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COMMENTARY

Troubling economic geography: New directions in the post-pandemic world

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Abstract

This intervention focuses on recent disruptions and transformations in the (post) pandemic world economy that will likely 'trouble' economic geographers for some time to come. It aims to foster constructive dialogues and move conversations forward in the expanding field of economic geography whose presence and relevance in critical human geography is ironically at stake. I contend that economic geography in the early 2020s is characterised by a changing world and a changing generation of more diverse researchers who can be innovative enough to take on these troubling themes for future research. I suggest four such research directions that combine new themes of geopolitics and risks in remaking the global economy with older issues of work and environment that certainly merit renewed interest and greater analytical attention in the field. Taken together, these new horizons for economic geography research throughout the 2020s and beyond can be well capitalised upon to enhance the intellectual and public relevance of the field.

KEYWORDS

economic geography, environmental change, (geo)politics, global economy, risks, worlds of work

1 | INTRODUCTION

Economic geography as a field underwent tremendous transformation throughout the 2010s, as illustrated thematically in several recent handbooks and teaching texts (Barnes & Christophers, 2018; Clark et al., 2018; Coe et al., 2020). On the one hand, the field witnessed the proliferation of newer approaches and the resurgence of earlier research themes. During the 2010s, the emergence and consolidation of major research foci and communities such as financial geography and global production networks/global value chains became fairly visible. Earlier key themes such as innovation, urban and regional growth, and labour geographies also took off in new directions via respectively evolutionary economic geography and diverse geographies of work(ers). Since the mid-2010s, new themes such as digital technologies, marketisation, platform economies, and racialised economy have surfaced and taken some hold in the field. All of these literature

strands are now further enhanced by the much greater geographical diversity in the empirical studies of the Global North and the Global South.

On the other hand, economic geography is now practised by a new cohort of more diverse researchers throughout the world who were socialised into the field during the 2010s through education, research, publications and field-specific events (e.g., successive editions of the Global Conference on Economic Geography and the Summer Institute in Economic Geography). As a co-editor of two leading journals publishing economic geography research (*Economic Geography* and *Environment and Planning A: Economy and Space*) throughout this transformative period, I have encountered and appreciated the rapidly growing presence of this younger and emerging group of early- to mid-career economic geographers from across the world whose research interests span wide-ranging topics—from the above key research themes to more radical concerns with the gendered, racialised and environmental entanglements of economic activities and their unjust consequences for individual and collective wellbeing. Such an infusion of diversity in both researchers and key concerns matters much at a time when economic geography's presence and relevance in critical human geography—as evident in the (relative lack of) recent papers in *Transactions*—seems to be at stake. In the near future, I expect many of them to advance and lead the field with their novel research and scholarly publications in this and other leading geography journals.

The unprecedented worldwide disruptions unleashed by the COVID-19 pandemic and the variegated challenges to globalisation and its doctrine since the late 2010s have now unravelled both the thematic trajectories of ongoing research in the field and the post-pandemic institutional life of all aspiring geographers. In a sense, the disruptions have been brewing for some time. Globalisation emerged from the 1990s as an influential spatial imaginary and a contested set of material processes, cohering around the dominant narrative of neoliberalisation, financial power and technological innovation. Such a triumphal narrative of economic growth and positive spillover underplayed severe challenges and unintended consequences that were fermenting at the international and local scales—from the impact of human–environment interactions (COVID-19 and climate change) to economic dislocation and techno-nationalism that culminated in the recent trade war and geopolitical contest between the United States and China, the Russian invasion of Ukraine, and worldwide inflation. New and pressing real-world issues, such as home-based work, technological decoupling, digital disruptions, high living costs, worsening inequalities, and environmental change and climate adaptation, are now seriously confronting economic geographers.

In this new context of changing world and changing generation in the discipline, this brief commentary outlines several key directions that might prompt innovative thinking and research agendas for the field in this—likely troubling—decade and beyond. It highlights key geographical problematics that might shape future progress of the field. Where possible, I will briefly exemplify how these research challenges might be confronted and how the recent work by a new generation of economic geographers has made a difference to the field. Nevertheless, this paper does not address methodological reflexes and disciplinary introspection that can be found in relevant recent work (Bathelt et al., 2017; Hassink et al., 2019; Martin, 2021; Rosenman et al., 2020; Yeung, 2019, 2023, 2024). In particular, I focus on four most urgent and yet 'troubling' tasks for post-pandemic economic-geographical research: (1) (geo)politics, economies and space; (2) remaking the global economy; (3) worlds of work; and (4) (un)sustainable global economic/environmental change.

2 | (GEO)POLITICS, ECONOMIES AND SPACE

Since the late 2010s, the global economy has experienced unprecedented disruptions in relation to escalating geopolitical tensions, such as the US–China trade war starting since the former Trump administration in March 2018 and the US restrictions on technology exports to China since January 2021 under the Biden administration. The domestic political responses to the devastating COVID-19 pandemic in 2020–May 2023 have also made it abundantly clear that the spatial organisation of inter-national economies cannot be understood in its own right without the necessary and, increasingly, highly contested role of *(geo)politics*. Indeed, there has been much political discussion in the US, the European Union and Japan about the need to 'break' the dependence on China for global supply chains and to 'bring back', 'reshore' or 'friendshore' manufacturing production. Collectively, these geopolitically driven policies for economic restructuring are known as 'decoupling', 'de-risking' and 'deglobalisation' initiatives.

Couched in geopolitical, national security and techno-nationalist terms, the US has now taken high-profile action against specific firms from China and tightened its export controls on key US technologies destined for China. Most recently, the US and the EU have unusually enacted new strategic industrial policies to promote specific high-tech industries, such as semiconductors (see Yeung, 2022a; Yeung et al., 2023) and artificial intelligence, within their national and macro-regional territories. Meanwhile, China has also deployed its trade policy to punish unfriendly geopolitical actors,

such as Australia and Taiwan. Even macro-regional free trade initiatives, such as the Regional Comprehensive Economic Partnership within the Asia Pacific (2020) and the Indo-Pacific Economic Framework for Prosperity (2022), have clearly taken their respective geopolitical alignments—with(out) China or the US.

In economic geography, (geo)politics has hardly been ignored (e.g., Glassman, 2011, 2018). Still, I think even geographical political economy focusing on domestic politics and practices (cf. MacKinnon et al., 2019; Pike et al., 2009; Sheppard, 2011, 2012) could not have anticipated this kind of *Machiavellian* infusion of geopolitical and national security imperatives into macro-regional and national economic processes. In some cases (e.g., the US and China), this unexpected concoction has also been exacerbated by a toxic kind of populist nationalism increasingly ingrained in the ruthless pursuit of domestic political agendas. In short, (geo)politics, economies and space are now so mutually constitutive that they have become the primordial driving force in the global economy, at least throughout the 2020s. I anticipate these geopolitical considerations to be necessarily more-than-geographical-political-economy (i.e., more *inter*-national rather than intra-national in nature) and fully endemic in future research on the economic geographies of consumption, production, finance, innovation and work in different cities and regions throughout the world.

This 'geopoliticised' approach to economic geographies, however, should neither eschew individual actors and firms nor blindly bring the state back in. Rather, I expect the analytical focus to be more squarely placed on how and why international governance and the concomitant supra-national institutions can make a real difference to this transformative and yet geopolitically infused global economy. To me, the relatively recent interest in state roles and state capitalism among a new cohort of economic geographers has certainly brought much hope and light to this renewed attention on, and real-world significance of, geopoliticised economic geographies. This geographical work on state capitalism in China, the Global South and Western Europe by Lim (2014, 2019), Horner (2017, 2020), Alami and Dixon (2020) and Alami et al. (2021) has well demonstrated that politics and policy practices are *integral*, rather than external, to economic-geographical processes and socio-spatial outcomes. By probing much deeper into the complex and yet intertwined relationships between (inter-)state politics and economic-geographical processes, this emerging body of geographical research will likely help answer some of the most critical issues confronting our understanding of geopolitics, economies and space.

For example, and in the context of policy failures in state-led interventions in many developing countries (see Hamilton-Hart & Yeung, 2021; Yeung, 2016) and increasingly in advance economies, the recent geopolitical drive in the US and the EU towards reshoring manufacturing activity abroad will take time to materialise in the next five to ten years. Still, there is no guarantee that it will generate positive outcomes for their localities, regions and territories. Ironically though, many high-tech lead firms and industry associations in these advance economies have opposed such politics-led policy-making in the name of national security and supply chain resilience. They are fully aware of the fallacy of these politicised decisions and have rightly argued that reducing import dependency should not serve as a political excuse to force protectionist measures onto those industrial sectors characterised by highly efficient and geographically extensive global production networks (see Yeung (2022b) on electronics and Yeung et al. (2023) on semiconductors). Some of them have even lobbied hard against home government's excessive 'Made in Home Country' policy interventions (see Lincicome & Zhu, 2021; Spence, 2023). Future studies in economic geography must theorise more robustly such inter- and intra-national politics of economic processes and demonstrate empirically their consequential effects on people, places and economies.

3 | REMAKING THE GLOBAL ECONOMY

When, and not if, the global space-economy is inadvertently (re)shaped by geopolitical imperatives and unilateral state action in the 2020s, economic geographers need innovative approaches to analyse and explain this new 'wave' of combined uneven development that seemingly goes beyond the more traditional Marxian political-economy approach (cf. Alami & Dixon, 2023; Peck et al., 2023). This Marxian approach has so far been less useful in analysing the ever-more complex interfaces between the state and variegated forms of capitalism that have been well studied in the earlier developmental state literature (see Yeung, 2017a, 2017b). In accounting for this new (geo)political remaking of the global economy since Peck and Yeung's (2003) collection of critical thoughts by economic geographers two decades ago, even prevailing 'dominant' approaches in economic geography, such as evolutionary economic geography and global production networks (see Boschma, 2022; Boschma & Frenken, 2018; Yeung, 2021a, 2021b), can be inadequate because of their relative neglect of the state and its variegated geopolitical interventions.

In this sense, future economic geography research must necessarily take into account how new forms of *risks* and *uncertainties* are translated into material practices that remake the global economy in their own images. Of course, these risks and uncertainties go well beyond (geo)politics and armed conflicts (e.g., wars) and include, in an equally significant

way, those associated with public health (e.g., COVID-19 pandemic and other future pathogens), disruptive technologies (e.g., platformisation, artificial intelligence and robotics), social change (e.g., racialised and gender politics). These risks must be better theorised in different economic geography approaches because they will likely produce new forms of (dis) integration and demand for resilience and security at different spatial scales—from the individual body all the way to the global—in our interconnected worlds during this and, likely, the next decades.

In prevailing innovation and regional studies, economic geographers are seemingly far too preoccupied with socio-technical systems (e.g., transition studies), regional growth trajectories (e.g., the related variety and regional diversification literature), and change agency and institutions (e.g., studies of regional development paths). In turn, insufficient analytical and empirical attention has been paid to the above risks that are fundamentally different from Knightian uncertainties commonly understood as unknown conditions and random outcomes not amenable to ex ante calculations and predictions. This blind spot of missing out risks and uncertainties is also evident in the relatively substantial strands of literature on (global) financial geographies and global production networks. The closest such literature strands come to (geo)political risk is their analysis of state regulation of financial systems and production network governance (e.g., Billing & Bryson, 2019; Bryson & Vanchan, 2020; Christophers, 2017; Hess, 2021; Johnson, 2014).

Economic geographers can indeed bring such 'calculatable' risks into our analyses of people, production systems, and regions so that better mitigation and management strategies in the remaking of the global economy can be understood and proposed. The recent work by early-career geographers, such as Schwabe (2020) and Nowak (2023), has provided good evidence that disruptive technologies embodied respectively in electric vehicles and platformisation can pose significant risks to automotive suppliers and worker livelihoods, and yet these suppliers and platform workers are able to mitigate such risks through upgrading strategies and, in the case of workers, embedding in their own socio-technical networks in urban spaces. Contributing to urban and financial geography, Fields' (2018) work has highlighted the risks to urban tenants that are associated with the complex ways in which housing assets have been financialised through calculative practices exercised by various actors, such as credit rating agencies and institutional investors, well beyond the common understanding of these 'ordinary people'. Her study thus helps us politicise what she terms 'geographies of actually existing markets'.

While still relatively limited in scale and scope, this productive geographical research into risks and changing production/socio-technical networks has certainly opened up new directions for our necessary engagement with risks to understand better changing economic geographies. Still, I think such risk analysis in future research must be broadened to go beyond economic and technological risks to incorporate geopolitical, social and environmental risks (from pandemics to climate change). The causal relationships between these more-than-economic risks and complex uneven geographical change must also be better theorised and empirically exemplified in order for a fuller understanding of how the global economy is remade in the 2020s and beyond. In short, such a broadening-out of research work on risks in the remaking of economic geographies requires both conceptual advancement that internalises risks as a causal consideration and methodological innovation that renders such risks more visible in and amenable to empirical investigation.

4 | WORLDS OF WORK

One might be forgiven for thinking that the above two agendas on (geo)politics and risks for future research in economic geography are far too global- and macro-centric without any substantive concern for human agency. Be that as it may, I argue that these two new directions are useful in setting up the critical and yet dynamic scenario for the reinvigoration of another substantive field in economic geography—labour geographies (see Herod, 2018; Peck, 2018). In fact, I believe that the changing world in the 2020s outlined above will likely transform and 'trouble' the (uneven) geographies of labour for a long time to come. In these troubling 'worlds of work' underpinned not only by major geopolitical and technological shifts but also by the economic precarity of high inflation and low growth, labour and work will no longer follow the earlier trajectories of permanent employment versus flexible work in factories and offices. The emergence of the gig/sharing economy and the disruptive realignment of the global economy will produce new regimes of work that are certainly going to be less permanent and flexible, but perhaps even more precarious and risky (see Baglioni et al., 2022; Coe & Jordhus-Lier, 2023; Strauss, 2018).

To a large extent, these new worlds of work are troubling not only in an academic sense (our existing theories and concepts might be inadequate or at least need rethinking), but also in the real-world sense of misery and lost identities and livelihoods in uncertain times (e.g., worker strikes in the UK since late 2022; also Nowak, 2023 above). This renewed focus on work types and labour conditions will help reorientate economic geography from its studies of the global

economy with an excessive focus on firms, industries and states. In unpacking and explaining these diverse worlds of work, future economic-geographical research can reveal not just the inherent spatialities of these worlds of work, but more importantly also their centrality in sustaining and reproducing the myriad forms and regimes of capitalisms and their uneven development in regions and national territories. It can help reduce the 'inclusionary bias', first noted by Bair and Werner (2011), in many existing economic-geographical studies of the global economy and refocus our attention on the 'dark sides' of such articulation of social identities and livelihoods in the midst of serious regional decline and capitalist crisis throughout the 2020s (see Bair et al., 2021; Blažek et al., 2020; Diemer et al., 2022; Pinheiro et al., 2023).

Recent work by emerging economic geographers of poststructuralist and feminist persuasions, such as Cockayne (2016, 2018) and Reid-Musson et al. (2020), has opened up new directions for unpacking labour geographies in a world of precarity and ambivalence associated with rapid technological shifts and neoliberal economic practices. Building on the earlier and pioneering feminist work on working bodies (McDowell, 2009, 2013, 2015), these geographers have clearly re-centred labour geographies' focus on workers' embodied experiences and the future of their (precarious) work. The large UK-based ReFashion Study project on garment workers in Cambodia, led by Katherine Brickell and a group of talented early to mid-career geographers, has helped revitalise a much-needed critical approach to the 'dark sides' of economic geography (Lawreniuk, 2020) and the necessary concern of labour geographies with *both* work and livelihoods (Brickell et al., 2023; Brickell & Lawreniuk, 2022).

In reworking these labour geographies and their implications for local, urban and regional change, economic geographers can certainly focus on the (re)production of labour beyond the workplace, their different segmentation and regulation in relation to race, gender and citizenship, the changing role of collective representation and worker resistance, and the wide-ranging individual responses in such diverse worlds of work (e.g., migration, volunteering, caring, and so on) in the Global North and the Global South. In the context of my arguments so far, I believe these pressing issues of worker dispossession and poverty are becoming much more significant among workers implicated in the sort of (geo)politically motivated reshaping of the global economy.

5 | (UN)SUSTAINABLE GLOBAL ECONOMIC/ENVIRONMENTAL CHANGE

All these quite unexpected challenges and directions for economic geography research in this and coming decades (at least largely unforeseen prior to Donald Trump's presidency in 2017–21), however, should not take precedence over another perhaps even more critical agenda—*global environmental change* and its long-term impact on politics, economies and space. While the environmental agenda has been taken up in economic geography for quite some time now (e.g., Angel, 2000, 2006; Bridge & McManus, 2000; Florida et al., 2001; Gibbs, 2006) and some prominent views have been voiced (e.g., Davies & Mullin, 2011; Hudson, 2007; Leichenko & O'Brien, 2008), it remains at most a 'minority subject' in economic geography at the turn of the 2020s. Apart from some relatively recent work on the waste economy (e.g., Inverardi-Ferri, 2018; Lepawsky, 2018; Wang et al., 2021) and environmental governance in commodity production (e.g., Havice & Campling, 2017; Khan et al., 2020) and resource extraction (e.g., Bridge, 2008; Bridge & Gailing, 2020), (global) environmental change is mostly absent from the enormous literature on innovation systems, regional diversification, financial geographies, labour geographies and the digital economy.

This minority state of play of the environmental agenda in economic geography is clearly unsustainable in a capitalist world-economy increasingly moving towards self-destruction. As Leichenko et al. (2010) argued so well over a decade ago, the complex connections and interactions between (global) climate change and the globalisation of economic activities represent what they called a form of 'double exposure' that spreads risks and social vulnerabilities over time and space. Environmental change cannot remain as an 'externality' in our narratives about economic processes and activities, but should rather, as championed by Demeritt (2009), be the central input and topic for intervention in geographical research. Economic geography is no exception to this clarion call and should reconcile its own intellectual blind spots and inadequacies. Recognising the inseparability of global economic/environmental change is a good starting point. But for economic geography research to catch up with the much broader and more advanced research in 'sustainability sciences', more concrete theoretical and empirical work in economic geography must be carried out in the 2020s.

More specifically, I can think of several urgent issues of greening industries, supply chains and finance, sustainable energy transition, water and food (in)securities, environmental justices and politics, biodiversity and climate mitigation/adaptation, nature-based solutions, and so on at many different spatial scales—from the local to the global. But as convincingly illustrated in Bridge et al.'s (2020) recent work, even carbon finance as a 'green' solution to climate change is not as simple

and monolithic as most would have thought. There are many inherent difficulties and uncertainties in valuing carbon as a commodity in nature and as an asset in financial markets. Similarly, I can envisage substantial challenges in new economic geography research into the above-mentioned urgent issues. We certainly need sustained scholarly attention and focus on them in order for conceptual breakthroughs and empirical advancement to be made possible. Cohen et al.'s (2022) recent collection has brought home some productive approaches to rethinking the nexus between finance (financial geography) and financial 'solutions' to major environmental problems that might help overcome some of the impasses in such key debates.

In lieu of a conclusion, let me end this provocative commentary by making a positive case that the very troubling kinds of economic disruptions and (geo)political shifts taking place worldwide in the past several years have paradoxically opened up several new horizons for economic geography research in the 2020s and beyond. Some of these are quite new directions that could not have been anticipated prior to the COVID-19 pandemic and thus new conceptual innovation is likely necessary to explain and account for their causal dynamics and (uneven) geographical outcomes. In short, our theory and explanation need to be rebuilt better to account for these transformative changes (see my arguments in Yeung (2024)). In particular, geopolitics and risks can no longer be taken for granted in any economic-geographical work of the current era because they are now endemic to the remaking of politics, economies and space. Meanwhile in this remaking of the global economy, older fissures remain visible and yet inadequately studied in economic geography, such as labour, work and environmental change. Addressing these critical issues will compel us to rethink and rework our existing conceptual and methodological apparatuses. By resurfacing these issues in my take on the future directions of economic geography, I hope this commentary will productively spur new debates and novel theoretical advancement in our post-pandemic changing world and changing discipline.

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This paper does not contain specific data beyond the references cited.

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