Globalisation and the Geopolitics of Higher Education

Simon Marginson

The Centre for Global Higher Education (CGHE) is an inclusive international partnership supported by the UK's Economic and Social Research Council. The Centre promotes research into global higher education, its inequalities and its futures.

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Abstract

The paper examines global space making and geopolitics in higher education. After reviewing global ontology and spatiality, globalisation (worldwide convergence and integration), and the interactions of the national and global scales, it examines the changing geopolitical order on an historical basis. It moves from the long impact of the colonial inheritance to the high point of neocolonial Euro-American globalisation in the 1990s ('the end of history'), to global multi-polarisation and the spread of capacity in higher education and science in the 2000s and after, to the tempestuous decade after 2015 and the present Euro-American (Western) nativist revolt against cross-border connections, and the U.S. strategy of decoupling from China, both of which closely affect the contemporary geopolitics of universities and science. Global multiplicity in agency, culture and identity, especially the rapid rise of China and the longer erosion of the colonial order, plus the neoliberal immiseration of Euro-American populations, have triggered Western pushback against the 1990-2015 phase of globalisation. This pushback has taken form in a shift from normative internationalisation and cosmopolitanism to widespread assertions of singular national identity, nativist resistance to migration that has disrupted cross-border student mobility in many countries, and partial breakdown in relations between the U.S. and China in political economy and in science and technology. In government bordered nation-state identity and strategy are being more sharply asserted and multilateralism is weaker. The U.S. decoupling with China is associated with the reworking of bottom-up global scientific cooperation by techno-nationalism and

national security politics, with negative implications for the Humboldtian university practices of university autonomy and academic freedom.

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'What is different about our time is that globalisation forces us to live all jumbled together, and yet we have very different visions of what this common world should look like.' ~ *Bruno Macaes, The dawn of Eurasia: On the trail of the new world order, 2018, Penguin, p. 2.*

Introduction: A more global reality

Though social relations determine technological transformations and not the reverse, some new technologies seem to alter the conditions of possibility almost overnight. After the advent of the Internet in 1989 the truism 'higher education is international' gained a new poignancy. Streams of messages, information, images and data began to flow in from everywhere, at first nearly all of it in English. Online relationships began to flourish. For those in Euro-American higher education with access to bandwidth and computing power, a small group growing at an exponential rate, the possibilities seemed endless. Universities elsewhere also discovered new opportunities for action and creation but they also faced newly normalising standards and requirements. The loss of control over time and the displacement of language and codes of behaviour diminished agency. The geopolitics of higher education had been suddenly shifted to a more immediate Western hegemony.

More than three decades later that hegemony is fragmenting, the geopolitics and the patterns of global openness and closure are different and the Internet has proven a mixed blessing for all parties, but the decisive shifts of the early 1990s are still salient. Knowledge and information continue to converge in the global scale, bringing political and educational cultures into direct and continuous contact with each other while sharply highlighting their differences. Global/national tensions are endemic while felt in differing ways from location to location. While there is much scope for agency and innovation in the global scale, the distributions of resources, the protocols and the relations of power are asymmetrical. Because individuals and institutions are both nested

in nation-states and active in other geographical scales they are caught up in the upheavals of global geopolitics.

This paper is about space making; individual, institutional and national agency and collective relations in higher education and knowledge; the inter-state and global architecture and configurations of power; the transition from neo-coloniality and Anglo-American unipolarity to global multipolarity and developing decoloniality; and the flows and ebbs of globalisation. The next two sections theorise ontology, space and scale, and geopolitics in higher education, drawing on human geography and primarily the work of Doreen Massey (2005). This is the basis of the descriptive account that follows: world order and globalisation in higher education and research, in two main phases. First, Anglo-American hegemony and sweeping openness after 1990, which leads to multipolarity and the rise of China. Second, Western pushback against globalisation and partial disruption of cross-border student flows and research cooperation from the mid 2010s onwards.
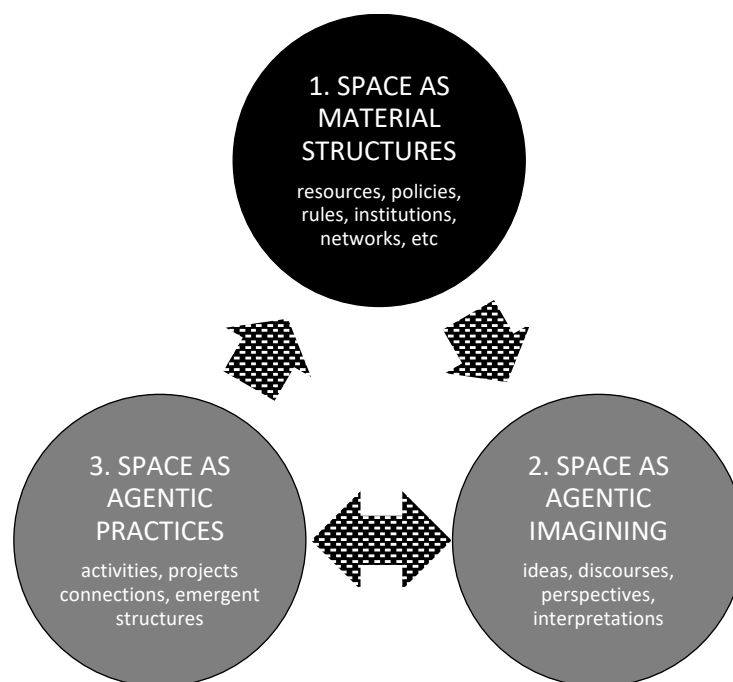
Space and space making in higher education

Higher education is practised in space and time in which human imaginings and practices intersect with material coordinates, and space is constructed as social space and relations of power (Lefebvre, 1991; Massey, 2005). Space in human geography differs from space in physics or in engineering. Geographical space is not an already-existing container, static and waiting to be filled, like an empty stadium. It is in motion and continually constructed by human agents. Massey describes each person's life as a trajectory moving through time. Those trajectories intersect, deliberately and accidentally, in space. Space is comprised by interactive relations between people, individual and collective, structured by materiality. 'If time unfolds as change then space unfolds as interaction' (p. 61) and as events (p. 28).

Understanding of social space begins with ontology. Reality exists independently of our perceptions of it but our interpretations and practices are part of reality. Reality is never fixed or finished but continually emerging. Universities, nations, knowledge and the world are always becoming. There are multiple possibilities and the future is unknown, for both the actual and the possible are part of reality. Over time all certainties crumble: Massey (2005) refers to 'the variable essence of things' (p. 58) and 'the mutuality of chance and necessity' (p. 117). This does not mean that anything can happen. The possible is conditioned by materiality and history, including capital and class (Sayer, 2000). Nevertheless, it is crucial to grasp the conditioned openness of space in which lie the ongoing potentials for new action. 'It is that liveliness, the complexity and openness of the configurational itself, the positive multiplicity, which is important for an appreciation of the spatial' (Massey, 2005, p. 13).

Social space is always incomplete. Spaces in higher education, from the immense global to the intimate local, are co-constituted with the human and organisational agents – who are simultaneously self-forming and socially-spatially formed (Marginson, 2024a; 2024b) - who make those spaces. Social space is not pre-existing or natural, prior to all human agency. It is the outcome of prolonged and often strenuous past and present human effort.

Following Lefebvre (1991), relational space making in higher education combines (a) pre-given historical-material elements (structures) like geographical territories and localities, resources, institutions and networks, with (b) the imaginings and interpretations of space making agents, and (c) the social practices in which they bring their visions into material form (Marginson, 2022d). For example, a global network of universities joins real institutions in grounded locations. The coordinates are material but the joining is social and entails many possible imaginings and practices. Figure 1 simplifies and summarises the process.

Figure 1. Space making in higher education as materiality, imagining and social practices

1. SPACE AS MATERIAL STRUCTURES
resources, policies, rules, institutions, networks, etc

3. SPACE AS AGENTIC PRACTICES
activities, projects connections, emergent structures

2. SPACE AS AGENTIC IMAGINING
ideas, discourses, perspectives, interpretations

Source: author

The material in domain 1 includes pre-given structures like economic resources, institutions and systems of institutions, communications networks, laws, regulations, policies, languages of use. The lower two domains 2 and 3 especially embody individual, group and organisational agency. In domain 3 agents rework material elements from domain 1, using ideas and interpretations from domain 2 to build new activities, programmes and organisations in higher education: embedded

material practices that become reproduced as ongoing structures in domain 1. Imagination in domain 2 and social experience in domain 3 shape each other in a continuing reciprocal process, as theorised by Archer's (1995; 2003) duality of the social self and the inner self in reflexive conversation (Marginson, 2024b).

Many examples can be given of space making in higher education. Universities sign agreements, make alliances, create joint degrees in a local region or across borders. Singapore positions itself as a 'global schoolhouse' in a 2002 report of the ministry of trade and industry, selects foreign universities to invite in to set up branches, and recruits foreign researchers to staff its labs. A Chinese university planner and a London-based magazine in 2002/2003 imagine a university world ordered by calibrated rankings of performance (see below). Governments in Japan South Korea, China, Germany, Russia and more start to build layers of 'World-Class Universities' that network into innovating industries, facilitate global research partnerships and build status for the nation. EU and ASEAN countries establish regional recognition protocols that facilitate student mobility. Western universities set up branch campuses in East and Southeast Asia and India. Stanford faculty create a MOOC. Researchers reach into each other's systems, collaborating in projects and academic writing. Millions of students apply for foreign university places, fill out visa forms, buy plane tickets and cross the border. All are making relational social space in higher education.

The certainty of multiplicity

Massey (2005) argues against notions of space as static and stable, of a closed world always-already divided up; of spaces and places internally coherent and bounded without reference to changing externality (pp. 5, 6, 26, 49, 151); of identity and agency as fixed and singular, apportioned to specific geographical places in unchanging landscapes and with an 'isomorphism' between space/place and society/culture (p. 64). 'So many of our accustomed ways of imagining space have been attempts to tame it' (p. 151). In the face of all this openness the impulse of scholars and politicians is to order the chaos, to derisk the open ontology of the temporal, 'both its terrors and its creative delights' (p. 26) They want a place or home that provides certainty, a safe haven (p. 65). But over and over the impossibility of stability is apparent. Nothing stays still for long. Space emerges and alters, new trajectories and intersections and gaps appear, and when people finally go home it has been changed out of recognition. All these strategies that hold down the moving parts by discourse or by force 'evade the challenge of space as a multiplicity' (p. 61).

Arguably, along with the open ontology itself *multiplicity* is Massey's most important insight, one that is repeatedly apparent in higher education. In the most influential book on the post World War II American university, Clark Kerr's (1963) central idea was that the university had become the 'multiversity', multiple fields of knowledge, interest groups, external stakeholders, agendas, roles, without a binding centre. Higher education and knowledge, like all of human society, turn on 'the

co-existence of difference' (Massey, 2003, p. 3). This is difference in all the senses of multiplicity including 'diversity, subordination, conflicting interests' (Massey, 2005, p. 61). '*The* pertinent lines of differentiation in any particular situation' can vary (p. 12). Space is the sphere of 'co-existing heterogeneity' where the distinct trajectories of agents intersect. It *must* always entail plurality (p. 9).

Difference is not confined to levels or calibrations of the same quality generated by internal decentering, as in university rankings, though hierarchy is one of its forms. Multiplicity also about the qualitatively distinct, and the differentiating effects of external relations on inner phenomena (as in the diversification of national university systems on the basis of their varied global activities). Multiplicity is heightened in global relations, with no global state to homogenise identities. For Gupta and Ferguson (1992) globalisation is 'a shared historical process that differentiates the world as it connects it' (p. 16). 'Even the new hybridities formed at points of intersection and juxtaposition are just as much a product of the dissonances, absences and ruptures within the process of globalisation as of any simple increase in the building of interconnections (Massey, 2005, p. 100).

Whether control is exerted through language, knowledge, university hierarchy, capital, military force, a *permanent* homogenising uniformity with no gaps or loose ends is impossible, especially in the global scale. 'There are always loose ends' (Massey, 2003, p. 5). The loose ends include the human and organisational agents who shape space. Multiple trajectories mean multiple agents with multiple perspectives and projects: 'governments, higher education institutions, business, and international/regional organisations' and 'students, faculty (whether individually or as a collective), civil society' (Moscovitz and Sabzalieva, 2023, p. 155). While some individual trajectories may have a discernible rationality, no one can be sure what will happen when the trajectories intersect.

Not all scholars agree with Massey about the primacy of difference. Pieterse (2020) sees differentiation and universalism as twin 'drivers' of human affairs (p. 235), each giving way to the other in succession. Marston, et al. (2005) state that 'complex systems generate both systematic orderings and open, creative events' but the systematic orderings are more common. Variations cluster and become mimetic over time (p. 424). Yet some gaps, some differences, do not close into identity. If ontology is open and trajectories intersect, uncontrolled emerging diversity must *always* have the final word. 'Conceptualising space as open, multiple and relational, unfinished and always becoming, is a prerequisite for history to be open and thus … for the possibility of politics' (Massey, 2005, p. 59).

The inexorable fact of social (and cultural, and political) diversification over time, which is equally evident in the natural world, ought to cure social science of its long struggle to find universal patterns and iron law causal explanations, its addiction to equilibrium as rest, and its longing for

the security and status of true prediction, the promise it can know the future by extrapolating from a frozen present. 'Through many twentieth-century debates in philosophy and social theory runs the idea that spatial framing is a way of containing the temporal. For a moment, you hold the world still. And in this moment you can analyse its structure' (Massey, 2005, p. 36). But the structure is not still and it turns into something else.

If the theoretical critique is not convincing the empirical will suffice. In higher education the certainty of multiplicity shows in the inevitable diversification of fields of academic knowledge, a long topic of higher education research (Clark, 1986). It was apparent in the variety of global initiatives by mostly Anglospheric universities in the first 15 years of the Internet era (Marginson, 2011). It means the field of power is also fluid and no singularity of content and no system of domination survives unchanging: few things are more certain than the eventual pluralisation of homogenous English-language global science. It shows in the multipolarisation of global political economy, and higher education and knowledge. Arguably, how diversity is configured and practised is *the* question in higher education space.

Scales and higher education

One kind of multiple space with special geographical importance is *scale*, like the local, national or global. Scale is 'a produced societal metric that differentiates space' (Marston and Smith, 2001, p. 615). Like other spaces, scales combine the actions and imaginings of agents with material structures and their coordinates. Scales differ in scope, proximity, coordinates and the associated imaginings and social relations. Active scales include the planetary or world scale, which combines human society and nature (Chakrabarty, 2021); the global scale, human society at world level; the pan-national regional scale as in the EU (Robertson, et al., 2016; Robertson, 2018); the national scale; the sub-national region scale, including the city; and the local scale, which in higher education includes the institutions, the disciplinary unit or research centre, and the student organisation. There is also the individual scale (Marginson, 2022d; Moscovitz and Sabzalieva, 2023, pp. 154-156).

Though the 'social ownership' of scales is 'broad-based' (Marston and Smith, 2001, p. 615) there is varying recognition, especially of the regional and global, and definitions of scales are contested. The national and the local are most prominent, appearing fixed and part of common sense, but all scales are fluid and dynamic (Moscovitz and Sabzalieva, 2023, p. 154) and held together by imaginings and strenuous effort. For the blood and soil nativist the nation is always there but in reality nations are 'imagined communities' (Anderson, 2016) sustained by law, authority and coercion, financial power and instruments of persuasion. Likewise, Massey (2005) repeatedly argues against ideas of global space as pre-given and 'out there', external to agency or locality. Like all scales the global is constructed, concrete and lived (pp. 6, 184-185). Global activities 'are

utterly everyday and grounded, at the same time as they may, when linked together, go around the world' (p. 7 and p. 53).

Agents in higher education contribute to the formation of scales and also make and utilise space within them (Marginson, 2022d). Large multi-disciplinary research universities are active in all scales. Higher education has long worked across scales. The Buddhist monasteries of Northern India, the medieval Islamic madrasas and the European universities were structured by a double spatiality. They combined their materiality and grounded identity in cities and states with mobility, and an open mental horizon. Scholars, students and ideas crossed borders. The double spatiality remains integral to today's universities, fundamental to their (partial) autonomy and organisational identity. They can hardly not be national, while the global scale frees them to be something of their own that does not derive from states, and connects them to all institutions that combine inquiry and learning.

The multiple scales and their variations are not well understood. The nation dominates thought and crowds out complexity. 'Methodological nationalism' is 'the belief that the nation/state/society is the natural social and political form of the modern world' (Wimmer and Schiller, 2003, p. 301). Through this lens worldwide phenomena are generated internally by nation-states, there are no global systems, higher education can be comprehended only in separate national categories, and cross-border activity is marginal (Dale, 2005, Lo and Ng, 2013; Shahjahan and Kezar, 2013). A methodological nationalist lens blocks from sight global phenomena such as ecology, and science to the extent it is epistemically autonomous. Methodological nationalism is not identical to normative nationalism, whereby one nation is preferred over others (Beck, 2007). Some patriots know that lived activity takes place outside the national scale. Nevertheless, the two forms of nationalism do tend to lean into each other, and taken together they tightly border identity. Massey (2005) refers to 'romances of coherent nationhood' and vain attempts to 'purify' the national space (p. 12).

Scales co-exist and are irreducible to each other. They are not identical at varying sizes, with one fitting into the other and the big ruling the small, like the matryoshka, the Russian dolls. They are different. For example, while national science is normed by the nation state and its laws, regulations, policy and funding; global science has no normative centre. It is comprised by knowledge in journals and bibliometric collections, and structured by communicative networks, institutional practices and collaborative relations. There is a worldwide cultural hegemony in science but no single driver, political or economic, akin to the centred nation-state. Scientists are active in both global and national-local science, and the norms, relations and behaviours in each case are partly different (Marginson, 2022e).

Scientists are often more free when they are working across borders than within state regulated national systems, though not all agents can choose their scale of activity. However, relations between the scales, including their causal power in higher education, vary in time and space. In the 1990s the global scale often seemed to be the main source of change in the sector. More recently the potency of the nation-state has been reasserted, though some national spaces are more open than others to cross-border and global effects.

Scales are too large to be owned, though they are the site of differing layers and conflicting projects, and sometimes, attempts to control them by defining them (Knight, 2004). 'Globalisation', meaning social convergence and integration in the global scale, is the subject of differing claims, from neoliberal markets, to decoloniality, to global polities (see Rizvi and Lingard, 2009; Robertson and Dale, 2015; James and Steger, 2016; Rizvi, et al, 2022; Marginson, 2022c; 2022f). For all its political limits, discussed below, the post-1989 'space of flows' (Castells, 2000) opened a wider window and multiplied the potentials for agentic action, not just in Anglo-America. Massey cites Stuart Hall (1996) for whom globalisation is 'a major, extended and ruptural world-historical event' that decentres Europe and the colonial (p. 249), so the global South becomes more than a secondary by-product of Europe (Massey, 2005, p. 63). These potentials were partly but not wholly suppressed by the U.S.-driven hegemonic and subordinating globalisation, as summarised by Hardt and Negri in *Empire* (2001), and they resurfaced in the multipolarisation of the world order in the 2000s/2010s.

Relations of power and geopolitics

Agents strategise to control space via selective opening, partitioning and closing; and they mix and match scales, working their trajectories in one to open new possibilities in another:

> What is at issue is the articulation of forms of power within spatial configurations … The argument about openness/closure … should not be posed in terms of abstract spatial forms but in terms of the social relations through which the spaces, and that openness and closure, are constructed; the ever-mobile power-geometries of space-time… What is at issue is the nature of the relations of interconnection – the map of power of openness (Massey, 2005, pp. 93, 166, 171, emphasis in original).

Geopolitics can be defined simply as institutionalised relations of power in the regional and global scales. For Cantwell and Grimm (2018), 'geopolitics involves competition between states': this includes competitions to house the strongest research universities and to attract research talent

(p. 134). However, while geopolitics are commonly discussed in terms of nation-states they are also populated by corporations (Hartmann, 2021), NGOs, cities and universities. Geopolitics especially engage international organisations, though the fluctuating unequal relations between major states are more determining. Further, geopolitics entail cooperation and horizontality as well as competition and hierarchy. They can be win-win as well as win-lose (zero-sum) in form. Geopolitical relations in higher education, especially in science, are more cooperative than are political, economic and military relations between nations; though maybe higher education is more geopolitically hierarchical and unequal.

Massey (2005) shows that like all space, geopolitical relations have multiple possibilities. In a world that is a jigsaw of territorial nation-states many separate trajectories are in the mix. Individual trajectories with their chains of causality may each seem coherent but they co-exist, they are 'intertwined', and as noted, their intersections are causally unpredictable: 'it is the fact of multiplicity which produces the indeterminancy' (p. 113). 'Order and disorder are folded into each other' (p. 117). There is no reason to assume that heterogeneous national (or university) trajectories occupying the same moment will necessarily cohere and coordinate (p. 141). Like all space, geopolitical space is sometimes (though not always) ordered on a temporary basis via negotiation or domination. Primary attempts to achieve coherence are the hegemonic strategies of the U.S., and the inter-state (multilateral) negotiations orchestrated by global agencies like the United Nations (U.N.).

The scope of global agencies to order global relations is limited by the absolute political sovereignty of nation-states, their tendency to nation-centrism, and their indifference to the world as a whole, their refusal to recognise it as a political subject. Except in the European Union, where in some policy domains (e.g. trade, competition, eurozone monetary policy, crime, consumer protection) the European Commission has binding powers to make laws and apply decisions, multilateral coherence rests on voluntary consensus between the major powers. This consensus is episodic. When the U.N. system's capacity to secure consensus was at its maximum, in the early decades after 1945, that capacity was underpinned by U.S. hegemony. Up to now, with the partial exception of Europe. geopolitics has not been consciously global except where imperial and controlled from a single national centre.

Zhao Tingyang (2021) states that 'it is precisely with the advent of globalisation that the limitations of international politics have become patently clear… As our contemporary world becomes ever more intimate and interdependent among nation-states, a renewed problem of world sovereignty emerges' (p.14). The world as a whole is understood as a geographic space of activity, not as a single subject in the sense that the nation, the university or the corporation are conceived as agentic subjects. Outside Europe, nations have no necessary obligation to recognise their interdependency or take responsibility for the global:

'…with respect to the political, only nation-states are deemed significant. It is for this reason that the world has only been exploited as a 'common' resource and treated as a domain to be fought over and abused … This is especially the case within ideologies of hegemonic nation-states, where other nation-states and even the high seas are conceived of as just so much territory to be dominated' (Zhao, 2021, pp. 185, 187).

Global inequalities

Power, domination and equality/inequality in higher education and knowledge are not so much determined by space and time as coeval with them. Consider global mobility. It is mostly articulated by structural hierarchy. There is more than one kind of agentic mobility (physical, virtual) and immobility (chosen and forced); each is associated with differing freedoms and unfreedoms; and individual, institutional and national agents markedly differ in 'capabilities, resources and position in the global hierarchy' (Moscovitz and Sabzalieva, 2023, p. 155). While mobility can enhance agency and vice versa, at a given moment there are spaces which only some agents can enter. The powerful can move almost anywhere while maintaining a secure home base. Virtual relations democratise mobility, to a point, yet some agents lack the rights and resources for virtual movement, or cannot share knowledge because their language of use is marginalised. Fortunate agents in higher education access government funding for global mobility. Many others have only their own resources. South to North migration grows not when people are becoming poorer - ecological devastation or war can fix in place those who most need to move - but when people's capabilities and aspirations are rising (de Haas, 2023). As in national populations it is the aspiring middle layers, not the poorest of the mobile, that are best placed to invest time and money in foreign higher education and most likely to secure state or philanthropic support.

In short, capitalist political economy and the hierarchies of class, culture, race, gender and knowledge create viciously unequalising conditions. Agents' solidarity with each, their understanding of relational inter-dependency (within and between nations) is incomplete. Massey (2005) remarks that 'there are few spaces less "Euclidean"… than those of global neoliberalism;' (p. 100), and that individual places are unequal in their capacity to shape space. London, the U.K., the U.S. are places where the 'neoliberal capitalist global' is produced (p. 101). The same comment can be made about universities. All respond to globalisation but the leading Anglo-American institutions are also makers of global space.

Yet most agents have more scope for action than they know. All have conscious and reflexive wills and can determine their responses to structural constraints (Foucault, 2005, p. 133; Archer, 1995, p. 71). Once created, new spaces constitute new opportunities. In space in general, and in higher

education and knowledge, not even the strongest agents can control a space forever. Every space eventually 'escapes in part from those who make use of it' (Lefebvre, 1991, p. 26). So it has been with the post-1989 globalisation.

Theorisations of the geopolitics of higher education

One theorisation of global relations of power often referenced in studies of higher education and science is the centre-periphery model in Immanuel Wallerstein's (1974, 2006) 'world-systems theory' (e.g. Schott, 1998; Choi, 2012; Chinchilla-Rodriguez, et al., 2018; Olechnicka, et al., 2019). World-systems theory imagines a three part global space: the Euro-American centre or core, a 'semi-periphery' of weaker Western nations and a few others, and the bulk of the former colonies immiserated on the 'periphery'. Individual countries are a function of the 'totality' of worldwide capitalist economic relations (Wallerstein, 1974, p. 387). 'There is no such thing as "national development"' (p. 390). The hierarchy is fixed. There is limited 'surplus' at world level and for one country to rise another must decline (Wallerstein, 1976, p. 466). Wallerstein is a critic of Eurocentrism but sees it as inevitable unless or until capitalism is abolished. Centre-periphery analyses see global relations in science as both determined by political economy and difficult to shift (Olechnicka, et al., 2019, pp. 102, 105).

However, the last three decades of global political economy, higher education and science make no sense in world systems terms. The periphery has not been wholistically stuck in permanent under-development. The zero-sum surplus is a fiction: many countries have advanced simultaneously in both absolute and relative terms. Consider the ascent of universities and science in China and Singapore to leading world roles – in his sequence of papers Wallerstein stubbornly maintains China in the periphery or semi-periphery - and the rise of scientific output of India, Iran, South Korea and Brazil, among others, with varied correlations with political economy. World-system theory fails because its rigid spatiality cannot encompass change. Fatally, it assumes the structure of global power in political economy blocks all autonomous evolution in either the economic trajectories of nations (Smith, 1979) or their higher education and science. In failing to grasp the relative autonomy of the national scale Wallerstein falls into methodological globalism. The national scale is interactive with the global scale but not wholly determined by it (Marginson and Xu, 2023).

Antonio Gramsci (1971) has more helpful ideas about geopolitics. For him relations of power in science, education and other cultural sectors are semi autonomous in relation to states and the economy, while also contributing to the overall configuration of power. Gramsci identifies two ways in which relations of power are exercised: direct coercion or force, and hegemony, where by the ruling class justifies its dominance and wins the active consent of those over whom it rules (p. 178). The state and corporations supporting the state invest in normative processes including law,

schooling, media, publishing, the arts, and science and universities. The interests of the dominant group are diffused through social networks and thereby secured in subjectivity and day-to-day conduct. Intellectuals, who articulate universalising ideas, play key roles in forming hegemony (and also in counter-hegemony). Gramsci (1995) takes the theorisation of hegemony to the world level (pp. 156-157), noting the 'colonial subjection of the whole world to Anglo-Saxon capitalism' (Gramsci, 1977, pp. 79-82, 89-93), and 'combinations of states in hegemonic systems' (Gramsci, 1971, p. 176). His passages on 'Americanism and Fordism' highlight the universalising element in American culture, propagated worldwide in industrial production, mass consumption and ideologies of individualism (Gramsci, 1971, pp. 277-318). The sciences are well fitted for universalisation (p. 446). He anticipates the world order in science that emerged after 1990.

Noting that 'higher education should not be viewed solely as an educational endeavour, but also as a geopolitical project' (p. 152), Moscovitz and Sabzalieva (2023) provide a theorisation of geopolitics for higher education studies. They develop a 'scales, agents, interests and opportunity structures framework … a heuristic through which to analyse and critique the intersections of the new geopolitics with higher education'. This can guide empirical investigations by helping researchers to identify the forces at play (p. 156).

Hegemony, multipolarity and conflict

The paper now turns to the changing world order, globalisation and geopolitics and their manifestations in higher education and science over time (see also Marginson, 2011; 2022a; 2022d; 2024c; forthcoming). While punctuated by new events, the present is conditioned by an ever-changing mix of layers of the past. Global circumstances combine five successive historical layers (Sakwa, 2023) that still shape global relations of power:

1. Euro-American colonisation and world domination prior to World War II;

2. The 1945 UN Charter, sovereign internationalism and beginnings of post-coloniality;

3. From 1990, hegemonic neo-coloniality under Pax Americana in the political-military realm and U.S.-dominated globalisation in economy, culture and higher education;

4. From the 2000s, growing multipolarity in economy, higher education and science;

5. From the mid 2010s, part fragmentation and destabilisation of the post-1990 order.

Before 1990

Between the fifteenth and twentieth centuries Euro-American (Western) countries ruled, controlled or strongly influenced over 95 per cent of the earth, with England and then the U.S. leading in the

two centuries before World War II. Colonisation is the most fundamental fact of geopolitics, continuing to affect global hierarchy, global flows and global imaginings. It installed an Anglo-American episteme, organisational models, system norms and language in universities, though the research university itself and the deepest Western pedagogy, Bildung (Sijander, et al., 2012), originated in Germany. A superior Chinese educational culture bequeathed to the West selection by competitive examination, again via reforms in Germany, yet since then East Asian education has scarcely touched the West. Colonisation was underpinned by Western assumptions of racial and cultural superiority and a self-defined moral right to lead or rule, attitudes that are still deeply felt in Euro-America.

After World War II the 1945 United Nations (U.N.) charter in San Francisco began to move beyond coloniality. Following the war and the Manhattan project the U.S. was the strongest single nation, but the U.S was allied to the Soviet Union with a different political system, the Cold War had not begun and there was near universal support for self-determination. The spirit was optimistic, multiple-cosmopolitan, inclusive and tolerant. The central idea of the 'Charter International System' was 'sovereign internationalism' whereby the world was a plural space, tolerant of civilisational differences and diverse political systems. Non-interference in the internal political affairs of countries was respected, providing they abided by shared charter values like the U.N. conventions (Sakwa, 2023). Further international organisations were created, designed to enshrine a stable U.S.-led global order with Western norms of economic markets and political democracy of the capitalist kind, in which economic freedoms were foundational: the World Bank, the International Monetary Fund, OECD, NATO, and the General Agreement on Trade and Tariffs which became the World Trade Organisation (WTO) (Heather and Rapley, 2023, pp. 36, 70). Most of the newly independent countries remained economically and politically dependent on the old imperial heartland (p. 54). Meanwhile the U.S. moved in and out of its multilateral charter obligations, intervening in other countries unilaterally at will.

As time went on sovereign internationalism in the U.S. became largely displaced by a liberal anti-pluralist position grounded in American exceptionalism, and intolerant of non-liberal regimes (though less so when they were U.S. allies). Sakwa (2023) calls this 'radical liberal internationalism' and it later took shape as the Anglo-American 'rules-based order'. That was never an agreed global standard. It was the creed of a hegemonic bloc whose proponents assumed they were superior in all respects. They assessed all societies against Western norms and supported interventionist strategies based on humanitarian objectives and regime change. This crusading liberalism recalls nineteenth century British imperialism, which claimed world primacy as its right on the basis of self-defined civilisational standards.

1990-2010s: U.S. neo-imperial hegemony and 'the end of history'

The Soviet Union dissolved itself at the end of 1991 (Zubok, 2021), and for many in the U.S. there was no obstacle to worldwide Americanisation. Fukuyama (1992) proclaimed Western liberal democracy as the final form of government. 'Even at the time, this sounded hubristic. Today, it looks delusional' (Heather and Rapley, 2023, p. 127). Nevertheless, with military primacy and Western support the U.S. government felt free to pursue a more transformative political, economic and cultural hegemony. Ultimately post-1990 globalisation facilitated heterogeneity, confirming Massey (2005), as will be discussed, but in geopolitical terms it was neo-imperial and neo-colonial and grounded in a homogenising civilisational order.

Hegemonic U.S. led globalisation supported world markets in an open trading regime. This was combined with the cheapening of transport and intensified people mobility, communicative convergence via the emerging Internet, and the export of U.S. film, television and cultural forms and ideas in many domains, including universities and science. English-speaking universities moved with special ease in structuring and colonising the expanding global space: implanting branch campuses in East and Southeast Asia; fostering partners, university consortia and research links; drawing foreign students and doctoral talent. Higher education became more widely utilised as a medium of upward social-professional mobility via spatial mobility. Student flows from the global South and East were pulled gravitationally to the U.S. and U.K., the 'whitest of the white' (Shahjahan and Edwards, 2022).

There was more than one kind of post-1990 global space; diverse agentic agendas, strategies, trajectories and practices (Marginson, 2022d). An expanding open network with porous borders appealed to scientists. For national policy makers the global was a bordered arms race in talent and technologies. European government and university leaders supported regional integration designed to transcend historical conflict by bringing societies, universities, faculty and students together. Commercial university rankers imagined a single global market in 'world-class universities', facilitating families investing in cross-border education and universities building prestige. 'Social imaginaries circumscribe what is deemed possible or legitimate to think, act and know' (Stein, 2017, p. 329).

At the peak of hegemony in the 1990s/early 2000s, globalisation in higher education mostly felt like uniform Anglo-Americanisation, but something more was also happening. Governments and institutions in Singapore, Malaysia, Japan, South Korea, China, France, Nordic nations, the Gulf States and elsewhere also took global initiatives, some mixing cross-border education with foreign aid policies. Globalisation coincided with a great uplift in participation rates in tertiary education (Cantwell, et al., 2018) and the growth of global science in many countries. These developments reflected rising aspirations, in populations and states, and also expanding economic capacity to

support aspirant world-class universities. Even so, the autonomous national trajectories were flavoured by the hegemony and its political-economic agenda. Hegemonic globalisation entailed the spread of Anglo-American neoliberalism in economic policy and higher educational policy, including business organization of universities, competition, tuition prices in some systems, and state steering from a distance via product formats, contract-based goals, performativity and audit.

Global spatiality in itself was not necessarily neoliberal (Massey, 2005, p. 83). Post-1990 globalisation meant more than free trade in capitalist markets: it included communicative convergence, science, and expanded educational relations, diverse cultural encounters and new hybrid forms (Rizvi, 2005; 2011). Educators could pursue a globalisation that was soaked in multiplicity without regard for the neoliberal agenda. Nevertheless, their institutions were being colonised and remade by neoliberal mindsets, entrepreneurial enthusiasms, expanding world markets and unequal hegemonic geopolitics. In the U.K., Australia and New Zealand, and later in Canada, executive leaders in universities nominally devoted to the public good had little hesitation in cashing in, building a large-scale commercial industry in international education that transferred capital out of emerging countries and quickened brain drain, in continuity with the colonial years. All was justified by a normative universalising 'internationalisation', which largely meant Westernisation (Marginson, 2023).

National/global synergies. Scientists mostly saw science as global collaboration rather than a geopolitical contest of nation-states, but as long as governments saw benefits in the open global science of researchers, each party gained from the other. Elite U.S. universities subsidised the doctoral training of foreign students at scale and networked with countries everywhere. They worked the relatively accessible U.S. migration regime to recruit global talent, especially graduate researchers from China and India, augmenting U.S. scientific capability and soft power, and their own national standing and global advantage.

U.K. universities leveraged their inherited status to attract and monetarise cross-border students, substituting international student revenues for declining public financing, saving the Treasury money while augmenting neocolonial soft power abroad. Universities also drew research income and talent through their leadership in collaborative European research and free people movement in the EU (Highman, et al., 2023). The top research universities worked the global science system to perform high citation science on the U.S. scale while confirming their national position. Australian universities, supported by expansive migration policies on student visas and skilled labour, used global student flows to lift their research performance, not via cross-border doctoral talent as in the U.S. but via fee revenues. By 2019, 32.4 per cent of all students paid commercial international fees, providing 27.3 per cent of revenues (Australian government, 2024) and financing about one quarter of university research. Australia, a country of 25 million people, achieved seven universities in the top 100 in the Shanghai Academic Ranking (ARWU, 2025), and equalled the U.K. in its

proportion of science papers in the high citation category (NSB, 2022). The global rankings sustained Australia's recruitment in the global student market in a circular effect.

China pursued another national/global synergy (Marginson, 2018; 2022a) underpinned by ever increasing state investment, with spectacular results. Compared to the Anglosphere there was less global outreach and more national capacity building but again, activity in each scale strengthened the other in circular fashion. Collaboration into the U.S. built national research infrastructure and global research performance. Rather than focusing on foreign talent China used state funded programmes to bring diasporic Chinese scientists back from the West. Between 2003 and 2022, papers with authors in China increased by 13.0 per cent a year, from 88,585 to 898,949 (NSB, 2024) and Chinese universities moved past the U.S. in high citation STEM-based research (Leiden University, 2025).

In all these examples of national/global strategy, despite the potential tensions between national policy and global activity partly beyond national control, it seemed that the compatibility of scientific nationalism and scientific globalism (Haupt and Lee, 2021) could be taken for granted. It later became apparent that this happy match was not forever.

The global knowledge economy. The post-1990 themes were neatly parceled up in the 'global knowledge economy' discourse foregrounded by the OECD and World Bank, which defined human capital formation, science and universities as key to technological innovation, high value production and national competitiveness (Olssen and Peters, 2005; Dale 2005; Sa and Sabzalieva, 2018, pp. 152, 154). In comparing science policies Sa and Sabzalieva (2018) note 'a remarkable similarity across countries in embracing this positioning' (p. 156). The knowledge economy spatiality reworked the national/global hinge. First, the national and global scales became more closely combined: 'domestic higher education projects are entangled in the prevailing geopolitical order, notably a hierarchised global higher education space' (Moscovitz and Sabzalieva, 2023, p. 153). Local-national practices had implications for relative global standing, and vice versa. Second, while nations differed in the extent of state intervention, deregulation and commercialisation, neoliberal governance was flexible and the global knowledge economy idea was interpreted everywhere through national lenses and contextualized with national policies (Sa and Sabzalieva, 2018, pp. 159-160). The scope for variations between systems insulated the frictions of global homogenisation.

The cross-country comparison by Sa and Sabzalieva (2018) also identifies variations in normative nationalism, in the extent to which global cooperation was read in terms of national interest (p. 161); There were also variations in methodological nationalism, in the extent to which there was awareness of global science as being ontologically distinct from the nation and its national science system (Zha, 2024, p. 1533).

Global ranking. Over time the more competitive and quasi-capitalist aspects of the global knowledge economy imaginary gained ground. In the first decade after 1990 there was broad policy consensus that 'while competition between states was intense' all could be winners in science: there were 'shared geopolitical benefits rather than absolute, zero-sum gains' (Cantwell and Grimm, 2018, p. 133). Then in 2003/2004 the competitive global knowledge economy was captured and institutionalised by global university rankings (Marginson, 2014). In this potent framing of the global higher education space the logic was unambiguously hierarchical and zero-sum. The first ranking was conceived by a university planner in China whose intention was to use data on comparative research performance to drive improvement in the science output, and the national and global position, of Shanghai Jiao Tong University (ARWU, 2025). This was followed by a business-research ranking developed by the business research firm Quacquarelli Symonds (QS) for the higher education sector magazine *Times Higher Education* (THE) in London, using comparative data that combined surveys of university reputations with indicators of resources and outcomes. Later, the THE developed a new ranking of its own, while QS broke away, maintaining its previous ranking in competition with THE. Both organisations used ranking (THE, 2025; QS, 2025) as a loss leader that drew higher education clients to their business services in the sector. Not surprisingly, university leaders found that they could improve their THE/QS ranking by paying THE/QS for advice on how to do so.

The rankings formed global higher education space in different ways. The ARWU gained its authority from the centrality of research in university status. By foregrounding a research-based hierarchy it encouraged national investments in basic science, and institutional mergers to augment performance, for example in France. The THE and QS rankings set out to order the 'best universities' in relation to all missions, though no actual teaching/learning was measured and no collective missions entered either ranking, aside from research. The reputational surveys in each ranking recycled reputation as ranking, in a circular effect. The goal of each global competition was the status position as an end in itself. Universities could advance their ranking position via negotiations with the ranking company, or marketing campaigns, without actually improving their performance in intrinsic education and research. In the THE and QS rankings global competition played out as simulation, creating a shell knowledge economy that was detached from actual education and research. This contrasted with the ARWU focus on real research outputs and recognition. Yet all three rankings normalised all universities within one global higher education space, in which all institutions were equivalent and comparable, and competed on standardising criteria, regardless of their histories and contexts. The criteria were geopolitically unambiguous. The ranking templates derived from characteristics of the leading Anglo-American research universities. All three rankings were routinely headed by Harvard, MIT and Oxford.

Rankings exaggerated diversity of status while suppressing all other actual and potential multiplicity in higher education. Institutions deviating from the standard template (e.g. those that

were discipline specialists, or focused on social missions such as local community building or widening access, or carrying large vocational education programmes not linked to research) were punished in the rankings. 'Excellence Initiatives' to achieve WCUs, like rankings themselves, steepened stratification in national systems. Rankings installed specific metrics as goals that normalised missions and behaviours, especially in aspirant systems focused on 'World-class university' status (Hazelkorn, 2015), locking institutions into models and incentives most would never have chosen for themselves (e.g. for sub-Saharan Africa see Teferra, 2019). No development did more to normalise the global higher education space as a universal neoliberal market, while perpetuating Anglo-American authority.

For university leaders, global status ranking was a comparative frame of reference with few winners. The status of non-winners was exposed and reduced, there was bottomless accountability and insecurity, and no control over the conditions of performance. Yet the global knowledge economy was an asset to executive-style leaders, and not just in the Anglosphere. Though neoliberal systems steered them more closely, in the transition from ivory tower to business firm they maintained corporate autonomy, more closely controlled academic freedoms, and gained a new legitimacy as CEOs with academic status at the edge of global modernisation: doyens of futurity with the progress of the nation in their hands. In a more unequal global higher education world there were corporate opportunities.

It was all of a piece. Nation-states believed that capital accumulation was maximised in a liberal global regime of 'total unfettered mobility, of free unbounded space' (Massey, 2005, p. 81), valorising every kind of openness, connection and passage. Cross-border education formed graduates for global business. Cosmopolitan cultural inclusion in education optimised market reach. Open science maximised innovation and productivity all round, with talent flowing to the centres best able to profit from it. All was expected (at least in Anglo-America) to foster Anglo-American soft and hard power. Western states were comfortable with global openness because it was Western dominated, predictable and limited. Academic networks were technically open but culturally closed, by English and the Western episteme, and guaranteed by the Harvards and Oxfords. In non-Western nations hegemonic globalisation was two-sided but they did not make the rules.

However, the conditions supporting post-1990 globalisation were of their time and not permanent. Once those conditions began to shift, once open global hegemony no longer generated the same net benefits for the agents that drove it, matters would change. 'The closed geographical imagination of openness, just as much as that of closure, is itself irretrievably unstable' (Massey, 2005, p. 175).

Multipolarity

During the 2000s the exceptional U.S. dominance began to recede. Global economic capacity became more broadly distributed and later the emerging multipolarity was apparent in higher education and science. This began to deconstruct the geopolitical conditions of post-1990 Anglo-American globalisation as a one world one culture transformation project, changing the conditions of global engagement all-round.

Table 1 indicates the dramatic reduction in political economic inequality between countries after 1990, reflecting state and economy building in the global East and South. The proportion of people living on USD $1.25 a day in constant 2005 prices dropped by half (Bourguignon, 2015, p. 42). In the table the Theil index - like the Gini coefficient, the higher the index the higher the inequality - shows a modest increase in inequality *within* countries but a sharp fall in inequality *between* countries, especially after 2000, continuing after 2010.

Between 2000 and 2020 the share of world GDP in constant prices in the U.S. and E.U. fell from 43 to 30 per cent. In 2016 China's GDP passed that of the U.S, and by 2022 the combined GDP of China and India was moving towards the U.S. and E.U. total (see Table 2). As Heather and Rapley (2023) note 'it is so much more than a Chinese story' (p. 127). Economic multipolarity includes India, Indonesia, Iran, Brazil, South Korea, Saudi Arabia and middle economies like Malaysia, Vietnam, Chile, the Gulf States. 'In 2019, six of the world's fifteen fastest-growing economies were African' (p. 127). The world is transforming.

Table 1. Trends in global income inequality, as measured by the Theil index: 1990-2010

A decline in the Theil index means that inequality has reduced.

	1990	1995	2000	2005	2010
Global inequality	0.949	0.918	0.903	0.827	0.723
Inequality between countries	0.734	0.696	0.681	0.600	0.479
Inequality within countries	0.215	0.222	0.222	0.227	0.244

Source: Table by author, original data Bourguignon, 2015, p. 42

Table 2. Proportion (%) of PPP world GDP at constant 2021 prices: United States, European Union, China, India: 2000-2020 and 2022

	2000 $78.5 trillion	**2005** $94.1 trillion	**2010** $111.7 trillion	**2015** $132.0 trillion	**2020** $146.6 trillion	**2022** $161.4 trillion
European Union	22.2	20.4	18.1	16.2	15.0	15.1
United States	19.8	18.7	16.6	15.7	15.2	15.0
China	6.4	8.5	12.3	15.2	18.1	18.4
India	4.2	4.8	5.6	6.5	7.1	7.5

PPP = purchasing power parity, which standardises across countries the domestic economic value of income.
Source: Table by author, data from World Bank (2025). Data for 2020 were affected unevenly by the pandemic.

Mutipolarity in higher education. Massey refers to multi-polarisation as 'the arrival of the margins at the centre' and remarks on 'the accompanying reassertion of the depth of differences' (p. 70). Growing political economic power in the global scale, sooner or later, provides favourable conditions for cultural power, as has happened in higher education and science – though multi-polarity has shown itself more in non-Western infrastructures and the quantity of participation, institutions and published science, than in cultural contents. Anglo-American language and institutional models still dominate (Marginson and Xu, 2023).

Between 1990 and 2015 China's Gross Tertiary Enrolment Ratio rose from 3 to 47 per cent. In 2023 it was 75 per cent, just below the U.S. 79 per cent (World Bank, 2025). The colossal growth in participation in China was matched by the expansion of science. After 2000 it was increasingly apparent that science was no longer the preserve of the Anglosphere, Western Europe, Russia and Japan. Between 2003 and 2022, while science papers in China grew by 13.0 per cent a year the growth in India was 11.4 per cent, Iran 15.6 per cent, Turkey 7.5 per cent, Brazil 7.3 per cent, and South Korea 6.4 per cent.

Table 3. Change in output of published science in Scopus, seven largest non-Western systems compared to selected Western countries: 2003 to 2022

Country	Scopus papers 2003	Scopus papers 2022	change 2003-2022 2003 = 1.00
China	88,585	898,949	10.15
India	26,638	207,390	7.79
South Korea	23,880	76,936	3.22
Brazil	17,731	67,001	3.79
Iran	3,907	60,940	15.60
Turkey	13,376	52,658	3.94
Indonesia	387	31,947	82.55
United States	336,491	457,335	1.36
Germany	74,320	113,976	1.53
United Kingdom	77,151	105,584	1.37

Here and elsewhere Russia (84,252 papers in 2022) is classified as Western, Brazil and Latin America as non-Western.
Note that while established research systems like the U.S. and Germany typically grow more slowly than emerging systems, the non-Western growth in Table 3 is exceptional in historical terms.
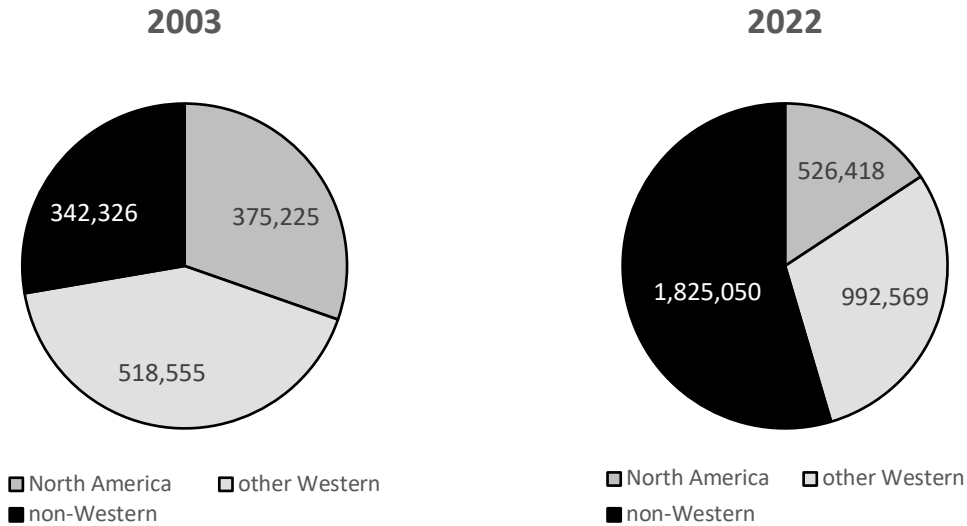Source: Author using data from NSB (2024).

In 2022, 59 nations/systems published more than 5,000 science papers, compared to 30 in 2003. The 2022 group included a dozen countries where per capita income in purchasing power parity terms was below the world average (NSB, 2024). Table 3 shows the dynamic growth in science in the largest non-Western systems (see also Marginson, 2022a; 2022b).

China, South Korea and Singapore emphasised the physical sciences, technology, engineering, computing and mathematics (STEM) because of their primacy in urbanisation, industrialisation and global technological competition. China became much the largest producer of graduates in STEM (Zha, 2024, p. 1544). In 2022 researchers in China published 228,189 papers in Engineering, compared to 22,897 in 2003. The 2022 output of 228,189 papers in China also compared to 49,437 in the U.S. and 79,408 in the E.U. in 2022. Chinese universities came to overwhelmingly dominate in high citation papers in STEM research, with Tsinghua moving to become the world leading producer of such papers, ahead of MIT (Leiden University, 2025). While Anglo-American universities still lead in high citation medical research, Chinese institutions were making up ground in that cluster too.

Global multipolarity in universities and science is not a normative claim or a theorised speculation, it is a fact, though one under-recognised in the West. The geopolitical shift in science is captured in Figure 2.

Figure 2. Distribution of science papers in Scopus between Western and non-Western countries: 2003 and 2022

2003

342,326   375,225

518,555

□ North America   □ other Western
■ non-Western

2022

526,418

1,825,050   992,569

□ North America   □ other Western
■ non-Western

'other Western' includes all Europe including Russia and the European settler states Israel, Australia and New Zealand but not South Africa, Latin America and other former European colonies. Mexico included in 'non-Western' not North America.
Source: author, using data from NSB (2024)

In 19 years, papers from non-Western countries moved from 27.7 to 54.6 per cent of the total papers codified by Scopus as part of global science. While high citation science is more concentrated in the West than is total science, researchers, doctoral programmes, laboratories and research collaboration and publication are now broadly distributed.

From the mid 2010s: Partial deglobalisation in the West

By the early 2010s the long economic tide to Euro-American globalisation had turned and U.S. geopolitical strategists were reassessing the national-imperial approach (Blackwill and Fontaine, 2024). The U.S never acknowledged multipolarity or resiled from its claim to global leadership. Rather, it decided that in order to sustain that primacy, it needed to radically change its handling of openness/closure in global space making. By the first Trump presidency it had abandoned Fukuyama's (1992) hegemonic project, switching from multi-sector engagement with China to geopolitical confrontation in the economy and technology. Given that the global balance of power had rested on U.S. hegemony, and given also the absence of other bases for global integration – such as a global system consistent with multipolarity with distributed power, diversity and negotiated coordination – multipolarity coupled with U.S. bi-polarisation led to the unravelling of global order. This had flow ons to destablisation of national politics and national global strategies in many countries.

The West moved from global convergence to bounded nationalism, amid a nativist revolt against migration and cosmopolitanism identity, which was the combined outcome of neoliberal immiseration and the weakening of Western (primarily U.S.) global hegemony. Despite this, cross-border student mobility and global science continued to grow, but the previous global higher education space of 1990-2015 became more nervous and fractured. The nativist inspired Brexit in the U.K. in 2016 was symptomatic: it abolished European student entry through Erasmus mobility while radically reducing non-U.K. Europeans in U.K. degrees and faculty recruitment pools (Papatsiba and Marginson, 2025). States asserted themselves more strongly. In government, support for normative internationalisation in higher education receded. Universities found themselves dealing with new geopolitical tensions and national/global frictions, growing uncertainties and large-scale disruptions to cross-border student flows, and a new emphasis on risk management in research collaboration. Non-Western countries were in a different place. They not share the pushback against globalisation, the security paranoia, nor the same widespread internal political destablisation. However, their cross-border economic , politicaland educational relations were affected by the fallout from the shift in U.S. space making strategy; and they found themselves still in an Americanised world. Though the relative GDP of the U.S. was declining, and politically and culturally it could no longer remake the world in its own image, the U.S. government still had an unrivalled capacity to rework the global space.

Why deglobalisation? Recurring alternation between globalisation and deglobalisation is inevitable. Space is always emerging. Neither composite tendency can ever achieve equilibrium, and both combine different strands of causation with multiple historical limits. Polarity between openness and closure is an ongoing feature of the U.S. polity, which has always combined internationalists and isolationists. More generally, long oscillations between periods of geopolitical opening and periods of geopolitical closing are one of the characteristics of imperial regimes. For example, in both Tang China in the ninth century CE and the Ming dynasty in the fifteenth century CE a sustained period of open borders and multi-sector engagement was followed by an equal period of closure and xenophobia.

Zahra (2023) describes how the high globalisation period of 1870-1914, sustained by the apex of all round Euro-American colonisation, fast growing cross-border trade, the telegraph, Western middle class travel, and exceptional levels of migration from Europe into the European settler states, gave way after World War I to virulent protectionism and import substitution in national economic policy, a dramatic drop in migration, and populist antagonism towards foreigners far in excess of 2016-2024. The post World War I shift to deglobalisation, which helped to foster conditions for the rise of fascism in Europe, was worldwide, universal rather than regional as in 2016-2024. Zahra states that 1870-1914 globalisation was vulnerable because the main beneficiaries of globalisation were economic capital and upper middle class people who enjoyed

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global lifestyles. Many others across the world had experienced globalisation as disruptive, unequalising and immiserating.

However, though the current deglobalisation was inevitable in abstract, the timing and amplitude were not. The causes combined economics, geopolitics and domestic politics.

Economic globalisation and geopolitics. After the financial crisis of 2008-2010 there were diminishing returns from the globalised economy for both U.S. capital and labour. The growth of global trade slowed and the economic weight of multinational firms decreased slightly. Countries increased protective tariffs. Western offshoring of production and the average length of supply chains diminished (*The Economist*, 2019). Many industrial workers in the U.S. opposed open trade (Rodrick, 2018): jobs lost to automation were attributed to competition from China. This constituency underpinned Trump's wins in 2016 and 2024.

The economic factor in U.S. deglobalisation was also geopolitical. U.S. strategy makers concluded that given the expansion of the Chinese economy to equal size with the U.S., China had gained more from global openness, while China's economic success rested partly on the inward transfer of American technologies. Moving to global closure would contain China's rise. Further, China's entry into the WTO and the work of American firms in China had failed to trigger Americanisation of the Chinese political system as had been expected. In China the polity determined the economy, not the reverse as in the U.S., and Chinese civilisation stubbornly failed to abandon three thousand years of tradition. The belated realisation partly explains the abruptness of the U.S. reversal. The same American affect –the transformation of frustrated expectations about convergence into a sense of being used and a breach of trust, and the Manichean rejection of the party-state that revisited Cold War anti-communism – showed in both the political-economic decoupling and the techno-scientific decoupling (Inkster, 2020; Heather and Rapley, 2023; Blackwill and Fontaine, 2024).

The pivot to global polarisation along familiar Cold War lines, a geopolitical strategy of othering and exclusion/closure, relocated global relations from economic goals and trade and financial flows to the military-security domain. There the U.S. maximised its advantage, controlled the Western discourse and could discipline its allies and dependencies. However, the strategy was merely negative: more coercive than hegemonic. In contrast with post-1990 economic globalisation, the global military-security space was unattractive outside the West.

Nativism and anti-migration. The symptoms of global multipolarity subverted Western identity. They unpicked the sense of superiority engendered by five centuries of colonialism, triggering cross-class sensibilities in white Western countries. In one nation after another the political right secured a political advantage by fanning the flames of nativist populism, in polities already part-deconstructed by growing inequality and the failure of neoliberal capital accumulation to distribute

economic prosperity, the 2020-2022 Covid-19 global pandemic, and the inability of governments and multilateral negotiation to alleviate or even address the climate-nature emergency. Yet Western nativism was not just a reaction to the loss of global power entailed in multipolarity, and it was more than the revolt of those down below, the majority of Western populations, who were excluded from the benefits of global capital accumulation. As in the post World War I deglobalisation, it was also a reaction to globalisation itself and the multiplicity associated with it. Global engagement and the cosmopolitan experience are by their nature highly uneven across situated populations. They have weak support, at best, among those isolated from the direct experience and aware only of globalising discourse; and the post-1990 discourse of free movement had fuelled 'the sentiments of parochialism, nationalism and the exclusion of those who are different' (Massey, 2005, p. 87). When the reaction became active and widespread, it took the form of the flip from multiple identity to the false certainty of an impossible singular identity. The nativist wanted to 'purify' the national scale in Massey's sense. Here the reaction against the global was not 'backward-looking' so much as looking backward to a spatial coherence that had never existed. 'This is a particular form of ordering and organising space' unable 'to acknowledge its multiplicities, its fractures and its dynamism. It is a stabilisation of the inherent instabilities and creativities of space' (p. 65).

The nativist stabilisation of space was impossible to achieve in practice. Hence nativism took the form of a perpetual unachieved grievance, a basis for continuing activist frustration and resentment, which could never bode well in nations with mixed populations, and was bound to destabilise cosmopolitan universities and their cross-border ventures. Populists played on fears of downward mobility among those who were struggling. The 2024 national elections in the U.K. and U.S. were contests in working class communities hollowed out by austerity, automation and global trade. People feared being displaced by outsiders whom they ranked below themselves. Migration resistance cemented deglobalisation (Brogger, 2023). Governments believed that to survive they must adapt to the mood not try to change it. Migration regimes toughened in Germany, France, the Netherlands, Sweden and Finland, and in his 2024 election campaign Trump promise bulk deportations from the U.S. However, most governments could do little to reduce permanent migration because low paid migrants were crucial to the capitalist labour force. When they wanted to achieve demonstrable reductions in migration, they turned to the soft target which was international students.

More assertive nation-states. The faltering of hegemonic U.S. global control quickened the agency of all nation-states, Western and non Western, while the weakening of mainstream ideological support for neoliberal deregulation, the growing internal conflicts and the emphasis on national security encouraged government interventionism in all areas, not only in economic policy. States increasingly focused on their bounded national interests and many (not all) became increasingly sceptical about multilateral norms. After 2015 a more strident patriotism was evident

in many countries, including the U.S., U.K., Russia, China and India, a patriotism that slid more readily into methodological nationalism.

The pre-2015 commitment to liberal openness in the Anglosphere and other Western countries positioned universities and researchers as part of the civil order. A global national security space had different implications. In states focused on internal control of anxious populations it was a short step to intervene more directly to secure knowledge economy benefits, and to problematise cross-border practices in universities. In countries where independent cross-border activities had been tolerated higher education and its personnel were renormed as national agents. Elsewhere it had always been so.

Fallout in higher education and science

Moscovitz and Sabzalieva (2023) comment that 'higher education is undergoing critical transformations as a result of changing geopolitical dynamics. Yet while widespread, these transformations are not uniform' but impact higher education agents in 'diverse and context-specific ways' (p. 151). The effects of the political and geopolitical shifts after 2015 were felt primarily in the higher education in the West.

There were unprecedented interventions in international student mobility, beginning with Brexit and the first Trump government's selective bans affecting students from West Asia. Both Netherlands and Denmark problematised the cost of inward EU students, and Denmark reduced international students in English language programmes in 2021 (Brogger, 2023). Anti-migration politics started to play havoc with international student numbers across the Anglosphere. In 2023 Canada announced a reduction of 45 per cent over 2024 and 2025 in new international student study permits and the Australian government sharply reduced visas in vocational education. In 2023 the UK blocked most students from bringing dependents, reducing applications by 16 per cent. It was remarkable that nations in the Anglosphere that had spent three decades building large commercial international education industries, that became integral to the funding of domestic higher education and research, could partly dismantle them overnight. Neoliberal economic objectives had become decisively subordinated to populist nativism. No such constraints affected student mobility into East and Southeast Asia, including China and Japan, underlining the fact that the migration-related drivers of deglobalisation were primarily a Western phenomenon.

Russia and Ukraine. The Russian invasion in February 2022 led to the wholesale destruction of higher education in parts of Ukraine (Ivanenko, 2025). The many close links between institutions and scholars in the two nations were broken and there was a large exodus of faculty and students from each nation. After Russia's university rectors formally endorsed the state action, formal relations between Russian and Western universities ceased, although some faculty-to-faculty

cross-border conversation was maintained, and Russian links with the non Western university world largely continued as before.

Figure 3. Number of papers in Scopus jointly authored by researchers from China and other nations, nation-to-nation partnerships of more than 5,000 papers: 2022
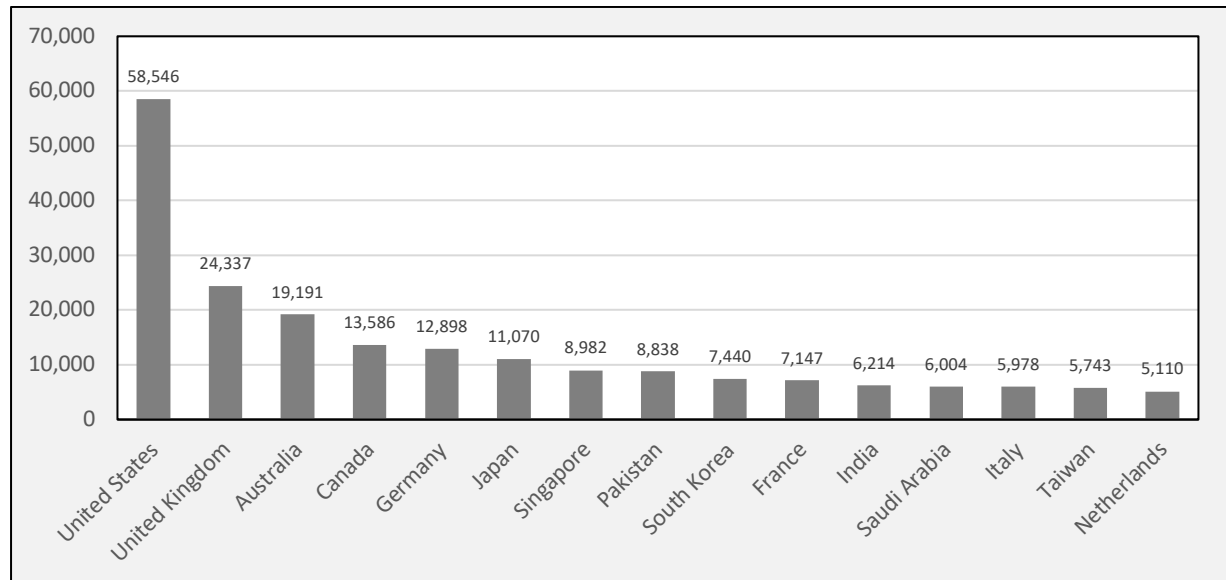
Source: Author, using data from NSB (2024)

The U.S./China decoupling.   When Trump began the American China Initiative in 2018 U.S./China co-authorship was the largest collaborative pool in global science (Figure 3). In an investigation of highly cited joint papers Haupt and Lee (2021) show that the U.S. was benefitting more than China: joint projects were in domains where China was strong, and China provided well over 50 per cent of funding. In surveys researchers in both countries strongly supported continued open cooperation (*The Economist*, 2024b). But technology and the associated science were seen by both sides of politics as primary elements of contest (Inkster, 2020). The U.S. Senate saw China as a 'whole of society threat' (Zha, 2024, p. 1544).

'Scientific discovery, which is fundamentally borderless, is being politically bordered' (Lee and Li, 2021, p. 2). In the late 2010s the U.S. turn to decoupling was supported by successive research reports and polemics from state agencies and think-tanks that problematised engagement with China. There was similar material in other countries in the Anglosphere. At first the main direct allegation was that Chinese researchers and students were 'stealing' American intellectual property. The line between borderless flows of knowledge and hostile nation-to-nation espionage was blurred. Decoupling in science was also linked to criticisms of human rights in China, and polemics stigmatised individuals and institution seen as linked to the 'Chinese Communist Party' or 'Peoples Liberation Army'. This meant all Chinese universities, researchers and scholarship

holders: higher education in China was nested in government, meaning the party-state, and China (like all nations) had a state-controlled military. The decoupling rhetoric positioned all university persons from China as potential spies. Given the volume of higher educational traffic between China and the U.S.– as well the research cooperation, Chinese nationals were the largest group of international students (369,548 in 2018-19), including graduate students (133,396) (IIE, 2025) - these strictures had a seismic effect in the global higher education space.

The China Initiative investigated 150 academics in the U.S., almost 90 per cent of Chinese heritage (The Economist, 2025). Further investigations were conducted by the FBI (Lee and Li, 2021, p. 2). The focus was persons suspected of undeclared affiliations and/or undeclared sources of funding from China. None were found guilty of spying or stealing intellectual property, though some were convicted of lesser offences such as grant fraud. However, the investigations had a 'chilling effect' on research collaboration. Following investigations by the National Institute of Health, again focused on undeclared links to China: 103 of the 246 scientists lost their jobs (Zha, 2024, pp. 1544-1545). A survey by Lee and Li (2021) of 1,949 scientists in leading U.S. universities highlighted the scientific importance of China/U.S. collaborations but found that following the China Initiative, 23 per cent of the Chinese heritage scientists surveyed and 10 per cent of the non Chinese heritage scientists had 'decided not to work with collaborators in China on future projects' (p. 10). The China Initiative was cancelled by the Biden government in 2022 because it had led to a 'harmful perception' of racial profiling. However, investigations continued; and in September 2024 the Republican-controlled U.S. House of Representatives revived the China Initiative as the 'CCP Initiative'. The second Trump government was expected to maintain the pressure. In early 2025 a Republican-controlled Committee of the U.S. Congress floated the idea of a complete ban on all entry of students from China into U.S. universities.

Visas for Chinese students entering the U.S. dropped from over 280,000 in 2015 to less than 90,000 in 2023 (The Economist, 2023). Sharma (2024a) reports instances of border harassment of Chinese nationals holding valid visas to enter the U.S., including long interrogations and strip searches at the airport followed by forced return to China. After the China Initiative began in 2018 U.S. university presidents stopped all visits to that country, and most U.S. universities stopped inviting Chinese university presidents for routine visits. In June 2024, when the president of Peking University was invited to the U.S., the U.S. government denied him a visa. By 2023 U.S. universities had closed more than 100 language teaching Confucius Institutes (Altbach and de Wit, 2023). The U.S. State Department categorised China as a 'category three' country, meaning 'don't go if you don't have to go' (Sharma, 2024b), and between 2015 and 2023 the number of U.S. students in China fell from 15,000 to 350. There were 1,219 scheduled direct plane flights between China and the U.S.in February 2019, and 269 in February 2024 (The Economist, 2024a). All contact was faltering.

It was disturbing how easy it was to shut down fruitful international cooperation. In January 2025 a large scale two decade partnership between two world-leading engineering universities, Michigan and Shanghai Jiao Tong, was shut down by the U.S. institution after a bout of name-calling in a Republican dominated Congress Committee. This followed the 2024 decisions of the University of California Berkeley to terminate a ten-year old research hub with Tsinghua University and Georgia Institute of Technology's withdrawal from a ten-year joint research institute with Tianjin University (Stone, 2025).

In December 2024 the two countries renewed the 1979 U.S.-China Agreement on Cooperation in Science and Technology to share data in domains such as climate change and epidemiology, but on a more limited basis to exclude 'critical and emerging technologies' (U.S. government, 2024). From 2012 to 2022 the proportion of U.S. collaborative papers that were with China fell from 47 to 32 per cent (*The Economist*, 2024a). From 2020 to 2022 joint papers fell from 62,904 to 58,546 (NSB, 2024). The decoupling was taking effect.

The U.S. government placed sustained political pressure on its Western allies to subject all scientific relations in China to national security policy. Typically this led to blanket risk-management regimes whereby all Chinese researchers in any field, even education or the humanities, were seen as potentially untrustworthy. This discouraged collaborative projects and reduced university autonomy and academic freedom in the West. The potentials of two kinds of global space making, networked bottom-up science and university-to-university partnerships and agreements, were each diminished. In Australia collaborative agreements between Australian and Chinese universities were subjected to formal approval from the government Department of Foreign Affairs. This was later rescinded, but in 2022 the top eight Australian universities conducted one third as many projects with China as in 2019 (Ross, 2023). In some countries China Scholarship Council students were banned (Altbach and de Wit, 2023). Many countries followed the U.S. pattern of closing Confucius Institutes. China remained open for cooperation but became 'more inward looking' (*The Economist*, 2024a), tightening the regulation of outward academic travel (Sharma, 2024b).

Spatial strategies of closure build agency by means other than engagement, fostering capacity behind protective walls, while partitioning space to block other agents from shared systems or each other. The U.S./China decoupling was designed to slow the geopolitical shift in the balance of power and if possible contain China's rise. Some in the U.S. assumed that Chinese creativity was sourced in American creativity and decoupling would cut it off. If so the U.S. strategy was doomed to fail: in building its scientific capacity from 1978 onwards China's core strategy had never been borrowing and imitation as the horizon of possibility, but one of building endogenous capacity in scientific creativity (Marginson, 2018). The emergence of the cost-effective Deepseek AI technology in China, which swept the world in 2025, was one of many signs that endogenous

Chinese science and technology could match that of the U.S. and would not be supressed by spatial decoupling at global level. Yet the collateral damage from the U.S.'s misguided spatial strategy was nevertheless enormous.

'The process of aligning science with national strategic goals threatens to impede global scientific excellence and the capacity to mitigate global challenges' (Chih, et al., 2023). The decoupling was inconsistent with the open intellectual exchange integral to higher education (Zha, 2024, p. 1546). China/U.S. decoupling and the national securitisation of Western research remade the global science space in half a decade, transforming much of it from primarily open grass-roots collaboration to a risk managed zone with regulation shared by nation-states and universities. In outline this brought Western science closer in form to Chinese science, but on the Chinese side more trust was placed in autonomous global links.

Conclusions

Since 2015 the previous Western strategy of building and exploiting a world-inclusive globalisation has transformed into a more historically familiar form of imperial and national geopolitics in which bordered national self-interest takes absolute primacy over open global relations and evaporates the collective interest. Aside from in outliers such as Russia, few in government anywhere as yet argue against the principles of a single joined up global knowledge network and cross-border cooperation between universities. Nevertheless, the ground is shifting: soft power goals are receding and open doors no longer the norm. Hard power and securitisation have become more important. Governments are freeing themselves to more forcefully impose a single national scale identity in universities and science. Higher education is expected to fall into line. Its global projects and its protestations at lost cross-border communications, passage and research exchange are brushed aside. Universities and scientists still work the global space (and it still has government champions, especially outside the West) but are increasingly challenged by methodological nationalism and zero-sum thinking, and the practical restrictions imposed by the new geopolitics.

There are limits to the extent that scientific knowledge can be bottled up, but in state circles, particularly in the U.S. and Europe, normative support for open science has declined, though China continues to expand its scientific relations, especially with non-Western countries. The continuing U.S. strategy of decoupling has triggered longer-term potentials for the evolution of two partly separated global systems of science and technology with restricted movement between them, and a group of countries playing both sides. This may trigger potentials for the evolution of at least one science bloc as a more inclusive system that admits non-English work, including endogenous knowledge (Marginson and Xu, 2023).

Relations of power in global higher education continue to be shaped by all five of the historical layers discussed in this paper. In the non Western world the powerful global momentum away from coloniality continues, building national agency amid multipolarity. Non-Western countries generally hold to the 1945 principles of sovereign internationalism, systemic diversity, national self-determination and non-interference; while the U.S. holds to its own rules-based order and its Western allies continue to follow. The neo-colonial era in higher education kick-started in 1990 continues in many respects, in the Anglo-American led university hierarchy and the commercial market in international education. Yet the growing multipolarity in university capacity and science is likely to destabilise the inherited order.

In some Euro-American circles the growing global multipolarity is associated with partial or complete disillusionment with global engagement. This is not shared in higher education, but has rapidly accumulated in the public space. The widespread anti-globalisation and bounded nationalism is especially evident in the nativist opposition to migration that has spilled over into disruption of global student flows. Western nativism can be partly explained by Western anxieties about the rise of the non-white non West, inverting half a millenium of colonial and neocolonial relations. Yet there is also a worldwide tendency, reaching well beyond the West, to national self-sufficiency in political economy and autarky in politics. This again can be understood as an outcome of the faltering of the post-1990 American-led global convergence. No new kind of global convergence has yet developed to replace it.

'The crisis consists precisely in the fact that the old is dying and the new cannot be born; in this interregnum a great variety of morbid symptoms appear' (Gramsci, 1971, pp. 275-276). The erosion of post-1990 convergence and the surge of bounded nationalism seems to postpone potentials for global common good, as evident in the deterioration of multilateral negotiations on the climate-nature emergency, despite its growing symptoms. At the same time the neocolonial element in post-1990 higher education is still partly intact, as evident in nation-centred approaches to the global public good in U.K. higher education (Marginson, et al., 2025), continued exclusions of non-Western knowledge from science (Beigel, 2014; Santos, 2007; Marginson and Xu, 2023), and Western attempts to universalise 'internationalisation' in cross-border education on Western terms (Knight, 2004; Stein, 2021; Marginson, 2023).

There is evident tension between the multipolar trajectories in higher education and science, and what is possible, what is permitted, where those trajectories meet in the global space. Meanwhile there is no global protocol and global agency to protect mobile persons in higher education, and maintain unfettered research cooperation, and uphold academic freedom in the face of interventionist states. The burning issues are how to achieve the global common good in and through higher education, how to configure multiplicity in higher education and knowledge, and the need for new global structures in the sector.

References

Anderson, B. (2016), Imagined Communities: Reflections on the Origins and Spread of Nationalism, revised edition, London: Verso.

Archer, M. (1995), Realist Social Theory: The Morphogenetic Approach, Cambridge: Cambridge University Press.

Archer, M. (2003), Structure, Agency and the Internal Conversation, Cambridge: Cambridge University Press.

ARWU (Academic Ranking of World Universities) (2025), 2024 Academic Ranking of World Universities. https://www.shanghairanking.com/rankings/arwu/2024

Australian government (2024), Higher Education Statistics. https://www.education.gov.au/higher-education-statistics

Beck, U. (2007), 'The Cosmopolitan Condition: Why Methodological Nationalism Fails', Theory, Culture and Society, 24 (7-8): 286-290. https://doi.org/10.1177/02632764070240072505

Beigel, F. (2014), 'Introduction: Current Tensions and Trends in the World Scientific System', Current Sociology, 62 (5): 617–25. Doi:10.1177/0011392114548

Blackwill, R. and R. Fontaine (2024), Lost Decade: The US Pivot to Asia and the Rise of Chinese Power, New York: Oxford University Press.

Bourguignon, F. (2015), The Globalisation of Inequality, transl. T. Scott-Railton, Princeton: Princeton University Press.

Brogger, K. (2023), Post-Cold War Governance Arrangements in Europe: The University between European Integration and Rising Nationalisms. Globalisation, Societies and Education, 21 (2), https://doi.org/10.1080/14767724.2022.2075832

Cantwell, B and A. Grimm (2018), 'The Geopolitics of Academic Science', in B. Cantwell, H. Coates, and R. King (eds), Handbook on the Politics of Higher Education, 130-148, Cheltenham: Edward Elgar.

Castells, M. (2000), The Rise of the Network Society. Volume I of The information age: Economy, society and culture. 2nd edition, Oxford: Blackwell.

Chih, T., D. Cooney-O'Donoghue, H. Orden, M-C. Hu, A. Chubb and W. Forsberg (2023), 'The Dangers of a Zero-Sum Approach to Global Science'. University World News, 10 June. https://www.universityworldnews.com/post.php?story=20230607092656114

Chinchilla-Rodríguez, Z., S. Miguel, A. Perianes-Rodríguez and C. Sugimoto (2018), 'Dependencies and Autonomy in Research Performance: Examining

Nanoscience and Nanotechnology in Emerging Countries', Scientometrics 115 (3): 1485–1504. https://doi.org/10.1007/s11192-018-2652-7

Choi, S. (2012), 'Core-Periphery, New Clusters, or Rising Stars? International Scientific Collaboration among 'Advanced' Countries in the Era of Globalization', Scientometrics 90 (1): 25–41. https://doi.org/10.1007/s11192-011-0509-4

Clark, B.R. (1986). The Higher Education System: Academic Organization in Cross-National Perspective. Berkeley: University of California Press.

Dale, R. (2005), 'Globalisation, Knowledge Economy and Comparative Education', Comparative Education, 41 (2): 117-149. http://www.jstor.org/stable/30044528

de Haas, H. (2023), 'Everything Politicians Tell You About Immigration Is Wrong. This Is How It Actually Works', The Guardian, 29 December. https://www.theguardian.com/commentisfree/2023/dec/29/politicians-immigration-wrong-cheap-labour

de Sousa Santos, B. (2007), 'Beyond Abyssal Thinking: From Global Lines to Ecologies of Knowledges', Review (Fernand Braudel Center), 30 (1): 45-89. https://www.jstor.org/stable/40241677

Foucault, M. (2005), The Hermeneutics of the Subject: Lectures at the College de France 1981-82, transl. G. Burchell, New York: Picador.

Fukuyama, F. (1992), The End of History and the Last Man, Harmondsworth: Penguin.

Gramsci, A. (1971), Selections from the Prison Notebooks, transl. Q. Hoare, ed. G. Nowell-Smith, London: Lawrence and Wishart.

Gramsci, A. (1977), Selections from Political Writings, 1910-1920, transl. and ed. Q. Hoare and G. Nowell-Smith, London: Lawrence and Wishart.

Gramsci, A. (1995), Further Selections from the Prison Notebooks, transl. and ed. D. Boothman, London: Lawrence and Wishart.

Gupta, A., and J. Ferguson (1992), 'Beyond 'Culture': Space, Identity and the Politics of Difference', Cultural Anthropology, 7: 6-23.

Hall, S. (1996), 'When Was The 'Post-Colonial'? Thinking at the Limit', in I. Chambers and L. Curti (eds), The post-colonial question, 242-260, London: Routledge.

Hardt, M. and A. Negri (2001), Empire, Cambridge: Harvard University Press.

Hartmann, E. (2021), 'The Shadow Sovereigns of Global Education Policy: A Critique of the World Society Approach', Journal of Education Policy, 36(3): 367–392. https://doi.org/10.1080/02680939.2019.1671989

Haupt, J. and J. Lee (2021), 'Geopolitical Tensions and Global Science: Understanding U.S.-China Scientific Research Collaboration through Scientific Nationalism and Scientific Globalism', in J. Lee (ed), U.S. Power in International Higher Education, 77-93, Rutgers: Rutgers University Press. https://doi.org/10.36019/9781978820814-005

Hazelkorn, E. (2015), Rankings and the Reshaping of Higher Education: The Battle for World-Class Excellence, 2nd edition, Houndmills: Palgrave Macmillan.

Heather, P. and J. Rapley (2023), Why Empires Fall: Rome, America and the Future of the West, London: Penguin.

Highman, L., S. Marginson and V. Papatsiba (2023), 'Higher Education and Research: Multiple Negative Effects and No New Opportunities after Brexit', Contemporary Social Science. https://doi.org/10.1080/21582041.2023.2192044

IIE (Institute of International Education) (2025), Open doors. Data on international student flows in and out of the U.S. https://opendoorsdata.org/data/international-students/academic-level-and-places-of-origin/

Inkster, N. (2020), The Great Decoupling: China, America and the Struggle for Technological Supremacy, London: Hurst & Company.

Ivanenko, N. (2025), 'Forced Mobility/Immobility of Students and Scholars from Higher Education in Ukraine', in A. Courtois, S. Marginson, C. Montgomery and R. Sidhu (eds), The Future of Cross-Border Academic (Im)Mobilities: Power, Knowledge and Agency. London: Bloomsbury.

James. P. and M. Steger (2016), 'Globalization and Global Consciousness: Levels of Connectivity'. In R. Robertson and D.B. Gulmez (eds.), Global Culture: Consciousness and Connectivity (pp. 21-39). Abingdon: Ashgate.

Kerr, C. (1963), The Uses of the University, Cambridge: Harvard University Press.

Knight, J. (2004), 'Internationalization Remodelled: Definition, Approaches, and Rationales', Journal of Studies in International Education, 8 (1): 5-31. https://doi.org/10.1177/1028315303260832

Lee, J. and X. Li (2021), 'Racial Profiling among Scientists of Chinese Descent and Consequences for the U.S. Scientific Community'. https://www.committee100.org/wp-content/uploads/2021/10/C100-Lee-Li-White-Paper-FINAL-FINAL-10.28.pdf

Lefebvre, H. (1991), The Production of Space, transl. D. Nicholson-Smith. Oxford: Blackwell.

Leiden University (2025), CWTS Leiden ranking 2024. https://www.leidenranking.com/ranking/2023/list

Lo, W. and F. Ng (2013), 'A Critical Reflection on Internationalization of Higher Education in Hong Kong: The Search for a Cosmopolitan Alternative', Asia Pacific Journal of Educational Development, 2 (1): 37-46. https://doi.org/10.6228/APJED.2013.0201.04

Macaes, B. (2018). The Dawn of Eurasia: On the Trail of the New World Order. London: Penguin.

Marginson, S. (2011), 'Imagining the Global', in R. King, S. Marginson and R. Naidoo (eds), Handbook of Higher Education and Globalization (10-39), Cheltenham: Edward Elgar.

Marginson, S. (2014), 'University Rankings and Social Science', European Journal of Education, 49 (1): 45-59. https://doi.org/10.1111/ejed.12061

Marginson, S. (2018), 'National/Global synergy in the Development of Higher Education and Science in China since 1978', Frontiers of Education in China, 13 (4): 486–512. https://doi.org/10.1007/s11516-018-0027-8

Marginson, S. (2022a), 'All Things are in Flux': China in Global Science', Higher Education, 83 (4): 881-910. https://doi.org/10.1007/s10734-021-00712-9

Marginson, S. (2022b), 'Global Science and National Comparisons: Beyond Bibliometrics and Scientometrics', Comparative Education, 58 (2): 125-146. https://doi.org/10.1080/03050068.2021.1981725

Marginson, S. (2022c), 'Globalization in Higher Education: The Good, the Bad and the Ugly', in F. Rizvi, B. Lingard, and R. Rinne (eds), Reimagining Globalization and Education, 11-30. London: Routledge.

Marginson, S. (2022d), 'Space and Scale in Higher Education: The Glonacal Agency Heuristic Revisited', Higher Education, 84 (6): 1365-1395. https://doi.org/10.1007/s10734-022-00955-0

Marginson, S. (2022e), 'What Drives Global Science? The Four Competing Narratives', Studies in Higher Education, 47 (8): 1566-1584. https://doi.org/10.1080/03075079.2021.1942822

Marginson, S. (2022f), 'What is Global Higher Education?', Oxford Review of Education, 48 (4): 492-517. doi:10.1080/03054985.2022.2061438

Marginson, S. (2023). 'Limitations of the Leading Definition of "Internationalisation" of Higher Education: Is the Idea Wrong or is the Fault in Reality? Globalisation, Societies and Education. https://doi.org/10.1080/14767724.2023.2264223

Marginson, S. (2024a), 'Student Self-Formation: An Emerging Paradigm in Higher Education'. Studies in Higher Education, 49 (4): 748-762. https://doi.org/10.1080/03075079.2023.2252826

Marginson, S. (2024b), 'The Double-Coded Self in Higher Education: Student Self-Formation and Social Sustainability. British Journal of Educational Studies. https://doi.org/10.1080/00071005.2024.2422444 (2024

https://doi.org/10.1007/s10734-024-01341-8

Marginson, S. (2024c), 'The New Geo-Politics of Higher Education 2: Between Nationalism and Globalism', CGHE Working Paper 108. https://www.researchcghe.org/publication/the-new-geo-politics-of-higher-education-2-between-nationalism-and-globalism/

Marginson, S. (forthcoming), 'The Changing Dynamics of Space and Scale: The University between Nationalism and Globalism', in K. Brogger, H. Moscovitz & S. Robertson, World yearbook of education. Cheltenham: Edward Elgar [details TBA]

Marginson, S. and X. Xu (2023), 'Hegemony and Inequality in Global Science: Problems of the Center-Periphery Model', Comparative Education Review, 67 (1): 31-52 https://doi.org/10.1086/722760.

Marginson, S., L. Yang and T. Brotherhood (2025), 'Making the World a Better Place? English Higher Education and the Global Public Good', Higher Education 89: 99–127. https://doi.org/10.1007/s10734-024-01367-y

Marston, S. and N. Smith (2001), 'States, Scales and Households: Limits to Scale Thinking? A Response to Brenner', Progress in Human Geography, 25 (4): 615-619. https://doi.org/10.1191/030913201682688968

Marston, S., J. Jones, and K. Woodward (2005). 'Human Geography Without Scale', Transactions of the Institute of British Geographers, 30 (4): 416–432. https://doi.org/10.1111/j.1475-5661.2005.00180.x

Massey, D. (2003), 'Some Times of Space', in S. May (ed), Olafur Eliasson: The weather project, 107-118, London: Tate Publishing.

Massey, D. (2005), For Space, London: Sage.

Moscovitz, H. and E. Sabzalieva (2023), 'Conceptualising the New Geopolitics of Higher Education', Globalisation, Societies and Education, 21 (2): 149-165. https://doi.org/10.1080/14767724.2023.2166465

NSB (National Science Board) (2022), Science and Engineering Indicators: Publications output: U.S. trends and international comparisons. https://ncses.nsf.gov/pubs/nsb202333

NSB (National Science Board) (2024), Science and Engineering Indicators: Publications output: U.S. trends and international comparisons. https://ncses.nsf.gov/pubs/nsb202333/downloads

Olechnicka, A., P. Ploszaj and D. Celinska-Janowicz (2019), The Geography of Scientific Collaboration, London: Routledge.

Olssen, M. and M. Peters (2005), 'Neoliberalism, Higher Education and the Knowledge Economy: From the Free Market to Knowledge Capitalism', Journal of Education Policy, 20 (3): 313-345. https://doi.org/10.1080/02680930500108718

Papatsiba, V. and S. Marginson (2025), Brexit, EU students and UK higher education: Broken bridges, London: Bloomsbury.

Pieterse, J.N. (2020), 'Global Culture 1990, 2020', Theory, Culture and Society, 33 (7-8), 233-240. https://doi.org/10.1177/0263276420958447

QS. (2025), QS World University Rankings 2024. https://www.topuniversities.com/world-university-rankings/2024

Rizvi, F. (2005), 'Identity, Culture and Cosmopolitan Futures', Higher Education Policy 18: 331– 339. https://doi.org/10.1057/palgrave.hep.8300095

Rizvi, F. (2011), 'Experiences of Cultural Diversity in the Context of an emergent Transnationalism', European Educational Research Journal, 10(2): 180-188. Https://doi.org/10.2304/eerj.2011.10.2.180

Rizvi, F. and B. Lingard (2009), Globalizing Education Policy. Abingdon: Routledge.

Rizvi, F., B. Lingard and R. Rinne, eds (2022), Reimagining Globalization and Education, Abingdon: Routledge.

Robertson, S. (2018), 'Global Higher Education and Variegated Regionalisms', in B. Cantwell, H. Coates, and R. King (eds), Handbook on the Politics of Higher Education, 114-129, Cheltenham: Edward Elgar.

Robertson, S. and R. Dale (2015), 'Towards a 'Critical Cultural Political Economy' Account of the Globalising of Education', *Globalisation, Societies and Education*, 13 (1): 149-170. https://doi.org/10.1080/14767724.2014.967502

Roberston, S., K. Olds, R. Dale and Q. Dang, eds (2016), Global Regionalism and Higher Education: Projects, Processes and Politics, Cheltenham: Edward Elgar.

Rodrik, D. (2018), 'Populism and the Economics of Globalization', Journal of International Business Policy. https://drodrik.scholar.harvard.edu/files/dani-rodrik/files/populism_and_the_economics_of_globalization.pdf

Ross, J. (2023), 'Australian Research Collaboration with China in Free-Fall', Times Higher Education, 17 July. https://www.timeshighereducation.com/news/australian-research-collaboration-china-freefall

Sa, C. and E. Sabzalieva (2018), 'Scientific Nationalism in a Globalising World', in B. Cantwell, H. Coates, and R. King (eds), Handbook on the Politics of Higher Education, 149-166, Cheltenham: Edward Elgar.

Sakwa, R. (2023), The lost peace: How the West Failed to Prevent a Second Cold War, New Haven: Yale University Press.

Sayer, A. (2000), Realism and Social Science, London: Sage.

Schott, T. (1998), 'Ties Between Center and Periphery in the Scientific World-System: Accumulation of Rewards, Dominance and Self-Reliance in the Center', Journal of World-Systems Research, August, 112–44. https://doi.org/10.5195/jwsr.1998.148

Shahjahan, R. and K. Edwards (2022), 'Whiteness as Futurity and Globalization of Higher Education', Higher Education, 83: 747–764. https://doi.org/10.1007/s10734-021-00702-x

Shahjahan, R. and A. Kezar (2013), 'Beyond the 'National Container': Addressing Methodological Nationalism in Higher Education Research', Educational Researcher, 42(1): 20-29. https://doi.org/10.3102/0013189X12463050

Sharma, Y. (2024a). 'Geopolitical Tensions Dim Prospects for US-China Exchanges'. University World News, 28 June. https://www.universityworldnews.com/post.php?story=2024062819490812

Sharma, Y. (2024b), 'Overseas Students, Exchanges, Deterred by Spy Laws – Academic'. University World News, 12 March. https://www.universityworldnews.com/post.php?story=2024031215292831

Sijander, P., A. Kivelä and A. Sutinen, eds (2012), Theories of Bildung and Growth: Connections and Controversies between Continental Educational Thinking and American Pragmatism, Rotterdam: Sense.

Smith, T. (1979), 'The Underdevelopment of Development Literature: The Case of Dependency Theory', World Politics, 31 (2): 247-288.

Stein, S. (2017), 'The Persistent Challenges of Addressing Epistemic Dominance in Higher Education: Considering the Case of Curriculum Internationalization', Comparative Education Review, 61 (S1): S25-S50. https://doi.org/10.1086/690456

Stein, S. (2021), 'Critical Internationalisation Studies at an Impasse: Making Space for Complexity, Uncertainty, and Complicity in a Time of Global Challenges', Studies in Higher Education, 46 (9): 1771-1784. https://doi.org/10.1080/03075079.2019.1704722

Stone, R. (2025), 'In Sign of Rising Tensions, University of Michigan Ends Partnership with Chinese campus', Science, 387, 6731. https://www.science.org/content/article/sign-rising-tensions-university-michigan-ends-partnership-chinese-campus

Teferra, D. (2019), 'Defining Internationalisation – Intention versus Coercion', University World News, 23 August. https://www.universityworldnews.com/post.php?story=20190821145329703

THE (Times Higher Education). World university rankings 2024. https://www.timeshighereducation.com/world-university-rankings/2024/world-ranking

The Economist (2019), 'Globalisation Has Faltered', 24 January.

The Economist (2023), 'American and Chinese Scientists are Decoupling, Too', 11 October.

The Economist (2024a), 'The Half-open Door', 12 February.

The Economist (2024b), 'Soaring Dragons', 15 June.

The Economist (2025), 'Amateur Agents', 4 January.

U.S. government (2024), Amendment and Extension of the U.S.-PRC Science and Technology Agreement (STA). https://www.state.gov/amendment-and-extension-of-the-u-s-prc-science-and-technology-agreement-sta/#:~:text=On%20December%2013%2C%202024%2C%20the,%2Dto%2Dgovernment%20scientific%20cooperation.

UNESCO (United Nations Educational, Social and Cultural Organisation) (2024), Institute of Statistics. Data. http://data.uis.unesco.org

Wallerstein, I. (1974), 'The Rise and Future Demise of the World Capitalist System: Concepts for Comparative Analysis', Comparative Studies in Society and History, 16 (4): 387-415.

Wallerstein, I. (1976), 'Semi-peripheral Countries and the Contemporary World Crisis', Theory and Society, 3: 461–483. https://doi.org/10.1007/BF00161293

Wallerstein, I. (2006), European universalism: The rhetoric of Power, New York: The New Press.

Wimmer, A. and N. Schiller (2003), 'Methodological Nationalism and beyond: State Building, Migration and the Social Sciences', Global Networks, 2 (4): 301-334. https://doi.org/10.1111/1471-0374.00043

World Bank (2025), Indicators. https://data.worldbank.org/indicator

Zha, Q. (2024), 'Reimagining China–US university relations: a global 'ecosystem' perspective', Studies in Higher Education, 49 (9): 1532–1552. https://doi.org/10.1080/03075079.2023.2269966

Zhao, T. (2021), All under Heaven: The Tianxia System for a Possible World Order, transl. J. Harroff, Oakland: University of California Press.

Zahra, T. (2023), Against the World: Anti-Globalism and Mass Politics Between the World Wars, New York: W.W. Norton.

Zubok, V. (2021), Collapse: The Fall of the Soviet Union, New Haven: Yale University Press.