The Glonacal Paper after 20 years: Spatial Analysis in the Study of International Higher Education

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Introduction: Globalization comes to higher education studies

In 1957 the first satellite was launched by the Soviet Union and circled the world for two months. In her seminal book *The Human Condition*, first published in 1958, the German philosopher Hannah Arendt (1998/1958) called this epochal event ‘second in importance to no other, not even the splitting of the atom’ (p. 1). In 1961 Yuri Gagarin completed a single orbit of the earth, the first person to see the whole planet from space, and touched down safely. In the same year the term ‘globalization’ was first listed, in the Merriam-Webster Third New International Dictionary (James & Steger, 2014, p. 419).

In 1971 the United States (US) ended the Bretton Woods agreement that controlled parity between currencies by floating the dollar. Other countries followed, and the partly deregulated financial flows began to evolve into their own global domain. Now the pace of change quickened. Cross-border trade and foreign direct investment, and then supply chains and the offshoring of production, began to expand rapidly. Cheaper air travel was booming, emigration and immigration are growing, and global brands and cultural icons proliferating. At the end of 1991 the Soviet Union collapsed and the United States, which was already in a multi-sectoral engagement with former enemy China, was suddenly in a position of unchallengeable dominance, *Pax Americana*, amid growing

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global convergence.

Meanwhile digital technologies were transforming information and communications. The Internet emerged in 1989 and grew exponentially, with American universities and scientists among the early adopters. The Internet gave form to sociability at the planetary level, so that global integration was being felt more closely at the level of subjectivity than in the prior era of intensified trade and migration in 1870-1914 (Held, 2014, p. 497). ‘Global’ replaced ‘transnational’ in the lexicon of the social sciences (Appadurai, 2014, p. 482) and ‘globalization’ moved to the centre of public discourse, policy and academic debate.

In a mid-1990s review of international relations theory, E. Fuat Keyman concluded solemnly that ‘it is becoming increasingly apparent that reality is not what it used to be’ (1997, p. 208). Nor was social theory. Large claims and novel generalizations flourished. In 1992 Francis Fukuyama’s *The End of History* declared an Americanized liberal order without end and in 1996 Manuel Castells (2000) identified another kind of universal in *The Rise of the Information Society*. There were many interpretations but the definition of globalization by David Held and colleagues (1999), convergence and integration on the world scale, was widely agreed. Many also believed that globalization in the economy, and communications and culture, would render the nation-state partly obsolete (e.g. Waters, 1995; Appadurai, 1996; Sassen, 2002). For a time this expectation was shared by two groups who disagreed on other points: neo-liberals who had been arguing for more room for the capitalist market since the 1960s, and liberal cosmopolitans for whom the horizon was the world society anticipated by theorists (e.g. Beck, 2000; Luhmann, 2012, p. 85). Much of the talk about globalization was ‘celebratory’, at least prior to the breach of Pax Americana in the attack on the World Trade Centre and the Pentagon in 2001 (Calhoun et al., 2002), and the growing data on the gross inequalities triggered by free-wheeling global capitalist development.

As Bourdieu and Wacquant (1999, p. 52) noted, claims about globalization tended to universalize a particular view of the world. In both scholarly work and popular discourse globalization was mostly seen as capitalist and inevitable, which generated both likes and dislikes, though a minority saw it as cultural (e.g. Robertson, 1992), or explored its economic aspects with a cultural lens (e.g. Appadurai, 1996). However, all agreed that globalization was spatial, bringing forward geographical ideas such as global/local vectors, flat networks, space-time compression and perspectival innovations like Appadurai’s ‘scapes’. With exceptions (e.g. Hirst & Thompson, 1995) most theorists also agreed that
globalization was profoundly transformative, not least for social theory itself. For a time, it seemed, few wanted to write on anything else. While questioning ‘the givenness of capitalist globalization’ Serap Kayatekin and David Ruccio (1998) stated:

Globalization has become a crucial theme as well as a key analytical concept in a rapidly burgeoning literature which, while often designed to expose the nightmarish effects of the emergent (or, for some already established) global order, appears to partake of the ecstasy of the totalizing vision. The range of disciplines that have been exposed to the tremendous hold of this concept include politics, sociology, geography, cultural studies and, of course, radical political economy (Kayatekin & Ruccio, 1998, p. 76).

Soon higher education studies joined this list of fields. In the 1980s higher education and research were little altered by the global economic convergences in finance, trade and production but the 1990s Euro-American universities were absorbed into networked communications system and as the decade proceeded the growing mobility of students, researchers, policies and ideas was evident. In emerging nations the first effects of global convergence in higher education were felt not in policy isomorphism or money flows but in a flood of Westernising knowledge and information (e.g. at Universitas Indonesia, Marginson & Sawir 2006). Published global science and the number of internationally collaborative papers expanded quickly. University partnerships and consortia spread. Anglophone institutions in the UK and Australia expanded international student enrolments, pegged out profit margins and absorbed revenue in neo-imperial ventures, establishing campuses offshore. US, UK and Australian institutions also initiated successive global ‘e-universities’, though these soon faltered for lack of customers.

Studies of higher education became populated by the words ‘internationalization’ and ‘globalization’, with many shades of meanings, and conflicted emotions about globalization. From the late 1990s to the mid 2000s was an exciting time in the literature. Stimulated by work in the social sciences, critical papers in higher education studies sought to explain, theorize and shape perceptions of the emerging global relations (e.g. van der Wende, 2002; Valimaa, 2004; Dale, 2005). Others offered strategic advice for global university businesses, for example Mazzarol and Soutar (2002) on the drivers of global student mobility.

As is often in the pragmatic and primarily instrumental field of research on higher education, the immediately practical papers that offered ways of coping
with and adapting to the new environment drew more early citations than the social theory papers, while the better theory pieces had a longer shelf life. Work on ‘internationalization’ led by Knight (e.g. 2004) and de Wit (e.g. 2002) steered between the two approaches and became very widely used in succeeding years, though, arguably, the internationalization literature was stuck in a nation-bound view of the world and struggled to fully understand globalization.

The glonacal agency heuristic

In 2002 Higher Education published a paper by Gary Rhoades and Simon Marginson titled ‘Beyond national states, markets, and systems of higher education: a global agency heuristic’. The authors set out to ‘shape comparative higher education research with regard to globalization’ (Marginson & Rhoades, 2002, p. 282).

The paper had two starting points. First, the global scale of activity in higher education was growing but higher education studies lacked ‘a framework for conceptualising agencies and processes that extend beyond the nation-state’ (p. 285). The standard national system model of higher education (in some countries seen also as a national market), with local institutions embedded in it, and international activity at the edges of the system, could not fully grasp either the global or the local. ‘Methodological nationalism’ (Wimmer & Schiller, 2002; Beck, 2007; Shahjahan & Kezar, 2013), the premise of the nation-state as the outer horizon of society, blocked understanding. Second, the glonacal paper also rejected methodological globalism, the assumption the global scale contained or determined all else (Marginson & Rhoades, 2002, p. 292). The ‘ecstasy’ of the totalizing vision of globalization had warped judgement about the nation-state. Though local institutions were more active in the global scale the nation-state continued to define, regulate and fund higher education, and global flows were often refracted by nation-states. The global/local binary in many accounts of globalization was unsatisfactory. The field needed a multi-scalar framework that could empirically track activity in higher education in the three scales at once.

The authors invented the term glonacal, combining the global, national and local scales. They noted that higher education institutions were shaped by global and regional trade and by pan-national organisations like the World Bank and

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1 Because this article reviews the 2002 glonacal article from a critical distance, personal pronouns (‘we said’ etc) are not used. The article’s assumptions have largely held up but after twenty years this author would do it somewhat differently, as discussed.
2 For a similar argument prior to the glonacal paper see Bottery, 1999, p. 299
OECD, yet the same institutions were also ‘global actors’ in their own right (p. 282). ‘They are globally, nationally and locally implicated.’ To understand higher education we need to grasp and to map these ‘multiple realities’ (p. 288). This was the purpose of the ‘glonacal agency heuristic’ (p. 282).

The glonacal paper responded to the spatial shift in the real world by conceptually developing space as a tool for understanding higher education. The authors did not realize it then, but the conclusions they reached based on raw observation of higher education systems paralleled much current and later literature about scale in human geography (see below). Parallels included the ontological openness of the paper, its multiple scalar spatiality, the focus on relations between scales, rejection of a zero-sum relation between national and global, rejection of the idea that any one scale was always or necessarily primary in higher education, and the use of the word ‘agency’ before ‘heuristic’.

Like the critical human geographers, the glonacal paper argued that social spaces, including meta-spaces such as scales, were not pre-given and natural but deliberately constructed by purposeful activity. Agentic activity was modulated by history and material resources, ‘layers and conditions’ (Marginson & Rhoades, 2002, p. 291), and by the vision, imaginings and discourses of agents. Globalization in higher education was brought into being by persons, organisations and governments. ‘Spheres of agency’ referred to ‘the parts of the world’ reached by an institution, a unit or a national higher education system, its ‘webs of activity and influence’ (p. 293).

In theorizing global cultural imaginaries, Appadurai had identified ethnoscapes, technoscapes, finanescapes, mediascapes and idioscapes (Appadurai, 1990, p. 301; Appadurai, 1996). This implied that globalization was heterogenous, not just site-specific but also sector-specific. Held et al. (1999) gave this empirical form in a sector-by-sector review of globalization. These works influenced the glonacal paper. There was not one globalization but many globalizations, as well as different perspectives on globalization. Against the idea of higher education shaped by de-territorialized and ahistorical global forces, Marginson and Rhoades (2002) argued for the reality and autonomy of space and scale in higher education. They critiqued the determinist narrative of a sector annexed by global capitalism and deployed in the knowledge economy. This reified economic globalization while leaving nation-boundness undisturbed. ‘The global … is invoked as a residual explanation for observed commonalities across

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3 For an example of a take on global convergence very different to those advanced in higher education studies, see the perspective of the US security sector in Kanaev et al. (2020).

As Rizvi (2006) put it a little later: ‘To regard the neoliberal shift in contemporary social imagining as a necessary consequence of globalization is to presuppose a broader discourse of capitalist triumphalism’ (p. 201). Yet to a surprising degree, commentators from both left and right had conflated globalization with the roll-out by nation-states of the neo-liberal mode of national regulation. On the contrary, argued Marginson and Rhoades. They found that some global activities of institutions, especially those where they moved outside national regulation, were associated with enhanced autonomy. In any case, institutions were complex organizations with multiple inner drivers. They were not simply branches of the capitalist economy, however much the economic ministries of government wished it:

The metaphor of academic capitalism reveals a powerful global trend but blinds us to the power of national traditions, agencies, and agents in shaping the work of higher education, as well as to the local agency exercised by students, faculty, non-faculty professionals, and administrators, pursuing prestige, knowledge, social critique, and social justice (Marginson & Rhoades, 2002, p. 287).

The paper highlighted the need for research on the effects in higher education of pan-national organisations, on the different kinds of international education, and on the global stratification of institutions beyond single nation hierarchies (Marginson & Rhoades, 2002, p. 301; Marginson, 2006). Research in all these areas was to grow significantly in future.

**Reception of the glonalacal paper**

The glonalacal paper was positioned between two extremes: the proposition that higher education was being totally transformed by globalization, and the proposition that no great change was taking place. This positioning played out well in the years after 2002. Agentic global activity in higher education continued to grow while as expected the nation-state failed to become eclipsed, let alone to wither away. The authors did not have to continually revise the definitions and meanings of glonalacal, as in the successive ebbs and flows of the definition of ‘internationalization’ (e.g. the reworking by Knight, 2003).

The three-way multi-scalar glonalacal approach was soon referenced in the work of other scholars of higher education and has become a field standard (e.g. Valimaa, 2004; Enders, 2004; Horta, 2009; Shahjahan & Kezar, 2013; Liu &
It is not universal to the field, and some scholars merely use glonacal as a synonym for the global rather than applying the heuristic as an empirical method. Nevertheless, the glonacal idea remains in active use, framing new doctoral work. It is also not alone. Studies of higher education that parallel the glonacal spatiality, with an open ontology and multi-scalar approach, include works by Matthews and Sidhu (2005), Ishikawa (2009), Resnik (2012) referencing Robertson (2006), and Friedman (2018a; 2018b).

In higher education studies the core of the glonacal heuristic, the three simultaneous dimensions of activity, has not been challenged. However, it has been complexified.

First, the regional scale was mentioned in the glonacal paper but discussed mostly in terms of trading blocs. This was not enough to get to grips with either the policy or the higher educational dimensions of regions. Policy in the pan-national region has closely shaped European higher education, through the Bologna reform agenda, Erasmus mobility, European research funding and collaboration, U-Multirank and other initiatives. To a lesser degree the region is a factor in higher education in Southeast Asia (e.g. Chou & Ravinet, 2017), and embryonic in Latin America and Africa. Robertson et al. (2016) demonstrate that cross-border regional spatiality (Hettne & Sodenbaum, 2000) also takes several other forms.

Second, the local scale is more plural than suggested in the glonacal paper. Jones (2008) questions the paper’s use of the institution as the primary unit for ‘local’. He notes ‘there are major differences in the degree to which different units within the same institution are internationalising, and the degree to which they are active in the global environment or responding to global pressures’ (p. 464). Komotar (2021) suggests that ‘local’ differentiates between institutions, disciplines, and individuals (p. 7).

These complexifications suggest that scalar combinations are variant by social sector, national case and time, an insight into multiplicity that moves the spatiality of higher education studies away from universalising models. For example, in the global research system disciplines and sub-disciplines differ markedly in the weight of global connectedness (Marginson, 2022b). In short, the three primary scales in higher education and the relations between them are best understood through ‘situated case studies’ (Deem, 2001).

At the time of writing there were 364 citations of Marginson and Rhoades (2002) in Web of Science and 1,274 in Google Scholar, peaking in 2018 and 2022.
Naidoo (2010) highlights a more fundamental limitation of the glonacal paper:

Theoretical frameworks … which emphasise the simultaneous significance of global, national and local forces on the development of higher education offer a powerful conceptual frame. However, while this provides an understanding of the relationships between systems of higher education and globalisation, it does not explicitly address the role of higher education in development (Naidoo, 2010, p. 81).

Marginson and Rhoades (2002) focused on the new freedoms and potentials of the global setting. The glonacal paper displayed an exuberant ‘outwardlookiness’, ‘a positivity and aliveness to the world beyond one’s own turf’ (Massey, 2005). It was right to keep open the prospect of non neo-liberal globalization and cosmopolitan relations. But the neo-imperial control exerted by the leading Euro-American universities and norms, and the monopoly of the global knowledge system (Santos, 2007), were apparent at the time, and were soon openly proclaimed by the explicit global hierarchy constructed by the global ranking systems in 2003 and 2004. In principle the multi-scalar glonacal heuristic was compatible with a critical analysis of hegemonic power in higher education (e.g. Marginson, 2022c). However, the absence of such an analysis in the paper itself (aside from passing references to resource inequalities, brain drain and English language bias) suggests that it was unduly optimistic, and insufficiently aware of Euro-centrism. Its examples of positive global mixing were largely drawn from student mobility into the Anglophone world. There was little global South perspective, as Naidoo states. Beck and Grande (2010) note ‘the category error of implicitly applying conclusions drawn from one society to society (in general) which then becomes a universal frame of reference (p. 411).

The paper also missed the implications of the vacuum in global governance in higher education and lack of momentum for the global common good, including the rights of mobile students (Marginson, 2012). Freedom from direct regulation was attractive but had its downsides.

Did the glonacal paper remake comparative higher education research as it set out to do? Yes and no. It helped to bring spatiality to the higher education literature. However, as with most papers, its best ideas were (and are) often ignored. The myths of methodological nationalism and the knowledge economy, locked into higher education studies by nation-state politics and policy, proved difficult to dislodge. The standard understanding of higher education is still largely intact despite all the research on global phenomena. Comparative
education studies are mostly framed by the national, though some comparativists draw on the glonacal heuristic (e.g. Kosmützky, 2015). The heuristic is influential but not dominant. Ironically, this has helped it to maintain its critical edge. Pitched against the orthodox nation-bound reading of higher education, the glonacal idea still has something new to say.

Twenty years after 2002 the setting is different. The growth of cross-border trade has slowed, there is a partial retreat from global supply chains (Economist, 2022) and ideological pushback against cosmopolitanism (Rizvi et al., 2022). Methodological globalism is shrinking, methodological nationalism is rife. Nevertheless, there is continuing globalization in higher education, especially in relation to knowledge and people mobility, and alongside other tools the explanatory potentials of spatiality and scale are undiminished. Arguably those explanatory potentials are still under-developed, particularly in relation to agency.

The present paper updates and moves beyond Marginson and Rhoades (2002). It expands on geographical theorizations of space, and multi-scalar spatiality in higher education, and proffers a scale additional to the glonacal triad: higher education as a one-world space.

**Space and agency**

As noted, the conclusions of Marginson and Rhoades (2002) paralleled much literature about space and scale in geography (e.g. Lefebvre, 1991; Marston et al., 2005; Herod, 2008; Watkins, 2015), especially the work of Doreen Massey (e.g. *For Space*, 2005).

**Relational and multiple**

Social spaces take many forms, such as markets, networks, cities; physical and virtual sites; and scales including the global, national, regional and local. These are not pre-given structures lined up and waiting to be populated, like a row of empty aircraft hangers. They are constellations of social relations that humans make for themselves. David Harvey (2005) refers to ‘an actively produced field of spatial ordering that changes sometimes quickly and sometimes glacially over time’ (p. 244). Space is not a flat plane, a blank sheet written on by people and events. It includes the agents themselves, their practices and relations — for individuality and sociability are inseparable (Massey, 2005, p. 58) — and the non-human elements in their world, with the whole assemblage moving and
For Massey space and time are heterogeneous and intersect. ‘If time unfolds as change then space unfolds as interaction’ (Massey, 2005, p. 61). Time means agentic history, ‘narrative’ and especially ‘trajectory’ or life journey. Space is where the multiple agentic trajectories intersect. ‘Space is the social dimension … in the sense of engagement within a multiplicity’ (p. 61, emphasis in original). In spaces, human agents encounter coeval (coexistent) others with their own distinctive trajectories, in a ‘meeting up of histories’ p. 4). There are also gaps, missed connections. Space is ‘the sphere of relations, negotiations, practices of engagement, power in all its forms’. ‘Space is the dimension which poses the question of the social, and thus of the political’ (Massey, 2005, p. 99). Active agents are integral to space making, though space is constructed by past as well as present agents, and resources with which to exercise agency and fashion social spaces are unequally distributed.

Massey (2005) sharply critiques those imaginings in which space is abstract and place is concrete (p. 183). Her specific target is the influential global/local binary. In this mode of thinking, global forces are seen as external, economic and dynamic while ‘local place’ is seen as internal, organic and fixed-residual, the victim of globalization, doomed to be subsumed by or defended from the global. Massey, who is well aware of the power of global capitalism, debunks ideas of globalization as an abstract universal force, and the local as prior to social practice. Space and local place are equally dynamic, social and constructed by agents, ‘an open ongoing production’ (p. 55). ‘Position, location, is the minimal order of differentiation of elements in the multiplicity that is co-formed with space’ (p. 53). Global activities ‘are utterly everyday and grounded, at the same time as they may, when linked together, go around the world’ (p. 7). As Larsen and Beech (2014) state, “the global is not just some space out there, without material basis. It is produced in local settings” (p. 200). But local agency is unequal. ‘Put bluntly, there is far more purchase in some places than others on the levers of globalization’ (Massey, 2004, p. 11). Her example is London. Likewise, leading Anglo-American universities have constructed global practices in higher education.

Space for Massey is unfinished, always becoming, continually combining unconnected trajectories (Massey, 2005, pp. 39, 41, 59). Movement is foundational. ‘We are functioning in a world that is fundamentally characterized by objects in motion’ (Appadurai, 1999, p. 230). Unpredictability and contingency are also foundational. ‘There are always loose ends’ (Massey, 2003, p. 5). Massey wants to ‘uproot “space”’ from concepts such as fixture, stasis and
closure and ‘settle it’ among relationality and heterogeneity’ (Massey, 2005, p. 13), allowing the unknown to appear, ‘the positive creation of the new’ (p. 54). Multiplicity, in all its forms, ‘diversity, subordination, conflicting interests’ (p. 61) is foundational. Space is the sphere of ‘coexisting heterogeneity’ (p. 9), ‘of the possibility of the existence of plurality, of the co-existence of difference’ (Massey, 2003, p. 3). Difference is not static and discrete but continuously co-evolving, fusing and emerging (Massey, 2005, p. 21).

Multiplicity is inherent because agents have autonomous trajectories. From a social realist sociological perspective, Archer (1995; 2000) explains the irreducible autonomy of agency. Agency and structure are different aspects of a stratified social reality. Each is not fixed but is evolving, emergent. They continually affect each other. Despite Giddens’s (1986) theory of structuration, structure and agency are not constituted on a reciprocal basis, which would imply identity. Structure – economic, political, social, cultural – is prior to agency. However, ‘people are not puppets of structures because they have their own emergent properties’ (Archer, 1995, p. 71). People have agency because of their capacity for reflective consciousness. The autonomy of conscious agents (Archer, 2005) guarantees the unpredictable potentials of self-shaping difference.

**Materiality, imagination and practice**

Henri Lefebvre’s *The Production of Space* (1991) suggests a three-way relation between space as material, space as imaginative, and space as social practices and social relations (e.g. pp. 11, 27). The three elements continually interact. The challenge for social science, including higher education studies, is to move from the suggestive and fluid theorisations of Lefebvre, Massey and others to concepts operationalisable as empirical observations. Figure 1 models a version of Lefebvre’s three-way schema for scale as space in higher education. The model could be used for the global scale (e.g. in Marginson, 2022c) or the national, local, regional or city scales. Like all such models Figure 1 fixes and simplifies a moving reality.
In Figure 1, the material domain A constitutes pre-given structures like communications networks, economic resources, inherited institutions, laws, policies and funding. The lower two domains B and C especially embody individual, group and organisational agency. The three domains A-B-C can scarcely be separated in reality. Theory focuses on the overlaps. Lefebvre’s ‘spatial practice’ embodies perception and interpretation, and ‘spaces of representation’ include space as lived and felt (Larsen & Beech, 2014, p. 200). For Massey (2004) identity is ‘both material and discursive’ (p. 5). For James and Steger (2016) globalization combines practice and consciousness. Appadurai’s scapes incorporate subjective ‘perspective’, whereby agents envision global cultural flows, into an otherwise impersonal notion of economic globalization (Appadurai, 2014, pp. 483-484).
Imagination and discourse in domain B are key elements in space making. ‘Changing the metaphors we use to describe the world does not change the way the world actually is, but it does change the ways we engage with the world’ (Herod, 2008, p. 226). Watkins (2015, p. 508) refers to three kinds of collective spatial imaginaries: imaginaries of places; idealized spaces, such as a harmonious nation, or a cosmopolitan world of global citizens; and ‘spatial transformations’, such as discourses of internationalization, or higher education as a global competition in the knowledge economy. James and Steger (2016) distinguish four levels of lived meaning, which they note have been carriers of globalization, with successively deeper resonance in society: (1) ideas; (2) ideologies; (3) social imaginaries (Taylor, 2003), which frame the shared understanding of an age, such as neoliberalism; and (4) ontologies, which constitute a shared sense of how to live (James & Steger, 2016, pp. 25-26).

The flow of the arrows in Figure 1 is significant. Spatial imagining in domain B is conditioned but not confined by pre-given materiality in domain A. In turn that imagining leads ultimately to augmented materiality in domain A via the passage through domain C, where changing social relations are ‘necessarily embedded material practices which have to be carried out’ (Massey, 2005, p. 9). Agency becomes embedded as structure. Meanwhile the agency-heavy domains, imagining/interpretation (B) and social practice and relations (C), continually constitute each other. While there is an obvious linear relation between imagining in domain B and practices in domain C, practical experience in domain C also suggests possibilities and limits for reflexive agents in domain B.

Consider examples of these accumulating processes, all in the global scale:

- Scientists who work with pre-given electronic networks (A) may conceive (B) their cooperative global networks as open or closed (C), leading to a new materiality in A.
- National governments conceive of science as a global arms race in innovation (B) and fund continuing expansion of national research capacity (C becomes A).
- League table rankings were first conceived in domain B by scholars in Shanghai and journalists in London, drawing on norms of scientific production and economic competition respectively. This simulated a worldwide higher education sector in the form of a global market of ‘World-Class Universities’ (C) and the simulation became real: it guided investment and strategy, becoming reproduced in domain A with structural force as organizational priorities and resource allocations (Hazelkorn &
Mifut, 2021). Across the world universities and countries found themselves locked into incentives and models they would never have chosen for themselves.\(^5\)

Global university rankings are a striking example of the potentials of spatial imagining when institutionalised in the form of a successful practical prototype. This also illustrates the point that spatial imagining can be reductive as well as productive. Global market competition can diminish mutuality and cooperation. ‘Social imaginaries circumscribe what is deemed possible or legitimate to think, act and know’ (Stein, 2017, p. 329).

\[ \textbf{Figure 2. Geo-cognitive scales in higher education} \]

Source: author. Glonacal scales in grey tone

\section*{Multiple scales in higher education}

There are many definitions of geo-cognitive scale (for a fuller discussion see Sheppard & McMaster, 2004). ‘Geo-cognitive’ refers to the fact that like all spaces, scales are formed in the interaction and material and mental processes (see Figure 1).

Simplifying, scales are recognized geographical meta-spaces that vary on

\(^5\) The role of ranking in shaping global higher education is too large a topic for this paper, but see, among others, Marginson (2007; 2014); Ishikawa (2009); Shahjahan et al. (2017); and Shahjahan et al. (2021) and Lloyd & Ordorika (2021) in Stack (2021). On the back of the publicly provided rankings data the commercial rankers QS and Times Higher Education mount professional services that assist institutions to perform within the competitive global market that the rankers themselves have institutionalized. A brochure distributed by QS in 2007, advertising its business services, is titled ‘A helping hand in globalising your university’.
the basis of scope and proximity. ‘Scale is a produced societal metric that differentiates space’. The ‘social ownership’ of scales is ‘broad-based’ (Marston & Smith, 2001, p. 615). As the glonacal paper argued, in higher education the local, national and global scales are especially active spaces, throughout the world; as noted the regional scale takes on special importance in some regions but especially Europe; the city scale is significant in many countries; and the local scale consists of disciplinary and student groups as well as institutions.

Conscious scales in higher education (see Figure 2) include the world as a whole and everything in it, including all other scales (Yang et al., 2022); the global scale of relations at the level of the planet; the pan-national regional scale, as in the European Union; the nation; the sub-national region such as state or province, and the city, a scale important in higher education (Goddard & Vallance, 2013); and the proximate local scale. Robertson et al. (2023) also suggest ‘civilizational states’ (p. 5). To adequately understand China, and perhaps also the US, requires a scalar concept with a cultural reach that is larger than the nation-state but distinct from the territorial conquest form of imperialism.

The extent to which a specific relational scale is practised is an empirical question. Contact and connections are not sufficient in themselves to constitute scales, which entail conscious imagining and transformative social relations (James & Steger, 2016, p. 22). Scalar imagining and practices in turn institutionalise what agents do, reproducing the scales in apparently stable ways. People think globally, act locally, feel national, see as a state, and so on. ‘Scaled social processes perpetuate specific productions of space’ (Marston & Smith, 2001, p. 616).

Are scalar distinctions then nothing more than agentic imaginings? Some geographers grant scale methodological and epistemological status rather than ontological status. For Jones et al. (2007) scales do not exist and because scale thinking can impose a misleading hierarchy, it is better to read social practices in terms of a ‘flat ontology’. Against this it can be argued that scales, like other human-made spaces, do exist and shape social relations, which have material manifestations. For example, the nation is as an ‘imagined community’ but one that is practised: its agents define its territory and enforce that claim by coercive means and engineered consent. The nation-state confronts higher education institutions and other agents with the awesome structural force of laws, regulations, customs, language, economic management, financing, policies, programmes and the like. At that point, despite the arbitrary and ambiguous character of territorial borders (Vaughan-Williams, 2008), it is difficult to deny
the national scale exists! On the contrary, the nation becomes so pervasive as to be taken for granted. This tends to conceal the continuous and strenuous work of its construction, including the shaping of its ideologies and narratives.

There is no bedrock essential scale, the true unchanging site of identity. The most proximate local scale is the self-regulated domain of daily life and neighbourhood, and in higher education the place of work and study. Though there is a material ‘immanence’ in the local (Woodward et al., 2012, p. 204) it is no more fixed than the other scales. Like the nation, ‘locality … has always had to be produced, maintained and nurtured deliberately … the local is not a fact but a project’ (Appadurai, 1999, p. 236). The global scale is also unfixed but in a different way. Slow changing hierarchies institutionalized by multilateral geopolitics and global capital pre-structure global relations only up to a point. Exceptional openness and mobility are a continuing source of agentic potentials. For Brooks (2018) international student mobility constitutes a distinctive space ‘of identification and belonging’ (p. 2). Appadurai finds that global flows in a more connected expand potentials for space and place. Diasporic communities use travel and social media to produce locality ‘as a spatial fact and a sensibility’ (Appadurai, 1999, p. 236). They find hybridized spaces between nations that blur geopolitical, socio-economic or ethnic-racial hierarchies (Pieterse, 1995, p. 56).

However, agentic perceptions, potentials and experiences of scale vary on the basis of resource and position. Friedman (2018a) reviews the ‘creation, legitimation and differentiation of cosmopolitan capital among different groups of students’ through ‘global citizenship’ programmes in contrasting UK universities. ‘Cosmopolitan capital’ refers to knowledge, skills, attributes and dispositions that confer global advantage. The content of that capital varied on the basis of institutional position in a national hierarchical order. Old Elite University was neo-imperial. It saw its faculty and graduates as natural global leaders. There was no need to foster cosmopolitan capital. New Elite focused ‘conspicuously’ on transforming itself into a ‘global university’ (p. 6), which was a defining feature of its organizational identity. It deliberately prepared its students for globally mobile work and global civil leadership. Urban Access focused on the recruitment of international students and the benefits of culturally diverse student life, but its larger priority was local employment of local students, not the global scale. Valley Access recruited international students for revenue but was only nominally interested in global education.

In these examples the varied positioning of higher education in two local scales – institution, and contiguous community – articulated with a global scale practised in differing ways. Each scale ‘is also a product of relations which
spread out way beyond it’ (Massey, 2004, p. 6). As the glonacal paper stated, in the multi-scalar setting scales overlap and co-penetrate. Interviewees in Friedman’s (2018a) Old Elite University know that their local activities help construct global models and knowledge in higher education. The reverse is also true: those same global models constitute local activities, albeit in other places. The more that multiple scales intersect, the more that practices in each are opened to change, though agents that are dominant or independent are less likely to change.

**Mixing and matching scales**

If scales in higher education are multiple, how then to understand their spatial-relational configuration? As the glonacal paper argued, its three scales had no fixed order of importance, though in particular cases, activity in one or another could be causal. Kosmützky (2015) likewise finds that neither national models nor the ‘transnational level’ is necessarily framing or determining. There are ‘multiple interdependencies’. However, this understanding is not universal. Scale-based analyses often see scale in terms of ‘hierarchical thought’ (Marston et al., 2005, p. 421) and universal not contextual scalar primacy.

The published diagram of the glonacal heuristic (Marginson & Rhoades, 2002, p. 291) was misleading in one way: it implied the global, national and local scales were structural replicas, ‘scale-invariance’ (Katz & Ronda-Pupo, 2019), with the only difference between them being the size of the container. A frequent vision of scale in geography, also, is that of a cascading hierarchy of levels, such as vertical scaffolding, or widening concentric circles, or the identical Russian *Matryoshka* dolls that fit into each other (Herod, 2008, pp. 226-228; Gregory et al., 2009, pp. 664-666). These visions are highly misleading. They conceal fundamental differences in the nature of the scale; for example the national scale is ruled by a normative centre, the nation-state, while the global scale has no normative centre. The hierarchical visions also privileges scales with broad scope (Marston et al., 2005, p. 427), feeding into ideas of bigger-smaller and outer-inner determination. In higher education studies this mode of thought fosters an over-emphasis on the explanatory power of large structural causes such as global capitalism, and the downplaying of agency, which is equated with the allegedly subordinate local scale. So often, scholars simply gesture towards ‘globalization’, as if that by itself is an adequate explanation!

Leaving open the question of scalar primacy allows the fuller potentials of scalar relations to emerge into view, including intersections between scales.
Multiple scales enable higher education institutions and national systems to configure movement between scales as opportunity and resource. Marston et al. (2005) refers to ‘scale jumping’ whereby power established in one scale is transferred to another, and cities and states that ‘rescale’ or ‘reterritorialize’ (p. 418). Universities and national systems jump scales or rescale when they merge across distances, creating multiple sites in one country; or open international branch campuses (Wilkins & Huisman, 2012) or online distance education. Nations foster global hubs (Lee, 2015). Site-based university corporations establish MOOC platforms in the global scale.

In science, most countries use global networking and production to help build national and local activity (Olechnicka et al., 2019). China sustains an effective ‘national/global synergy’ in science, whereby international research collaboration and building national capacity augment each other (Marginson, 2022a; 2022b). Institutional agents in higher education also combine activities in different scales for strategic purposes. Universities can use their productions in the global scale (e.g. research cooperation, or talent recruitment, or income from international students) to enhance their resources and status in the national and local scales. Reciprocally, they also use national resources and status to build pan-national regional and global activity. As noted, Friedman’s (2018a) New Elite University defined itself as a ‘global university’. The local was hybridised with the global and this strengthened the university’s status within the national scale.

Friedman (2018b) shows that university administrators can be nimble in combining and switching between scales. He interviewed in elite institutions in the UK and US that identified as globally open, cosmopolitan and serving the global common good. The administrators highlighted the global mission. Yet they also saw national boundaries across the world as ‘common sense, natural and enduring’ (p. 247), and tended to discuss students primarily in terms of national characteristics rather than region-culture, class or gender (p. 255). ‘Nationalized ways of talking about the world’, some ‘crude and stereotypical’, were ‘the basic discursive tools’ of university personnel ‘engaged in the internationalization of academic programmes and general operations’ (p. 248). Interviewees saw their universities as ‘embodying national characteristics, and … obliged to serve national interests’ (p. 247) by generating economic activity, soft power and globally competent graduates (p. 257). The global mission was seen as compatible with the national mission, though some interviewees stated that the higher priority was educating national students. Here international students were seen primarily as a means of fostering cultural awareness at home (p. 256).
In the Anglo-American universities studied by Friedman ‘the global has arisen alongside the national without displacing it’, and ‘the two can be mutually accommodating’ (Friedman, 2018b, p. 259). Though university personnel still have to work both scales, scale mixing is smooth in institutions for whom the global norms, models and language are also national. However, that relation between the global scale and the national-local scales is less comfortable in the majority of countries with non Euro-American languages and cultures. Cross-scalar tensions more readily arise. As Yang (2014) notes in relation to China:

To non-Western societies, modern universities are an imported concept. They originated from Europe, spreading worldwide from the mid-19th century to the present time mainly due to colonialism. Even the countries that escaped colonial domination adopted Western models as well. The European-North American university model has never been tolerant toward other alternatives, leading to the inefficacy of universities in non-Western societies, on whom a so-called ‘international’ perspective has been imposed from the outset. What is lacking is an appropriate combination of the ‘international’ and the local. Within the contemporary context of Western dominance, internationalisation of higher education in non-Western societies necessarily touches on longstanding knotty issues and tensions between Westernisation and indigenisation. This is particularly true in China, a country with a continuous history of fostering unique cultural heritages for thousands of years (Yang, 2014, p. 153).

Scale jumping and cross-scale complementarities work until they do not. In the decoupling of scientific relations between the US and China after 2018, defensive national geo-politics trumped global collaboration and national/global synergy (Lee & Haupt, 2020). Another manifestation of tensions between on one hand global relations in higher education, on the other local sensibilities and national policy, is the reduction of international student numbers in Denmark (Tange & Jaeger, 2021). Multiple scales trigger anxieties as well as opportunities. International students find new freedoms and cultural hybridities in moving across borders but also loneliness (Sawir et al., 2008), displaced locality and fragmented identity. Further, as well as augmenting scope, activity and capacity, scale jumping can also trigger reductions in scope, activity and responsibility (Stein, 2017, p. 542).

Concluding thoughts

Spatial analysis, the investigation of space-making and the use of scale as a
variable provide higher education studies with useful tools. Despite the broad take-up of the glonacal paper (Marginson & Rhoades, 2002), so far these tools have been under-utilized in the field.

Spatiality can be used to imagine new possibilities as well as record current events. In one respect there is clear scope for space making in higher education that moves beyond nationally-bound approaches, and the glonacal idea, while working with a sensibility already present. That is by advancing in the sector the ecological notion of a single interrelated, interconnected and interdependent world that Gagarin was the first to see fully in 1961.

What are the possible prototypes for a one-world scale populated by ‘globally oriented citizens’ (Matthews & Sidhu, 2003) in higher education? The ancient Chinese idea of tianxia, a world without borders held together by ethical relations rather than coercive practices, is one starting point, provided tianxia is understood as planet-centred rather than China-centred (Yang et al., 2022). Higher education as tianxia would include all nations, regions, localities and institutions, without dissolving them, while giving normative primacy to the common space. Tianxia is positive sum rather than zero-sum in relation to the nation and other scales. It is closer to the one-world idea than any other extant model. It may be too implicated in its long and varied Sinic history, just as ‘globalization’ might have become too closely associated with world capitalism, Anglo-American hegemony and neoliberal norms. Regardless, three aspects are worth taking up in any one-world development.

First, a one-world space in higher education would be exhaustively inclusive, an ‘ecology of knowledges’ (Santos, 2007) in which all languages would be welcome, with ‘harmony in diversity’ on the basic of a common humanism (Xu, 2022). Second, it would embody equal respect for differing national-cultural-civilizational traditions in higher education. This might be closer than it seems. Yang (2019) advocates higher education that grants equal status to ‘Western’ and Chinese civilizations (p. 68) and argues that the best East Asian universities already combine them (p. 70). Third, the one-world space would be sustained by positive not negative affect. It would be grounded not in the fear of the other beyond the border that powers methodological nationalism, but in mutual support, and the shared benefits of knowledge exchange and curious learning.

Whatever happens to the one-world ecology in general and in higher education, relational space in higher education will not stay still. Space is continually being re-imagined and newly practised, by emerging agents who create objects, relations and selves. Just as in the last twenty years, agents in
higher education will be in the forefront of spatial imagining:

We are always, inevitably, making spaces and places. The temporary cohesions of articulations, of relations, the provisional and partial closures, the repeated practices which chisel their way into being established flows, these spatial forms mirror the necessary fixings of communications and identity (Massey, 2005, p. 175).

References

Retrieved from https://doi.org/10.1177/026327690007002017


from https://doi.org/10.1177/0263211X990273006


Jones, G. (2008). Can provincial universities be global institutions? Rethinking the institution as the unit of analysis in the study of globalisation and higher education. *Higher


82-90. Retrieved from http://dx.doi.org/10.1108/09513540210418403
Shahjahan, R., Ramirez, G.B., & Andreotti, V. (2017). Attempting to imagine the
unimaginable: A decolonial reading of global university rankings. *Comparative Education Review*, 61 (S1), S51-S73. Retrieved from https://doi.org/10.1086/690457


Xu, X. (2022). Internationalisation of Chinese humanities and social sciences. In S. Marginson,


DEFINITIONS OF ‘INTERNATIONALISATION’ AND ‘GLOBALISATION’

• Global relations stitch the parts of the world closer together and create a common space for worldwide (and large regional) action and inter-action
• Inter-national relations presume nations as the building blocks, global relations do not
• The global scale does not contain all other scales, nor is it necessarily dominant (politically, nations are much stronger)
THEORIZING BEYOND THE NATION-STATE HAD BECOME ESSENTIAL: THE GLOBAL SCALE WAS EVER MORE MATERIAL

In Theory of Society Luhmann (2012) remarks that the decisive step towards world society was ‘the full discovery of the globe as a closed sphere of meaningful communication’ (Volume I, p. 85)

IN THE STANDARD MODEL HIGHER EDUCATION CONSISTED OF LOCAL INSTITUTIONS IN BOUNDED NATIONAL SYSTEMS – WITH MARGINAL INTERNATIONAL CONNECTIONS AT THE BORDER

But we saw not two dimensions of higher education activity, we saw three dimensions

Glonacal =

\( \text{global} + \text{national} + \text{local} \)
• Flows of people, ideas, knowledge, models, technologies and money, are agent driven
• No one scale (global, national and local) is necessarily dominant
• Simultaneous flows in all three scales
• ‘at every level – global, national, and local – elements and influences of other levels are present’
• Unevenness and inequality, but also reciprocity between scales
The methodological nationalist believes ‘the nation/state/society is the natural social and political form of the modern world’ (Wimmer and Schiller 2002). Shahjahan and Kezar (2013) discuss the ‘national container’ that blocks larger awareness in higher education studies. Through this lens global phenomena are perceived only within the national scale, as if they are functions or outgrowths of the nation. International education, faculty mobility and scientific cooperation (even global ecology) are pushed to the edge of vision.


The Glonacal Paper after 20 years: Spatial Analysis in the Study of International Higher Education

THE NATIONAL CONTAINER STILL BLOCKS THOUGHT FROM RANGING BEYOND IT
IS HIGHER EDUCATION A SUB-SET OF A SINGLE ‘GLOBAL KNOWLEDGE ECONOMY’?

GLOBALISATION SPECIFIC TO HIGHER EDUCATION
HENRI LEFEBVRE ON SPACE MAKING

• In *The Production of Space* (1991), Henri Lefebvre seeks to ‘analyse not things in space but space itself, with a view to uncovering the social relationships embedded in it’ (p. 89). He starts from a three-way distinction between space as physical-material (nature), space as mental-imaginative, and space as social relations (pp. 11, 27).

• Lefebvre also notes that social relations in space are ‘a means of control, and hence of domination, of power’ (p. 26). ‘The dominant form of space, that of the centres of wealth and power, endeavours to mould the spaces it dominates (i.e, peripheral spaces), and it seeks, often by violent means, to reduce the obstacles and resistance it encounters there’ (p. 49). These efforts are never fully successful. It proves impossible to wholly ‘eliminate the autonomy of the space that has been created’ (p. 26).
GLOBAL AS WELL AS NATIONAL STRATIFICATION
Papers in the top 5% of the field by citation rate, 2016-19 papers, Leiden ranking 2021 using WoS data

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<th>University</th>
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MOBILE STUDENTS INCREASED BY 5.5% PER ANNUM 1998-2019
International or foreign students in tertiary education, world (millions) – UNESCO data

GLOBE
Some Notable Citations of Glonacal, Adaptations and Parallel Studies

- Friedman, J. (2018). Everyday nationalism and elite research universities in the USA and England. *Higher Education*, 76, 247-261. [https://doi.org/10.1007/s10734-017-0206-1](https://doi.org/10.1007/s10734-017-0206-1)

Critiques and Extensions of Glonacal

WHAT ABOUT THE GLOBAL SOUTH?

- ‘Theoretical frameworks … which emphasise the simultaneous significance of global, national and local forces on the development of higher education offer a powerful conceptual frame. However, while this provides an understanding of the relationships between systems of higher education and globalisation, it does not explicitly address the role of higher education in development.’


AND GLOBAL IMPERIALISM?

5% of global population are L1 English speakers, 10% are L2 speakers. English is now the only language of global science.
The [orthodox] concept defines internationalization as the process of integrating an international, intercultural, or global dimension into the purpose, functions, or delivery of higher education. It has served the field extremely well, especially in its analysis of activities at institutional level. However, this definition is only based on and thus suitable for Western experience. To non-Western societies, modern universities are an imported concept. They originated from Europe, spreading worldwide from the mid-19th century to the present time mainly due to colonialism. Even the countries that escaped colonial domination adopted Western models as well. The European-North American university model has never been tolerant toward other alternatives, leading to the inefficacy of universities in non-Western societies, on whom a so-called “international” perspective has been imposed from the outset. What is lacking is an appropriate combination of the “international” and the local. Within the contemporary context of Western dominance, internationalization of higher education in non-Western societies necessarily touches on longstanding knotty issues and tensions between Westernization and indigenisation. This is particularly true in China, a country with a continuous history of fostering unique cultural heritages for thousands of years.”

REASSERTION OF THE ‘NATIONAL CONTAINER’: IMPACT OF GEO-POLITICS

- Nativist politics across the world
- Resistance to international students in some countries
- Brexit weakens Erasmus mobility and research collaboration
- US-China decoupling in science
- ‘Securitisation’ of higher education takes priority over university autonomy and academic freedom
- Russia closes up and breaks with international networks


~ DOREEN MASSEY

Scientific discovery, which is fundamentally borderless, is being politically bordered. Geopolitical tensions between the United States and China have spilled over into academic science, creating challenges for many scientists’ ability to fully engage in research and innovation’ – Jenny Lee and Xiaojie Li, Racial profiling among scientists of Chinese descent, 2022

Simon Marginson 131
LOCAL, NATIONAL AND GLOBAL HIGHER EDUCATION:
A MULTI-SCALAR SPACE OF POSSIBILITIES