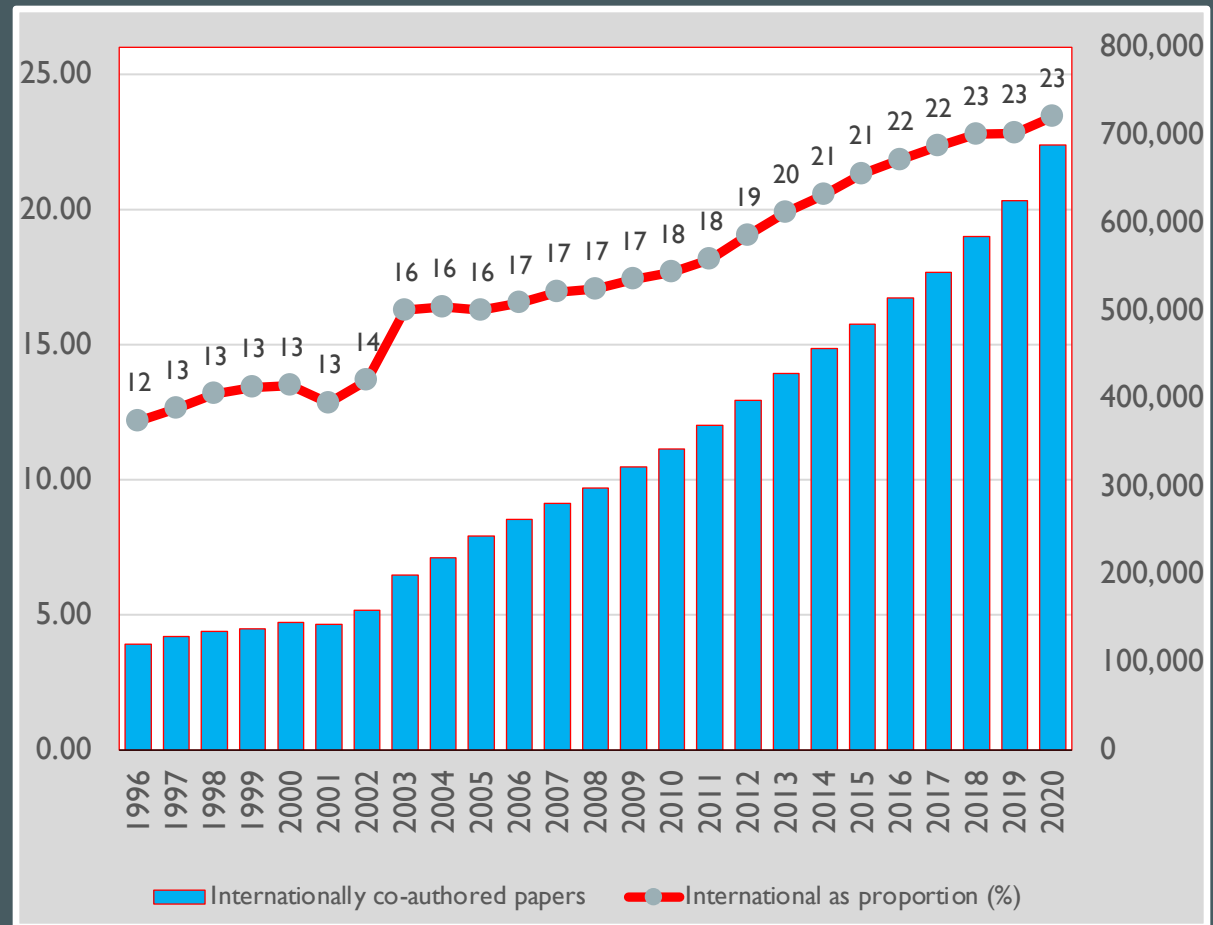
- Since the Internet began in 1989 there has been great growth in all networked information-based systems. A global science system has expanded rapidly, grounded in global publishing in English and networked collaboration, but excluding knowledge in other languages and all indigenous knowledge
- Global work dominates intellectually in the science disciplines, though research and scholarship in social sciences, humanities and some professional fields is often more local-national than global
- Global science is resourced by but not controlled by national governments. It is shaped primarily by grass-roots cross-border interactions between researchers
- Global science underpins global comparisons/rankings

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



RESEARCH UNIVERSITIES ARE GLOBALLY COLLABORATIVE

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

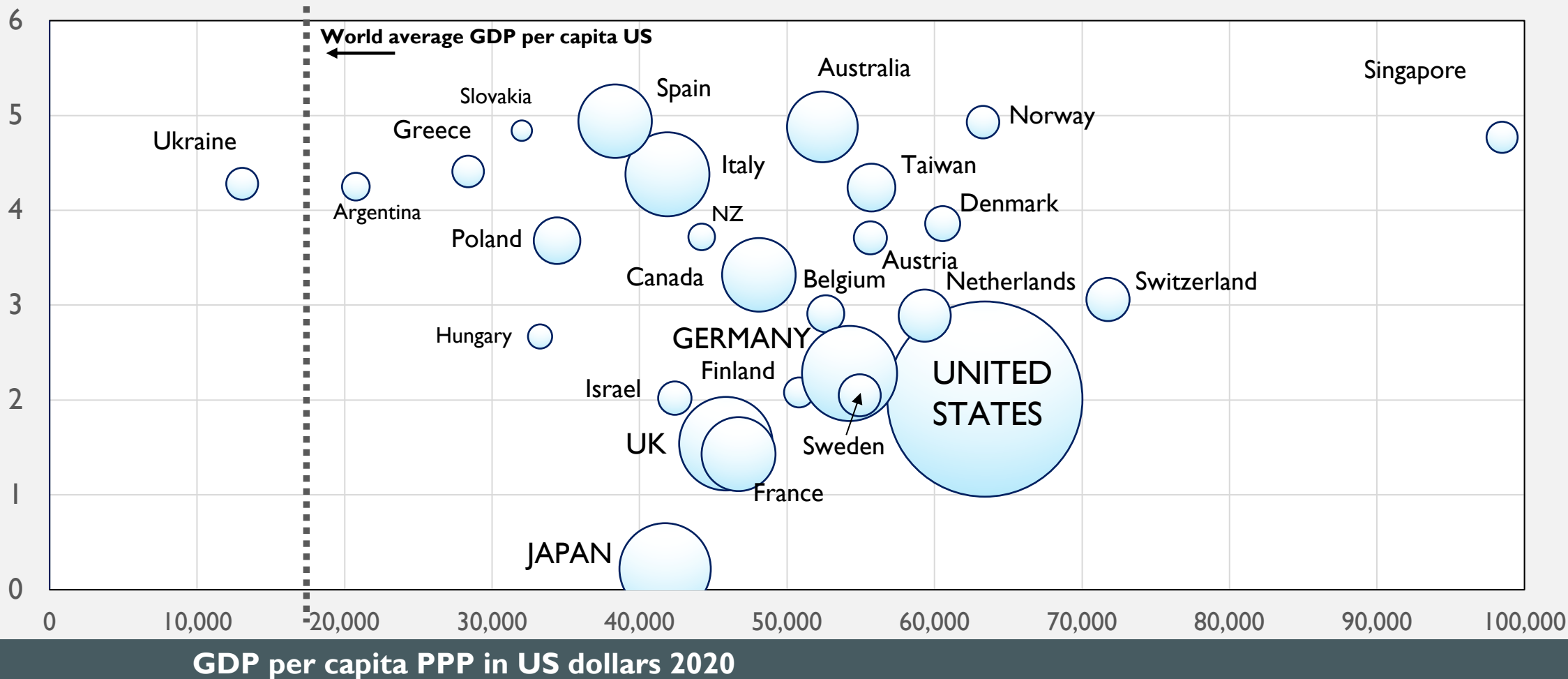
university	country	top 5% papers	all papers	% of papers in top 5%	cross-border papers	% of papers cross-border
Harvard U	USA	4276	35,050	12.2%	44,930	54.4%
Stanford U	USA	2140	17,187	12.5%	20,174	47.6%
U Toronto	CANADA	1773	24,260	7.3%	29,586	59.1%
Tsinghua U	CHINA	1726	22,311	7.7%	16,668	37.7%
U Oxford	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%

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

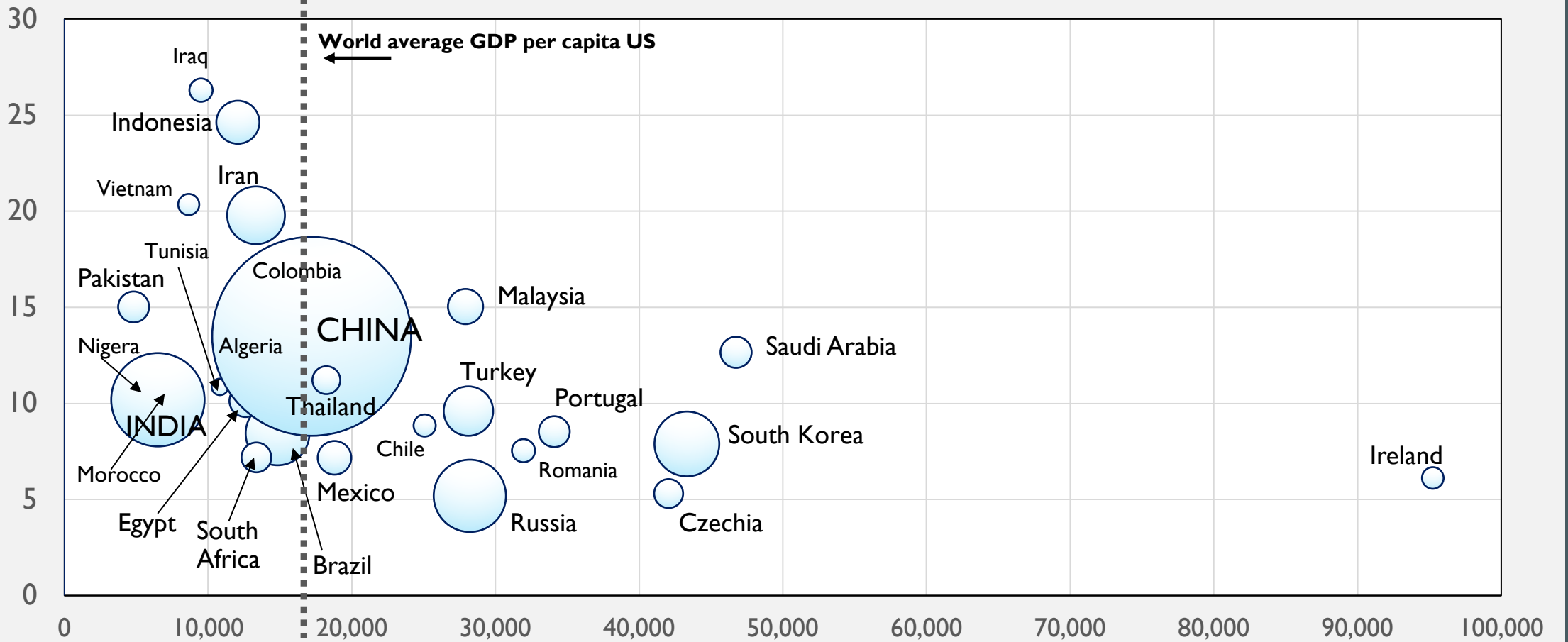


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Growth
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GDP per capita PPP in US dollars 2020

RISE OF REGIONAL HIGHER EDUCATION AND SCIENCE IN SOME PARTS OF THE WORLD

- In Europe the coordinated Bologna reforms, European Higher Area and European Research Area
- Horizon Europe: EU's ninth multiannual Framework Programme for research and innovation, world's largest research programme, budget €95 billion
- Growing coordination and cooperation in higher education in the Association of Southeast Asian Nations (ASEAN)
- Some region-level activity in higher education in Latin America, Sub-Saharan Africa, Middle East and North Africa



European Parliament, Strasbourg

NATIONAL FACTORS IN THE GEO-POLITICS OF HIGHER EDUCATION AND SCIENCE

- Some pushback against inward student mobility
- In 2020 US and Chinese researchers shared 62,904 papers in Scopus, much the largest collaboration in global science. The US government has now moved from engagement to decoupling (China Initiative 2018), citing technological competition and security risks
- US allies have also problematised China links
- China is moving towards greater self-sufficiency
- Russia's invasion of Ukraine has fragmented cooperation in the post-Soviet zone and triggered international isolation of Russian universities



HOW DO WE MAKE SENSE OF THE MIX OF SPATIAL FACTORS IN PLAY?

- How do we explain the simultaneous operation of global, regional, national and local factors in higher education?
- Are higher education and science becoming more global or becoming less global?
- Is internationalisation 'dead' amid aggressive nationalism?
- Are global higher education and international higher education the same thing? What's the implication of the different terms?
- Is the Anglophone definition of 'internationalisation' helpful, or is it misleading and Western-centric?



GEOGRAPHICALLY SPEAKING, HIGHER EDUCATION IS A *MULTI-SCALAR* SECTOR

- Higher education is not always ‘national’ or ‘global’. It is always *both* of these, and more
- Global, regional, national and local activities are *not zero-sum*: any and all can grow/decline
- Individual and institutional agents have open possibilities, and causation can flow from any of the intersecting scales of activity
- Geographical space is brought into being by agents (persons, groups, institutions, nations)

Roy and Diana Vagelos Education Center, Columbia University, USA



SPACE = SOCIAL SPACES WITH MATERIAL COORDINATES
SPACES ARE CONSTELLATIONS OF SOCIAL RELATIONS THAT ARE CREATED BY HUMAN AGENTS

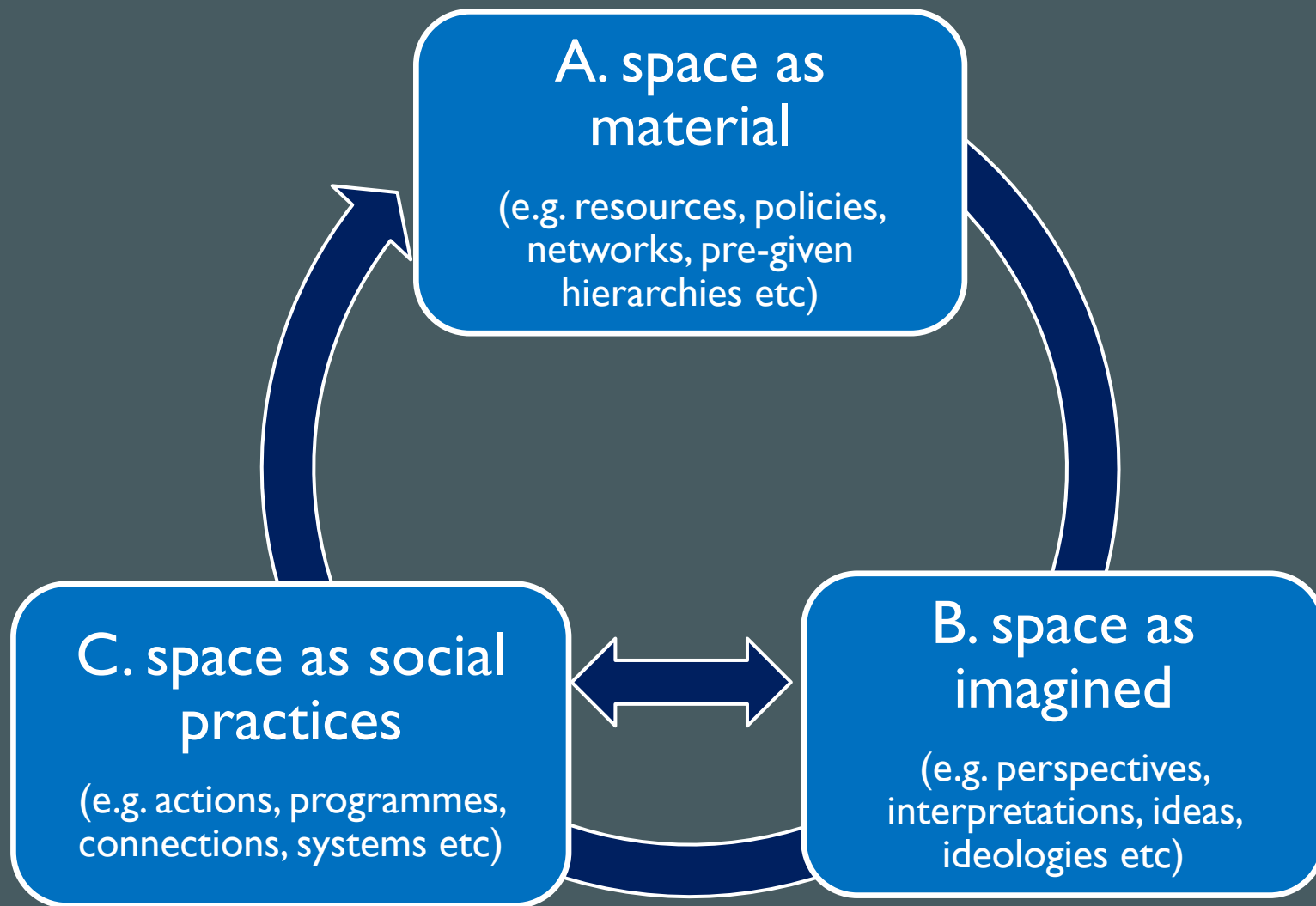
THIS



NOT



HOW AGENTS MAKE SPACE IN HIGHER EDUCATION



MULTIPLE SCALES IN HIGHER EDUCATION

the world as a whole (tianxia, contains all the scales and their activities)



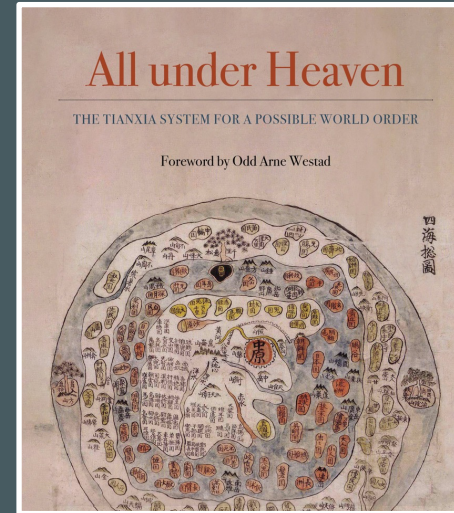
agency and activity in any one scale can intersect with any of the other scales

TIANXIA: 'THINKING THROUGH THE WORLD'

- *Tianxia* as the unified human and natural sphere, an ecological imagining
- 'Thinking through the world', the world as a political subject. No-one takes responsibility for the world. It is a 'non-world ... Anyone can abuse and plunder its resources... It is just a contested and damaged living space.'

- Zhao Tingyang (2011), *The tianxia system: An introduction to the philosophy of world institution (Tianxia tixi: Shijie zhidu zhexue daolun)*, p. 74. Renmin University Press.

- As a mode of governance, held together by culture and values not force, unity in diversity (*heer butong*)



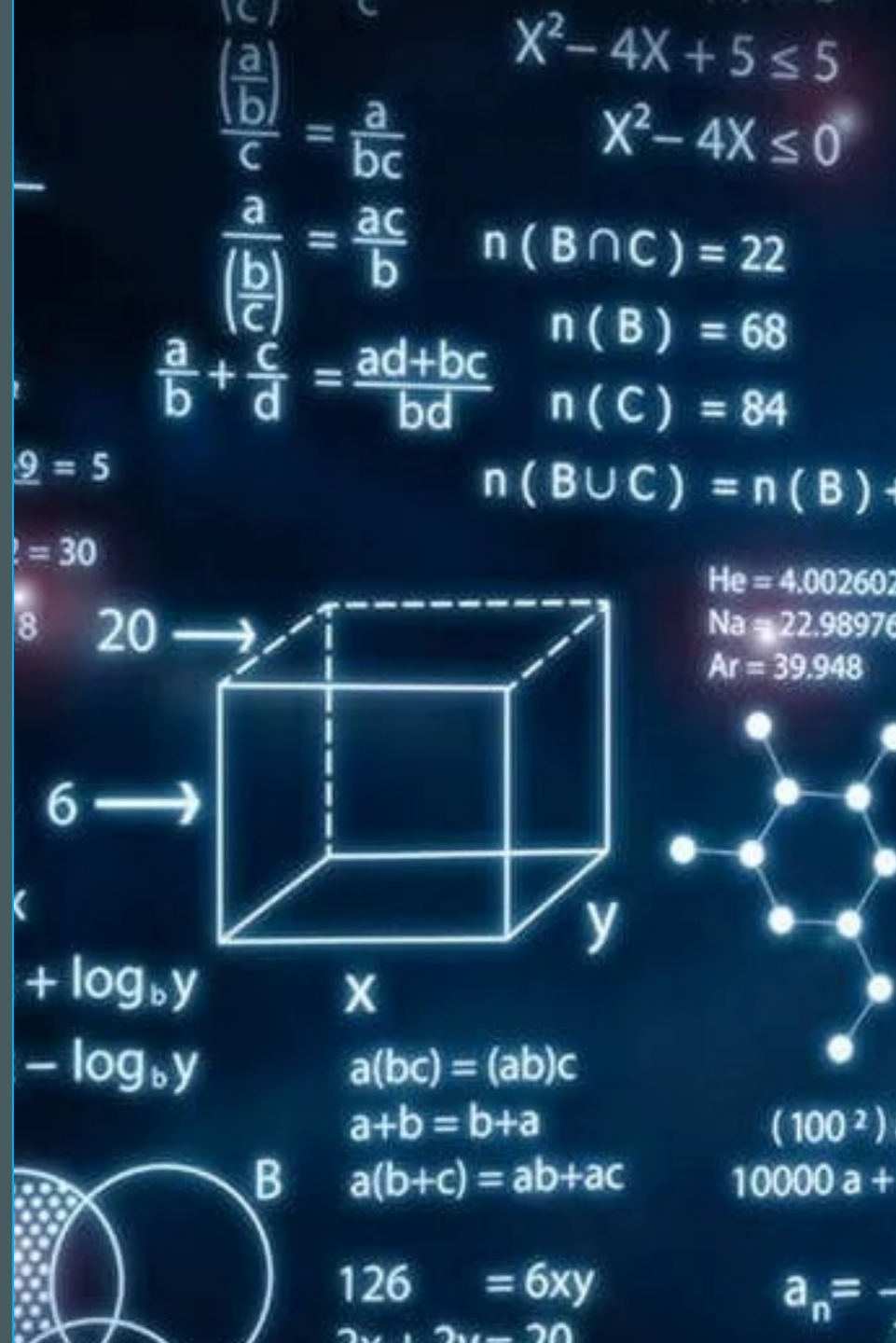
Zhao Tingyang, Chinese Academy of Social Sciences: modern expert on *tianxia*

IN HIGHER EDUCATION AND KNOWLEDGE
ALL THE SCALES ARE HIGHLY ACTIVE



A SCIENTIFIC GEOGRAPHY OF HIGHER EDUCATION

- Higher education and knowledge are nationally, culturally, linguistically and educationally diverse! We cannot unite or 'manage' the field using normative or ideological language that privileges one kind of space, one way of life or one set of values
- But we can agree on the neutral scientific concepts used to describe the different spaces and scales of activity in higher education, which are tools for research and policy analysis
- Terminology should be consistent with sound practices in other social sciences, and explain cross-border higher education on an inclusive basis, enabling the free identification of similarities and differences so as to better inform research and practice



NEUTRAL GEOGRAPHICAL DEFINITIONS

International	Phenomena or relations between nations (<i>inter-national</i>) or between higher education organisations or persons in nations
Internationalisation *	Creation or growth of relations between nations, or between higher education organisations or persons in nations
Global	Phenomena or relations in higher education pertaining to the world as a whole or a large part of the world
Globalisation	Extension or intensification of relations in higher education on the world or planetary scale, tending towards convergence and/or integration

* *NOT* 'the process of integrating an international, intercultural or global dimension into the purpose, functions or delivery of post-secondary education' (Knight 2004)

SOME DIFFERENCES BETWEEN INTERNATIONALISATION AND GLOBALISATION

- *International* activities are directly regulated and supported by national government
- *Global* activities (e.g. collaboration in science, university partnerships) can be practised outside government, using global travel and communications
- Resources and governance in higher education are mostly determined inside the country
- Information and scientific knowledge flow globally
- Global problems in science can be tackled on a multilateral basis (leading to internationalisation) but much is direct cooperation between universities and between scientists (globalisation)



HIGHER EDUCATION HAS LONG HAD *TWO KINDS* OF CROSS-BORDER CONNECTIONS

- **International relations** – conducted through the nation-state framework, for example collaborative research programmes, negotiations between national accreditation agencies, cross-border student mobility which is mediated by national governments through visa policies, scholarships and national marketing
- **Global relations** – flows of knowledge and ideas, scholar to scholar links, that date back to medieval Europe and the monasteries of India, university to university agreements, the global science system (almost 25 per cent of articles are now written by scientists from more than one country)



Medieval scholars in Europe



Nalanda in Northern India

HOW NOT TO THINK ABOUT GEOGRAPHICAL SPACE I: LIMITATIONS OF METHODOLOGICAL NATIONALISM

- Methodological nationalism: ‘the belief that the nation/state/society is the natural social and political form of the modern world’ (Wimmer & Schiller 2003). It rests on the ‘internalist’ fallacy that the trajectory of nations is entirely determined by their own efforts (Conrad 2016)
- ‘Methodological nationalism operates both about and for the nation-state, to the point where the only reality we are able to comprehensively describe statistically is a national, or at best an international one’ (Dale 2005)
- This ‘precludes a planetary consciousness, as we are stuck in global discourses underpinned by nation-state categories and identities’ (Shahjahan & Grimm 2022)



HIGHER EDUCATION IS NATIONAL AND GLOBAL AND LOCAL

- Methodological nationalism sees one totally dominant scale in higher education - the national. scale Local institutions are wholly contained in the national. The global scale does not exist, there is only international activity, an outgrowth of the nation-state
- The critique of methodological nationalism is not a rejection of national identity, or the use of the nation-state as a unit of analysis. The nation-state is central to higher education. Nation-based data are needed. However, in recognising this we don't have to exclude other scales from view



HOW NOT TO THINK ABOUT GEOGRAPHICAL SPACE II: ANGLOPHONE DEFINITION OF 'INTERNATIONALISATION'

'Internationalisation at the national, sector and institutional levels is defined as the process of integrating an international, intercultural or global dimension into the purpose, functions or delivery of post-secondary education' (Knight 2004)

- Attempts to manage a field of practice that is irreducibly diverse and cannot be unified with abstract terminology
- The definition is methodologically nationalist: focusing the main attention on the national framework and inter-national relations
- Uses a highly ideological geography (internationalisation good, globalisation bad), that blocks global activities from view
- *In the context of its use in a Western-dominated higher education world the definition is self-centred and non relational, leaving untouched the historical legacy of Euro-American centrism*



A MISLEADING GLOBAL GEOGRAPHY

**‘globalisation is changing the world of internationalisation’, while
‘internationalisation is changing the world of education’ (Knight 2003 & 2004)**

National container
seen as protecting
higher education
against globalisation

Seems to position
internationalisation
advocates in a key
role in institutions

external economic
globalisation [BAD]
pressuring nation and higher
education from outside

mediated by
internationalisation
activities [GOOD] of
nation / institutions

higher education
nurtured in national
container, changed by
internationalisation

BUT higher education
institutions are themselves
global agents, globalisation is
more than economic, e.g. flows
of science and knowledge

BUT rather than
protecting institutions
nation-state may impose
policy of competition
and commercialisation

CRITIQUE OF THE DEFINITION FROM THE GLOBAL EAST

‘To non-Western societies, modern universities are an imported concept. They originated from ‘Europe, spreading worldwide from the mid-19th century to the present time mainly due to colonialism. Even the countries that escaped colonial domination adopted Western models as well. The European-North American university model has never been tolerant toward other alternatives, leading to the inefficacy of universities in non-Western societies, on whom a so-called “international” perspective has been imposed from the outset. What is lacking is an appropriate combination of the ‘international’ and the local. Within the contemporary context of Western dominance, internationalisation of higher education in non-Western societies necessarily touches on longstanding knotty issues and tensions between Westernisation and indigenisation. This is particularly true in China, a country with a continuous history of fostering unique cultural heritages for thousands of years’ (Rui Yang 2014)



CRITIQUE OF THE DEFINITION FROM THE GLOBAL SOUTH

- ‘Although internationalisation of higher education is touted as a solution to the problems facing higher education provision in Africa, the reality is different. What internationalisation may well do is to deepen the relation of dependency of local higher education institutions on higher education institutions in industrialised countries’ (Ogachi 2009)
- ‘Internationalisation as regards the global South, particularly Africa, is far from being an intentional process’. Universities in the global South engage in ‘massive consumption’ of ideas, knowledge and textbooks from the global North ‘while staunchly, but helplessly, adhering to international academic and scholastic norms and values’. Former colonies maintain the academic language of the coloniser. Global rankings ‘have pushed the internationalisation pendulum from intention to coercion’, pressuring institutions ‘to do things not necessarily within the realm of burning institutional needs’ (Teferra 2019)



NEUTRAL TERMINOLOGY DISTINGUISHES 'GLOBAL' AND 'INTERNATIONAL', AND ALLOWS US TO INTERROGATE CROSS-BORDER ACTIVITY IN HIGHER EDUCATION

Global scale

Cooperation in science/ knowledge	Which knowledge is included in the global pool and which excluded (nations, languages, disciplines etc.)? Who has access to what knowledge on what basis (openness, cost)? Who decides validation, inclusion? In a research partnership, who initiates? Division of labour? Topic? Method? Authorship? Resource flows?
Partnerships between universities	In a bilateral partnership between institutions, who initiates? Net resource flows? Who sets the terms?
Mobility of institutions	What operating basis? Home or host country rules, language? Hybrid? Governance? Resource flows?
Mobility of programmes	Which country regulates the content and mode of delivery? Access and distribution? What is the language of learning? How open is the programme?

National/ international scale

Cross-border mobility of students	In bilateral relations, what balance of people movement (temporary and permanent) between nations? What are financial flows between country of student origin and country of education, across all aspects? To what extent are curricula and pedagogy transformed by educational mobility, if at all?
Nationally negotiated joint activity	Who initiates? Who sets programme terms and contents? What is the division of labour? Flows of resources, knowledge, people? Is dependency created?

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