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SPECIAL ISSUE PAPER



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Interjecting the *geographies of skills* into international skilled migration research: Political economy and ethics for a renewed research agenda

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Abstract

There is now a large literature on skilled migration, which uses multiple definitions, concepts, theories and understandings of skilled migrants. However, this research has not adequately considered the geographies of skills—the spatial and temporal relations through which skills get meaning, are accrued and claimed and their outcomes and how these shape and are shaped by skilled mobilities and migration. This paper explores sites and networks as two interrelated elements of a geography of skills in order to highlight how they have prescribed, produced, prevailed and precluded who attains the skills to migrate. The paper goes on to outline how and why the geographies of skills and skilled migration matter in contemporary knowledge capitalism and the ethical issues they raise for a renewed research agenda on skilled migration. Crucially, it suggests that the spatio-temporal configurations of skills raise not only empirical and analytical questions but also normative ones about the politics and ethics of skilling.

KEYWORDS

ethics, international skilled migration, networks, political economy, sites, skills

1 | INTRODUCTION

Skilled migrants are one of the few migrant groups welcomed globally as they are seen as adding economic value, occupying jobs that cannot be filled nationally and also able to 'integrate' locally (Cranston, 2017). Although none of these are universally true, they have become the mantras surrounding skilled migration. However, scholarship has also pointed to the vagaries of the definition of skill in skilled migration, pointing to how skills are social constructed and highlighting the who, what and how of skills as they play out in migration (Liu-Farrer et al., 2020). Research has focused on the different

Data sharing not applicable to this article as no datasets were generated or analysed during the current study

actors and policies associated with migration (Boucher, 2020), the variable content of skills (Kofman & Raghuram, 2013) and the processes through which skills are acquired, assigned and eroded before, during and after migration (Nowicka, 2014; Walton-Roberts, 2020).

In this paper, I seek to add to this literature by exploring the geographies of skills¹ and the role of mobility in producing these geographies. Investigating the sites, networks and spatio-temporalities of skills acquisition and reproduction, I argue, enables skilled migration researchers to reorient their work beyond the body of the skilled migrant or even of skilled migration policies and to include the structures and conditions in which skills are acquired and deployed. The paper explores how these spatio-temporal relations prescribe, produce, prevail and preclude who becomes skilled. The hierarchical power relations of sites, the stretch of networks and the topological

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power relations that shape skills are outlined. The paper ends by asking how these spatio-temporal qualities of skills play out in contemporary capitalism and the inequalities that arise as a result. It suggests the need to explore these inequalities by addressing the political and ethical issues posed by skilled migration.

Much of the skilled migration literature has assembled around migration and the mechanisms of migration policy (see Allen & Axelsson, 2019), overemphasising origin-destination narratives and the migration experience as the primary event in skilled migration. This paper, in arguing for a recognition of the geography of skills and not just of migration, joins a body of work that aims to decentre migration and address the over-valorisation of the migrant in migration research. For instance, Dahinden (2016) suggests that focusing on mobility and movement enables researchers to go beyond a focus on migrant populations as separate from non-migrants. She argues that this approach also reduces methodological nationalism, that is, the tendency to see the nation as a unified and singular entity in migration research. In a similar vein, Raghuram (2009b) contends that it is important to understand skilled migration through the spatialities of other categories such as health and study (Madge et al., 2015; Raghuram, 2013), categories that are important to both migrants and non-migrants. This paper adds to that literature by pointing to the spatio-temporalities of skills and how they are reflected and refracted in migration streams. Crucially, it suggests that the spatio-temporal configurations of skills raise not only empirical and analytical questions but also normative ones attuned to the politics and ethics of skilling.

The rest of this paper is divided into five further sections. The second section briefly reviews existing concepts and policy-related definitions of skills that have been employed in discussions of skilled migration thus far. The third section conceptualises some of the spatio-temporal aspects of skills using sites and networks as an organising frame. Although sites and networks are always entangled, they are heuristically separated here as sites are seen as nodes along networks. The fourth section explores how these sites and networks have been produced in and through particular power relations. It outlines how skills are prescribed, produced and have prevailed over time to develop certain sites and network of skilling, whereas other sites and networks have been precluded from skills, and thus, from skilled migration. The fifth section sets out some of the political and ethical questions that this spatiality of skills poses.² The paper ends by outlining some questions that including the spatiality of skills into skilled migration literature offers for a reinvigorated research agenda.

2 | SKILLS IN SKILLED MIGRATION: DEFINITIONAL AND CONCEPTUAL MULTIPLICITY

The number of skilled migrants has increased—between 2000 and 2017 there was over 200% growth in tertiary educated migrants globally (UNESCO, 2019). As skilled migration has grown, so has research on the underpinning migration schemes and skills selectivity (Boucher & Cerna, 2014), the nature of skills, the effects of skilled

migration and how gendered and other inequalities shape this phenomenon (Nijenhuis & Leung, 2014; Raghuram & Kofman, 2004). These insights into the geographies of knowledge mobility and the mobility of skills (Jons, 2016; van Riemsdijk & Wang, 2017) have come from a range of disciplines and sub-disciplines such as anthropology (John, 2019), geography (Beaverstock, 2017; Cranston, 2017; Faulconbridge, 2006), economics (Kerr et al., 2016), sociology (Ryan & Mulholland, 2014), politics (Boucher, 2020), philosophy (Sager, 2017), migration studies (Czaika & Parsons, 2017) and human resources management (Adler, 2002; Crowley-Henry et al., 2018). Together, it has led to a plethora of insights that have contributed a rich vein of thought on skilled migration.

Moreover, skilled migration research is also related to, sometimes coterminous with, other concepts that abound in migration studies. Skills sit alongside categories such as talent (Yeoh & Huang, 2011) and knowledge work (Friesen & Collins, 2017), which emphasise different aspects of skills: their intrinsic qualities, values, process of acquisition and how they are entangled with other identity markers such as gender and race (Simon-Kumar, 2015) and with life processes such as child-rearing (Shinozaki, 2014) and ageing (Biggs et al., 2013). When coupled with migration, the effects of skills circulations continue to be debated through the frame of brain gain/drain/circulation/ strain and chains (Kone & Ozden, 2017). Though education remains the key modality of acquiring skills (EIGE, 2017; Hall, 2007), softer skills are acquired through enculturation, both in office spaces and beyond (Beaverstock, 2004; Beaverstock, 2011). Moreover, skills also have affective qualities (Conradson & Latham, 2007) and are seen as entangled with material objects (Cox, 2016), following the new materialist turn.

These definitions of skills mutate in the context of skilled migration as they are socially constructed through multiple actors and policies (Liu-Farrer et al., 2020). They become knowable and classifiable through proxies such as education, age, years of experience, labour market sector and income as well as through composites of a selection of the above. These provide a basis for filtering out who is required and valued and those who may be required but whose knowledge, skills, and thus presence are given much less value. However, the nature and definition of skills alters as it becomes associated with embodied characteristics like age and gender, or coupled with, sometimes replaced by, criteria such as income and by changing labour market requirements (Oishi, 2020). These lead to differentiated outcomes for migrants particularly in the labour market (see Figure 1), depending on the migration and integration policy regimes, which vary nationally, regionally (Taylor et al., 2014) and sectorally (Hawthorne, 2016). The outcomes of skilled migration, therefore, do not always lead to skills utilisation as these characteristics intersect with the geographies of skill (see Figure 1).

Who becomes skilled, which skills are acquired and lost, their qualities and which inequalities intersect with their acquisition, loss and circulation are spatio-temporally sensitive (Man, 2004; Raghuram & Kofman, 2004; Vouyioukas & Liapi, 2013). The next section explores the sites and networks that mark the spatio-temporality of skills.

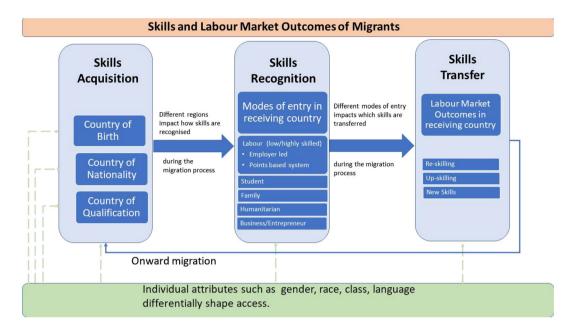


FIGURE 1 Skills and labour market outcomes of migrants

3 | GEOGRAPHIES OF SKILL: SITES AND NETWORKS

Research on the geographies of skilled migration has emphasised particular migration flows and sites. Firstly, it has been dominated by studies of global South-North migrant flows (Artuc et al., 2015; Kerr et al., 2016) although the growth of circular skilled migration makes this picture more complex. Secondly, research has focused at the level of countries, especially OECD countries with large and well-used skilled in-migration schemes such as Canada and Australia (Boucher, 2016; Hawthorne, 2016) and emerging financial and education hubs in Singapore (Beaverstock, 2011; Ortiga et al., 2017), Qatar (Babar et al., 2018) and Dubai (Coles & Walsh, 2010) where skills selectivity has been used to attract skilled workers or the proportion of foreign-born populations is high. Thirdly, cities have dominated skilled migration debates as they are recognised as primary sites of in-migration because of the economic, cultural and social opportunities they offer (Ewers, 2017; Ewers & Dicce, 2018). In focusing on migration, this body of work also casts light on the geographies of skills, albeit, often tangentially. Below, I explore two lenses through which these geographies of skills can be further understood. The first focuses on places as sites of skills development, transformation and deployment, whereas the second looks at the role of spatial networks.

Sites are points of agglomeration or nodes along and within networks of skills creation, validation, access, transfer and translation. Sites and networks are thus inherently related and only divided here for heuristic purposes. Moreover, sites may also be understood as points of density, which are inherent to skills mobility. The spatial stretch, authority and reach of skills are constituted through mobility. This stretch is brokered both across sites and through networks connecting and disconnecting sites. Thus, skills mobility is productive of sites and vice versa. Finally, the different degrees of spatial stretch,

the authority of sites and the depth and intensity of the networks are variably powerful/powerless. Power is brokered in and through sites and is enabled and disabled through networks. Moreover, power also operates, in the geographies of skills, through a series of actions—prescribing, producing, prevailing and precluding. Understanding these geographies of sites enables us to better understand power relations as they operate in ways that are hierarchical, networked and topological (Allen, 2009).

3.1 | Sites

Even in a world of mobility, skills are situated, with place influencing the development and ascription of skills at multiple scales (Raghuram, 2019). Moreover, these sites are often hierarchically ordered and have different authorities and powers to mediate skills production and reproduction. The nation is one such site of skills development. The state, by regulating and providing education, shapes skills. Moreover, the state and its intermediaries such as accreditation boards and professional certification authorities define skills in particular ways, shaping both migration and labour market outcomes for skilled migrants. For instance, in Germany, nursing programmes are 3 years long and are based in specialised teaching hospitals; nursing is seen as 'vocational'. By contrast, in Canada and the United Kingdom, nursing education is a university-based 4-year degree programme and categorised as skilled (Taylor et al., 2000). Consequently, German-trained nurses have less ability to migrate through skilled migration streams as they may not meet receiving countries' accreditation requirements.

These differences become hierarchical when the skills of some nations and their people are seen as superior to that of others. Thus, Amrute's (2016) study of Indian and German information technology

(IT) workers found that migrant Indians were seen by their German employers and co-workers as less skilled because of the repetitive nature of programming done by the Indian workers. As a result, Indian IT becomes the minimal threshold category beyond which lie the 'higher' skills of the German IT workers. Clearly, this is a question of race, but race itself is intimately tied with nation. As van Riemsdijk (2013) points out, Polish migrant nurses in Norway were seen primarily as 'Polish', as part of a 'less advanced' Eastern Europe, and hence, other markers of their identity such as whiteness, usually valuable in international skilled labour markets, were erased. The racism and sexism that skilled migrants face are often ignored as skilled migrants are seen as privileged (Cranston & Lloyd, 2019). Moreover, enduring racisms against some national groups can mean that even the children of migrants from those countries can have their labour market opportunities 'compromised by racial status hierarchies that force them into ethnicized segments of the labor market' (Weiß 2016 n 400)

The nation as site not only influences the nature of skilling and skills validation but also discourses around skills utilisation. For instance, the site of skills development is normatively collapsed with that of *skills deployment* in discussions of brain drain: skilled people are normatively expected to practice their skills in the country where they acquire them. The values skilled migrants bring back with them—economic, social and cultural—when they return are also framed within a national framework (Gaillard & Gaillard, 2015; Williams & Baláž, 2008).

Another site for situating skills is the *city*, a hub that brings together different kinds of skilled people (Florida, 2002; Richardson, 2016), with multiplier effects, eventually leading to a new geography of jobs (Moretti, 2012). Global cities attract skills as working in such cities is valued as a form of enculturation for enabling skills deployment and facilitating the careers of those working there. This authority of the city in brokering careers is particularly manifest in highly skilled sectors such as banking and consultancy. Cities are also the object of intervention of skilled migrants (Cochrane & Ward, 2012). For instance, mobile urban policymakers and technology workers come together to produce smart city infrastructures, and also move, circulating urban policies around cities. This is a rich vein for future research that can potentially stitch together the work of urban geographers with that of migration researchers.

Institutional spaces such as universities are also important sites for skills creation and mobility. Universities offer a means for international student migrants to acquire skills and knowledge recognised in 'local' and international labour markets (King & Sondhi, 2018; Waters & Brooks, 2011), which they can use for stay, onward or return migration (Corcoran & Faggian, 2017). Universities are also hierarchically ordered through rankings, which are themselves influenced by where universities are located. The site of a university can draw on long-standing authority of particular places (e.g. Oxford) in skills development or on being situated in global cities (e.g. New York). Hence, different sites (nation, city, university) of skills development are not mutually exclusive but shape each other.

A less well-studied institutional site is the *workplace*. Although economic geographers (Hall, 2017) and those researching human resources management (Napier & Taylor, 2002; Taylor et al., 2002) have focused on the mobility of skills, questions of how migrants navigate skilled workplaces have received less attention from migration scholars. Universities also form sites of employment of skilled migrant labour, and for the exercise of student and labour agency, offering rich avenues of engagement with research in labour geographies (Neilson, 2009). The emphasis on migration and family rather than on the nature of work stands in stark contrast to migration research on lesser skilled migrants (Buckley et al., 2017; McDowell, 2015) where the three Ds—dirty, dangerous and demeaning—are often the focus (Bauder, 2006; Polanco, 2016; Tyner, 2000).

Research on lesser skilled migrants has also highlighted the corporeality of skills, which is often missing from skilled migration research. For skilled as well as for lesser skilled workers, one site of skills is the body. Skilled migrant workers not only have to perform the embrained work for which they are often recruited but must also behave, dress and comport themselves in socially and culturally appropriate ways in the countries in which they work. They, however, also bring their own social norms with them. Post-migration, they thus negotiate between the norms of the spaces or workspaces of receiving and sending countries, of daily habitation and of the collectivities that already inhabit these sites. Most of the adjusting between these norms has to be done by migrants, who are usually hierarchically situated below the non-migrant. Integration thus remains a neo-colonising project as it produces migrant subjectivities as in-deficit, as traditional, or lacking in some ways (Raghuram, 2007; Schinkel, 2018), reinscribing the relations of power between those who inhabit the space and those who are only now entering those spaces (Bulley, 2017; Puwar, 2004). Integrationist models applied in workplaces discount the embodied, embrained and encultured skills required to reorientate in postmigrant workplaces (Schumacher & Leung, 2018; Sondhi, 2019; Sondhi & King, 2017).

3.2 | Networks

Although sites offer one route into analysing skilled migration, another is the different *networks* that enable skilled migration but also disable them. These different relations between networks and skills are, however, rarely analysed when it comes to the skills of migrants (rather than skilled migrants). Migrants' networks have been widely studied, but they usually focus on social networks based on, for instance, ethnicity. However, for many migrants, the workplace is a place of sociality too. This is particularly true for skilled migrants as workplace conversations and friendships help to provide access to international assignments (Beaverstock, 2011; Faulconbridge et al., 2007). Yet, the role of such networks, not only in personal careers but also in transfers of knowledge and practices (Cochrane & Ward, 2012; Schumacher & Leung, 2018), are often little recognised in current skilled migration literature. The racialised and gendered nature of these experiences also needs attention. For instance, though the

networks of skilled migrants may enable entry to jobs, career progression often depends on entry into the much more influential non-migrant networks, many of which exclude migrants, especially racialised migrants (Raghuram et al., 2010).

Organisational and (non)migrant networks also stretch across time, as skills are produced across proximate and distant networks in communities of practice (Lave, 1991; Raghuram, 2009b), such as a medical fraternity or batchmates with whom people studied. Moreover, these can also operate across generations through alumni associations and through teacher-student or apprentice-mentor relations where not only skills and knowledge but also contacts are transferred intergenerationally (Madge et al., 2015). Practices are also transferred intergenerationally, including in the domestic setting as mothers teach their children citizenship (Erel et al., 2018). Although existing research has pointed to the importance of the life course on skilled migrants (Kõu et al., 2015), skills have their own temporalities too, which fold in places near and far. For instance, colonial histories of skills development can lead individuals to become part of ways of thinking, working and acting in the world through mentors, teachers and supervisors who had traversed similar paths and across generations. Such histories of migration not only reproduce skills but also lead to their creation and evolution. Crucially, networks enable both migration and the production and circulation of skills; both migration and skills require networking (Abuosi & Abor, 2015).

At a macro level, international trade and policy networks also play a crucial role in the creation, validation and circulation of skills across boundaries. They enable different groups to become (im)mobile along existing and emerging corridors, hence shifting the geographies of skills and their circulation. For instance, the Belt and Road Initiative (BRI), a network of dozens of countries (Constantinescu & Ruta, 2018) connecting China and Europe and beyond, has altered the meanings of skills, the place of their acquisition, their recognition and their articulation as it occurs within and across these countries. China has facilitated education and training for its development, emphasised 'Chinese' experience as a desirable quality and, in doing so, drawn on the cultural authority of the old Silk Road along which goods, ideas and knowledge were exchanged over a thousand years ago (Meng & Nyantakyi, 2019). Thus, networks shape skills.

Finally, to reiterate, sites and networks are deeply entangled. Sites have different positions within skills networks—escalating the value of some skills and reducing the value of others. Some sites ('global' cities, for instance) transform the quality of skills, providing experience, enabling the learning of a language or enculturation into particular dispositions that can propel migrant careers and providing them a different position within the hierarchy of skills. Other knowledge may however be diminished due to deskilling. Skills thus both accrete and deplete across networks and in different sites. Moreover, skills also increase the value of some sites as they become recognised for the potential they offer for skills development and accretion.

Whereas this section has explored some of the hierarchies of skill manifested through sites and the networks through which the geographies of skills are produced, the next section outlines four ways in which power operates in entangled ways to shape skills.

4 | OUTCOMES OF THESE GEOGRAPHIES OF SKILL: SPATIO-TEMPORAL FORMATIONS

There are numerous ways in which temporalities of migration are traced (Cwerner, 2001; Robertson, 2018). These include the nation (de Haas et al., 2018) whose health and well-being alters with mobility of skilled nurses and doctors, cities whose competitiveness is escalated through skilled migrants (Ewers & Dicce, 2018; Florida, 2002), institutions that gain income and prestige through mobility (Raghuram, 2009b), families (Kõu et al., 2015) that have to change kinship arrangements and forms of care to cope with the distances that migration poses and individuals whose own horizons of work and study alter as they move (Baas, 2017; Weller, 2017). Moreover, the units of time also vary—from periodic assessments, usually related to data gathering, to more endogenous categories such as life stages (Collins, 2014; Zontini, 2015), life events (Kõu et al., 2015) and career stages (Czaika & Toma, 2017; Weller, 2017). Finally, these temporalities of people's own lives also intersect with political and economic events that are traced across nations such as regionalisation and institutions shifts (Baláž et al., 2018), and economic crises (Gandini & Lozano-Ascencio, 2016; Triandafyllidou & Isaakyan, 2016), when economic changes at the level of the nation, or even factors such as the global recession, affect economic opportunities and hence, the migration of people.

Together, this body of work points to the tempos, rhythms, interruptions and stoppages that mark skilled mobilities. They offer a synchronic analysis, that is, one that highlights the temporal rhythms of migrants that shape *mobility* across space. Less well studied in the skilled migration literature are the shifts in notions of *knowledge and skills* over time, that is, a diachronic analysis (Herbjørnsrud, 2019). A diachronic analysis can reveal the evolution and circulation of different meanings of skills and their impact on skilled migration. In particular, it facilitates understandings of the mechanisms through which the spatialities of skills prescribe, produce, have prevailed and precluded some people from skilled mobility.

4.1 | Prescribed

At the global scale, skills are not only defined but also prescribed through specific instruments, policy structures and tools and through institutions such as the International Labour Organisation (Reddy, 2018), the World Bank (World Bank, 2007) and the Asian Development Bank (ADBI, 2014). These organisations have distinctive remits, but together they create a framework for the recognition of skills and funding mechanisms for government initiatives around delivering skills enhancement in a changing world. They have also altered the agenda from education and training for social and economic development to knowledge and skills required for the labour market, aligning with the current needs for a global knowledge economy through notions such as '21st-century skills'. This has been accompanied by shifts from primary to tertiary education and training (World Bank, 2019) and an emphasis on lifelong learning as a means to skilling

up to ensure that a relevant skilled workforce needed for rapidly changing nature of work is always available (ILO, 2018). These prescriptions enable certain forms of skills development.

However, global prescriptions have to mingle with, and have to be delivered by, national skilling institutions, particularly accreditation bodies. As we saw earlier, in the health services sector, nursing and midwifery have, over the years, in countries such as Canada and the United Kingdom (Taylor et al., 2000), shifted from a 3-year vocational education programme to a university degree programme, thus moving it from a semi-skilled to a skilled profession. Moreover, as a result, countries with high rates of nurse emigration, like India and the Philippines, have aligned their programmes of nursing education to Canadian and British systems to produce nursing training that accede to the temporalities of skills definition in receiving countries. This is one example of how the topological foldings of power and of outside regulations pervade and prescribe the shape of training in sending countries. However, when one nation reaches into and reshapes training in another, it influences not only migrant skills but also nonmigrants' skills and knowledge base. In effect, the prescription of skills through mobility regimes goes well beyond migration, influencing nursing and definitions of caring skills more widely.

4.2 | Produced

Although skills can be prescribed, they also evolve as they are produced through geographically differentiated practice. For instance, although IT workers are now seen as the archetypal skilled migrants, the entry of IT into the skilled domain is relatively new. IT has become 'skilled work' in part not only because the content of IT work and its centrality to current modes of organising life have changed but also because of how and where IT practice has evolved in different places as we will see below. These practices were performative and have produced IT as skilled but also led to exclusions and inclusions of who can and is skilled.

In the United Kingdom, in the 1950s, skills were associated with manual craft work and low-level technology, largely done by men. However, in the decades after the Second World War, the 'functional dependence' and 'cultural inferiority' that marked applied science (Forman, 2007) along with US investment in technology education and development globally led to a dominance of technology in defining skills. Moreover, technology has itself moved from a low-skilled to a 'high-skilled' activity in line with the emphasis of the production of high-value-added products in a skilled economy (Lloyd & Payne, 2002, 2003). The United Kingdom, like many other parts of the world, now focuses on generic and transferable skills and on technology as a core aspect of skill.

However, IT has also evolved in geographically distinctive ways. Initially, in the United Kingdom, IT arose as an extension of women's secretarial work because categorising and tabulating, the primary functions of early computing systems, were the domain of women (Hicks, 2017). This work was considered secondary to the primary skilled work done by men (Davies, 1996). However, as computing and

IT skills gained recognition as the skills of the future, women were systematically removed from the field, or their presence made invisible, slowly shifting the gender balance in IT and thus in the archetypal skilled work (Hicks, 2017).

In the United States, the masculinisation of IT had a different trajectory. It became associated with research and the university computer lab (Ensmenger, 2015). The lab was, however, an increasingly homosocial space, marked by masculine rites of passage and practices that worked to exclude women.

Technology education was actively exported by the United States through the establishment of jointly built universities and through the circulation of technology graduates who went to the United States and then returned home (Leslie & Kargon, 2006). Along with this also travelled the masculinity of engineering. But IT has been less gender selective in many other countries, including India (Upadhya, 2016), Mexico and Poland (Raghuram et al., 2018; Thakkar et al., 2018), where it met local cultures of science. The postcolonial and post-socialist validation of science and technology along with the histories of class in educational structures led to a more robust participation by women in STEM education more generally and IT in particular. As a result, in some of these countries, the proportion of women in the IT sector is higher than in the United Kingdom or the United States, and often increasing.

The masculinisation of technology in the United Kingdom and the United States (as in many parts of the world) and the drop in women entering this sector were accompanied by diminishing availability of a skilled workforce, which had to be filled by migrants (Dass et al., 2015).4 IT has now become a key sector in skilled migration quotas with many of the work permits going to migrants coming from countries like India and Poland, countries with more equitable IT labour force. In the United Kingdom, the once female body of the 'IT' worker has therefore been replaced by migrant bodies-male and female. However, the migrant skilled worker is often asked to take up particular tasks that are then cast as 'adjunct', less specialised and routinised, whereas the non-migrant body is valorised as performing the more specialised and creative tasks. The division and categorisation of work as adjunct and 'specialist' are thus now also mapped through migration policies and categories, with differential rights afforded to those who are seen as skilled rather than highly skilled.

In sum, the IT sector, generally understood to epitomise skilled work and sought after in skilled migration regimes, was produced in place, and in doing so, it has shifted from feminine to masculine work and from adjunct to specialised (Davies, 1996) and thus from- low to high-skilled work. Hence, the value and status of technology, particularly the IT sector, has changed alongside 'who inhabits IT' and the nature of skilled migration. These shifts in notions of skills are particularly relevant for skilled migration research today as it points to how the skill and who performs these skills in different places morph over time, influencing the differential demand for and availability of skilled migrants. Moreover, this case points to how neither skills nor therefore skilled migration are gender-neutral.

Whereas the previous subsection highlighted the topologies of power, this section shows the entanglements of different vectors of power in different sites. It has pointed to how gender differences in how a skill has developed and the definition of skills are played out both in the workplace and globally. It suggests that skilled migration cannot be analysed without understanding the production of gendered identities over time and space, its entanglement with definitions of skills and how these are shaped by and shape mobility.

4.3 | Prevailed

The meaning of skills is not only reinvented over time but also exhibits continuities across space and time. The validation of accredited qualifications in some places rather than others has drawn on colonial histories of education, qualifications and skills. Disciplines such as medicine and surgery required a period of work in the United Kingdom in order to obtain qualifications from their Royal Colleges. These qualifications drew on imperial authority to shape knowledge but also what counts as knowledge and where it could be gained. Moreover, it also had a stretch as the qualifications eased mobility within the Commonwealth countries (Raghuram, 2009a). Colonial histories thus still shape who gets accredited as skilled because colonial cores in knowledge production and skills accreditation continue to be powerful. Or, put another way, skills have their own spatialities and place attachments that may or may not match national boundariespresent or past. Importantly, places accrue power through these attachments so that to be a place that is renowned for skills requires that people are attracted to come there and acquire skills (Raghuram, 2013). It requires the power of reach to produce desiring subjects at a distance who want to travel to these centres. Branding and publicity are used by these centres to create the desire to study in particular sites and institutions because crucially these mobilities validate and reproduce those centres of study as important and valid brokers in skills development. The power of reach is necessary for producing and reproducing the influence of these centres.

Seeing knowledge production beyond the boundaries of a nation state involves recognising that migrants do not contribute to pre-existing knowledge and skills; rather, skills are produced in and through mobility. Histories of skills production do not simply fold distant spaces together or involve smooth flows. Rather, skills are themselves produced through these foldings, torsions, stretches and bends, that is, these are the topologies of power that shape the production of skills. They are also productive of the differential value of sites of skills production.

4.4 | Precluded

Whereas some actors are prominent in prescribing what skills should look like, others have historically been precluded from the evolving world of skills, shaped by their position within the circuits of knowledge production. These patterns too prevail. Whereas Europe and North America maintain their hegemonic position as knowledge producers, other places, such as much of the continent of Africa, have,

over time, been removed from the ecologies of knowledge production (Obamba, 2013). The rise of an educated colonised population was seen, in part, to have caused the First War of Independence in India also known in Britain as the Great Indian Mutiny-in 1857 (Mamdani, 2008). This set the tone for colonisation of much of Africa in the following decades. Few or no universities were established in the colonies after the lessons learnt from India, so the expansion of higher education largely had to await independence. Post-independence, the search for skilled workers who will drive economic growth led to a rapid rise in higher education institutions in many countries. However, the structural adjustment programmes of the late 1970s and 1980s stalled this too. As dependence on global lenders for funding higher education increased, the rising emphasis on primary education in World Bank funding schemes delimited and diminished the grounds on which many African countries could enter the knowledge economy. The tertiary education and skills that had been crucial to the making of the knowledge economy in many parts of the global South had already been unmade in Africa. Circulating policies and politics around skills alter who gets skilled, where and how and thus the terrain of skilled mobility.

As shown above, skills have their spatio-temporalities that influence and are influenced by mobilities including migration. Over time and across space, skills reflect and refract changing and uneven power relations across sites and networks. They are not only prescribed and produced but also reflect how power prevails and precludes to shape the landscape of skills. The next section explores how these are also questions of value, that is, that these forms of power matter both in contemporary capitalism and for an ethical response.

5 | RESPONDING TO THE UNEVEN GEOGRAPHIES OF SKILLS - THE POLITICS AND ETHICS OF SKILLING

The previous two sections have explored sites and networks and how power is played out across them to shape the geographies of skills. This section outlines some political and ethical openings posed by these spatialities.

5.1 | Political economy

The sites and networks of skills production and circulation are important to investigate because the current phase of capitalism, often called knowledge capitalism (Bell, 1973), depends on the differential costs of skills reproduction and valuation globally. The relations between knowledge and skills, labour and the economy are being rewritten as knowledge becomes a circulating value that can be traded (Hayek, 1945). Yet, the relations between the spatial operation of capitalism in and through skills and migration have been inadequately addressed (Bauder, 2016).

One of the key problematics that has vexed those working from a Marxist political-economy perspective on skills is differentiating

between the skilled and lesser skilled (Caligaris & Starosta, 2018; Rowthorn, 1974). This differential has been variously understood as (a) a vector of the task itself (time taken to undertake it or the intensity of labour); (b) the productivity of labour, that is, its relation to returns on capital; or (c) the time and effort taken to acquire the skill required to perform the task, that is, to reproduce this labour (Elson, 1979). For Bourdieu (1986), and in the context of skills, the last of these is embodied cultural capital—which has to be produced not only through education but also intergenerationally by developing the habitus necessary for capital. The higher remuneration awarded to those with skills is considered as a multiplier of one of these numerical variants.

However, employers while recognising the need to pay higher wages for skilled labour also seek to reduce the costs of these skills. This is often achieved by sourcing skills from places where the costs of the reproduction of these skills are less than where these skills might be deployed. It is usually lower because the costs of overall social reproduction that underpin and articulate with production (Fraser, 2014; Kofman & Raghuram, 2015) are themselves lower, because of differentials in the costs of living and of education or of differentials in the value of currency. As costs of reproduction of skills vary, so do the costs of skills. But these costs are also borne unequally across the family, community, state and private sector so that not only how much the reproduction of skills costs but also who bears these costs differs globally. Sites therefore matter in skills development. In globalised capitalism, national tariffs for education and training provision and skills development are kept low through substitution, that is, the replacement of local skilled workers with migrant workers (Afonso & Devitt, 2016; Busemeyer & Trampusch, 2011). However, the situated value of labour (national, urban, institutional) changes over time as the costs of the reproduction of this labour alter, leading in effect to skills shopping, that is, search for new sites for cheap skills. Hence, not only does place matter in skills but also the spatial networks of skills exchange.

Notably, not all labour is substituted or substitutable with customer-facing jobs, for instance, retained for those who have racialised and gendered authority, whereas back-end jobs are peopled by racialised bodies (Duffy, 2011). The political economic value of labour is also produced over time and space in embodied ways. Moreover, these values can be recalibrated through agreements between nations as part of trade deals, through consortia of nations with cross-accreditation of skills and through student mobility programmes. It can also be reworked through situated networked agency, such as collective bargaining and protests. The value of labour is then based on how the skill is produced as a tradeable commodity at sites but also through networks and collectivities.

Crucially, these differences in the value of labour across space form one mechanism used by firms to drive down costs of production. Discussions of skilled labour migration have largely eschewed the nature of work, the time and intensity of labour (Nadeem, 2009) and the differential value of this labour globally, instead positing skilled migration as elite, privileged or, at least, middling (Rutten & Verstapen, 2014). Yet, given the spatio-temporally variegated nature

of skills and thus of the availability of skilled labour, the ways in which different sites are drawn into skills arbitrage and the topological foldings of power in skilled migration require more attention. Firms benefit from geographical inequalities in the cost of production and reproduction of skills, and these are played out in skilled migration.

5.2 | Ethics

So, how can researchers shape an ethical response to these inequalities? Currently, the ethics of skilled migration has primarily been seen through the lens of brain drain, that is, the ethics of migration among those who are skilled. However, the previous sections suggest that this must be accompanied by working through the ethics of the geographies of skills that underpins the ethics of skilled migration. Focusing on the ethics of the geographies of skills does three things. First, it helps to get past methodological nationalism in debates on brain drain. Skilled mobility, especially that of health workers, is one of the most ethically ambivalent forms of migration, with the rights of the health worker to move posited against the rights of the resident population to health. These two contrasting rights and the values attached are, however, underpinned by methodological nationalism, that is, people should practice their skills in their 'home countries' irrespective of where they acquired them (Brock & Blake, 2017). However, there have also been critiques of the methodological nationalism inherent in this brain-drain debate (Sager, 2017). As Raghuram (2009a) has argued, when skills deployment is matched to the sites of skills development, it validates very particular geographies of skills, seeing them without the flexibility, history and emergence that a more networked or topological approach offers.

Focusing on the geographies of skills shifts questions of distributive justice beyond the national frame. It asks questions about the coherence of the site of justice. For Rawls (1999), issues of distribution are particularly insistent when there are shared societal structures and infrastructures, often taken to mean the nation. This is refuted by Appiah (2006, 2008) in his notion of cosmopolitan ethics. Cosmopolitan ethics is defined by two basic principles: a universal concern and a respect for legitimate difference. Together, this means that although concern is shared across nations, there is no attempt to translate this into a shared/imposed commonality in ways of life and to erase difference. Thus, a cosmopolitan ethics would mean that irrespective of where people are trained, they should be concerned and take responsibility for the health of those without health services. It is not tied to sites. It thus undercuts the national bias also inherent to the welfare state model and instead adopts a more universal

Whereas Rawls' (1999) scope of justice can be seen to limit itself to the nation, Appiah's (2008) ethics can, on the other hand, be too generalised. In effect, sites cannot be the basis for, or completely elided in, ethical endeavours. Shifting to the geographies of skills and the networks through which they are developed and fostered overcomes these issues in part. It provides another ethical community with commonalities and shared values other than that offered through

shared nationhood. Rather, the ethical community is produced and exists around networks, that is, communities of practice. Shifting ethics from migration and migrants to the geographies of skills highlights skills as a common, if variegated, basis on which ethical endeavours can be constructed.

Moreover, intertwining the ethics of skills with the ethics of skilled migration shifts the temporal register of skilled migration research. It points to the spatio-temporal variations that have led to the distribution of skills and highlights new inequalities-gendered, national, regional-and how we got here. Thus, it looks at the work done to produce the current distribution of skills and of skilled migrants, as we saw in the case of the IT workers. This spatiotemporal frame repositions responsibility beyond the skilled migrant, or indeed the conditions of skills deployment, to the circumstances through which they are skilled, to how skills are defined, to how they are attached to bodies differentially across space. This reframing shifts responsibility for ethical endeavour beyond the skilled migrant to the many others who are involved in skilling and its spatial distribution and development. It exceeds contractual models of responsibility whereby an individual or organisation alone is directly liable for the deskilling to instead see how responsibility is shared and requires collective action. Young (2006) identifies key characteristics of this social connection model of responsibility: It goes beyond identifying individuals or institutions as individually liable. Instead, it recognises structural conditions and past inequalities and how they have not only produced contemporary injustices but also produced moral agents with unequal means of addressing these inequalities and injustices. Responsibility is therefore collective, shared between a variety of people, institutions, organisations and even nations. It is identified and expressed through social connections as the basis for ethical endeavour. By applying this to the spatial inequalities caused by skilled migration, we can see that the underpinning spatial inequalities in skills and the bases on which these are constructed also enter the fray in producing responsible action.

Finally, what happens to these skills when they are redistributed through migration? The geographies of skills valuation and devaluation have been considered through the lens of race and gender with the deskilling of racialised people, particularly women, attracting considerable attention (Hawthorne, 2016). Deskilling has been variously attributed to immigration regimes, professional bodies and hiring institutions, but moving beyond the notion of direct responsibility to a social connections model of responsibility also extends who is responsible for deskilling. For instance, the racism and sexism experienced by skilled professionals are being reproduced in wider society and help to devalue skills. Responsibility thus moves beyond communities of practice, that is, the world of skilled professions, to a wider society that reproduces the hierarchies in skills valuation based on who the skilled person is and where the skills were acquired. The implicitness of place connections in racist talk, such as when people can be told to go back to places to which they appear to be normatively tethered, shows how skills too get devalued through embodiment of skilled people but also their implicit emplacement. The wider public re/produces these skills valuation in their daily interactions.

Crucially, as McKeown (2018) argues, in a global economy where there is dependency across nations, it is not the fact that we are dependent on migrant skilled professionals (alone) that produces ethical responsibility. Rather, we are all beneficiaries of the inequalities, the deskilling and the devaluing of labour that makes some skills cheap, and it is this that makes us responsible. For McKeown (2018), it is 'the fact of my dependency on the exploitation of others generates political responsibility to struggle against it' (p. 491). The political economy of skills, the inequalities that drive labour arbitrage in skilled migrant sectors and the consequences of this are therefore the impetus for ethical responsibility. Focusing on skills, how they are attained, deployed and crucially how these become part of migration trajectories, is not only an analytical gesture but also an ethical gesture. Moreover, how we benefit from the spatial inequalities in skills is particularly pertinent for academics who are often arbiters of skills.

6 | CONCLUSION

This paper has argued for inserting the geographies of skills—the spatial and temporal relations through which skills get meaning, are accrued and claimed and how skills come to matter—into the geographies of skilled migration. Shifting the object of concern from the spaces of migration to the spatialities of skills that underpin skilled migration offers opportunities to engage debates and questions that go well beyond existing research on skilled migration. It points to the different sites and networks that are crucial to their production and reproduction. It also shows the multiple ways in which power operates to shape skills, that is, by prescribing, producing, prevailing and precluding.

The rest of this concluding section outlines some questions this raises for future research: What are the place attachments of different types of skills? Where do they appear/disappear, and what is the work that skills do to validate places as centres of knowledge and of capitalism? How do these skills get produced in relation to other places, and what are the places precluded from these circulating forms of power? What are the inequalities in skills development, accretion and deployment? What are the temporal contours that shape these circulations, networks and sites of skills and of skills mobility? Do different places require different skills? Moreover, how is mobile labour attuned to these shifts in needs of skills across places and time including in the pre-migration period? How do people acquire the skills to migrate and those required after migration? This might involve learning about both sending and destination places and their ways of working through a range of mechanisms-from 'integration' classes to sentiment analysis-so that skills can be deployed effectively. Non-migrants in destination countries have to be active participants in that learning.

Research on the geographies of skills in skilled migration would make visible skilling mechanisms and the associated challenges and costs—thus revealing the infrastructures that support not only the circulation of skilled migrants but also the circulation of skills. To seek to understand skilled migration without this analysis of the histories of skills is to locate migration in the migrant alone, removing them

from the contexts of skills and their uneven making and remaking in the contemporary world. The spatio-temporalities of other structures and processes, within which the migrant is embedded, including skills, matter.

Crucially, these are not empirical or analytical questions alone. The spatio-temporalities of skills raise critical questions for analysing the political economy of skilled migration. These inequalities are not played out at migration borders or in post-migration lives but have a pre-migration existence, which draws on differential mobilities of skills and knowledge and of the values that particular sites are able to accrue to themselves as skills centres (Raghuram, 2020). How does capitalism use the differential cost of production and reproduction of skills to shape skilled mobility? What is the role of skills arbitrage in shaping skilled mobility, and how does this differ from the labour arbitrage of lesser skilled migration? Where and when do these converge and differ, and what do these tell us about spatio-temporal inequalities and power relations globally? In short, how should we, skilled migration researchers, position ourselves in debates on skilled migration so that we remain intensively attentive to the inequalities that have shaped them?

These political economy questions are always tinged with normative questions too, that is, what are the ethics involved in the geographies of skills? Spatial inequalities in the distribution of skills have meant that skills are overly defined and arbitrated in particular places and institutions, especially in the global North, although people in other places have been denied from accessing skills or the skills obtained there are undervalued. An ethical register sensitive to these inequalities has to be part of the skilled migration. If certain skills are only obtainable in particular places, then is it ethically justifiable to move in order to further human development and skills acquisition? This is an issue of distributive justice, one lens through which the geographies of skills and skilled migration can be considered. What are the analytical tactics required to ensure that the ethical demands of skills inequalities are understood? What are the communities that are called upon to ethically address differential skilling and deskilling before and after migration? These are some of the openings that interjecting the geographies of skills into skilled migration literature offers.

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ENDNOTES

¹ In this paper, I have used the word skills largely as used in the skilled migration literature. I am conscious that the terms knowledge, skills and labour, on which this paper draws all have different histories and trajectories, some of which are explored in the paper. However, for the purpose of inserting skills into skilled migration literature, I have largely taken the underlying literatures as synonymous or at least all playing a part in helping to further develop the literature on skilled migration.

- ² Given the vast research on skilled migration, the overviews are inevitably selective and partial but cover the literature required to set up the argument.
- ³ Erasmus offers another example of international mobility brokered through multinational organisations.
- ⁴ As a result, skilling women in IT was often seen as a way of limiting dependence on migrant labour.

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