What kind of theory for what kind of human geography?

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Abstract
While upholding the analytical relevance of a better distinction of mechanism from process in the geographical analysis of uneven development, the five commentators of my forum paper have raised some critical epistemological issues that provoke three points of clarification in this response. First, I argue for an epistemological position that views theory not only as abstract devices but more importantly as explanation of social–spatial change. I elaborate further on the importance of causal mechanism in such an explanatory kind of theory. Second, I discuss the relevance and usefulness of mid-range theories in geographical research. Finally, this response ends with a return to the bigger picture of the kind of human geography that might benefit from mechanism-based theorizing.

Keywords
causal mechanism, critical realism, explanation, geographical political economy, human geography, theory

When my two great mentors published their short but pointed intervention on the kind of theory for economic geography at the turn of the new millennium, Amin and Thrift (2000) anticipated a different kind of economic theory in a post-disciplinary social science and cautioned us, then young researchers, to stand on our own terms and out of the long shadow of conventional economics. My forum paper in this issue (Yeung, 2019) has taken to heart their call for mobilizing our skills based upon geographers’ critical understanding of open systems, appreciation of context, and qualitative techniques. But my paper has also identified one key problem in the recent geographical literature since their critical intervention – the common conflation of process with mechanism – and gone about clarifying their analytical difference through developing a theory of mechanism grounded in critical realism. I am very heartened to learn that all five commentators appreciate this need for distinguishing clearly mechanism from process and have little dispute with this fundamental premise of my paper. And yet, they seem to hold different views on the normative role of critical realism and mechanism-based explanation for human geography writ large.

In this brief response using a moniker after Amin and Thrift (2000), I hope to clarify further three important issues that go beyond the original forum paper. First, I argue for an epistemological position that views theory not only as abstract devices but
more importantly as explanation of social–spatial change. Here, I respond to the critics by elaborating on the importance of causal mechanism in such an explanatory kind of theory. While critical realism provides a useful philosophical foundation for this mode of mechanism-based theorizing, I concur with MacLeavy (2019), Strauss (2019) and Whiteside (2019) that it cannot substitute for other non-realist ontologies in the multiple trajectories of geographical scholarship (though this was never my argument in the forum paper nor in my earlier epistemological work, e.g. Yeung, 1997, 2003, 2005).

Second and in response to Hassink (2019), Strauss (2019) and Whiteside (2019), I further discuss the relevance and usefulness of mid-range theories in the geographical analysis of uneven development. Finally, I end with a return to the ‘bigger’ picture of geographical political economy to argue for the kind of human geography that might benefit most from this kind of mechanism-based theorizing.

What theory? Theory as abstraction and explanation

‘By our theories you shall know us’, David Harvey (1969: 486) concluded his treatise Explanation in Geography exactly half a century ago. Theory, in my view, is what defines an academic discipline. When we study a particular geographical phenomenon (e.g. regional industrial decline), we can go about describing it in great detail and accuracy, much like the heydays of regional geography prior to the so-called ‘quantitative revolution’ in the 1960s (Barnes and Farish, 2006). Theory was not the core concern then in regional geography; accurate and comprehensive description was. Equally, we can re-present the pattern(s) and process(es) of this geographical phenomenon in stylized models and theories that ‘abstract’ their essence from the empirical details or ‘mess’, much like what the young Harvey (1969: 486) was advocating as ‘controlled, consistent, and rational, explanation of events’. In these positivist models and formal theories, causal explanations are often couched in terms of sequential occurrence such that for A (initial condition) to be a logical explanation of B (specific outcome), it must precede B in empirical events. To Harvey (1969: 46–47), this a priori reduction of explanation to variation in the laws of mechanics is a ‘mechanical’ or ‘mechanistic’ explanation.

And yet in the more recent forms of geographical enquiries inspired by critical social theory since the late 1970s, we witness theory as uncovering grand social structures determining human action in structural Marxism and their trenchant critiques in the forms of post-structuralism, postmodernism, post-colonialism and others (e.g. feminism, actor–network theory, non-representation theory and assemblage theory). In these critical ‘post’-thoughts, theory is often abstract, discursive, situated and relational in nature; spaces of social relations are discursively (de)constructed and contingently (re)framed through specific historical processes. Causation in these critical theories tend to be vague and indeterminant due to their ‘flat ontologies’ (Jones et al., 2007; Marston et al., 2005) and/or commitment to heterogenous associations and assemblages (Anderson et al., 2012).

Whatever one’s epistemological position though, a theory to me must be built on existing or new concepts that abstract from material and/or discursive realities to form a set of meaningful and comprehensible statements. These statements can be interpretive, explanatory or even normative. In a nutshell, all theories are an abstraction of the empirical world, but not all theories are explanatory of this world and even fewer are causal in explanation. While some of the above critical thoughts in human geography prefer a more open-ended and discursive approach to theory, I am more inclined to argue for an explanatory kind of theory. Here, I adopt Swedberg’s (2014: 17, emphasis omitted) simple definition of theory as ‘a statement about the explanation of a phenomenon’ and his view that ‘An explanation represents the natural goal of theorizing and completes the process of building out the theory’ (p. 98).

The art of theorizing, however, is a much more complicated and variegated exercise. My forum paper has advocated for a non-deterministic and mechanism-based approach to causal explanation and theory development in human geography. This kind of causal theory should be explanatory in nature; its explanatory power depends on the
identification and specification of mechanisms connecting cause and outcomes within particular historical–geographical contexts. In this sense, I agree with Strauss’ (2019: 257) view that my forum paper ‘is as much a normative project as an epistemological one’ (also Whiteside, 2019). In fact, I will argue all epistemological debates and positions, whether in their empiricist, positivist, realist, post-structuralist or feminist persuasions, are implicitly or explicitly normative because they seek to justify or even normalize the importance, and sometimes the dominance, of a particular approach to knowledge production.

While mechanism plays a necessary role in the explanatory kind of theory I favour, it is often conflated with process in the existing geographical literature, such as those debates discussed in my forum paper. This conflation in turn reduces the analytical efficacy of a mechanism approach to causal theory development. To me, process-based theories are not explanatory enough because they often merely describe empirical events or ‘happenings’ without giving credence to the underlying reasons why and how these events happen, at least not until the mechanisms for such ‘happenings’ have been specified through the kind of theorizing advocated in my paper. I therefore concur with Hsu’s (2019: 263) view that when taken too far the ‘process-ing’ approach could become problematic. Particularly constructivists and other critical researchers tend to dissolve structure into process and agency, which leads to a perspective that obscures the inherited social relations, institutions, structural constraints, spatiotemporal dynamics, conflicts, contradictions and even crisis tendencies of capitalism in shaping socio-spatial configurations.

In particular, his discussion of the characterization of China’s economic reforms as neoliberalism in Harvey (2005) and Ong (2006) demonstrates well the inadequacies of their process-based conception that misplaces the causal mechanism of ‘a historical project of nationalist revival under the dominant leadership of the party-state’ (Hsu, 2019: 265).

This mechanism-based conception of causal theory, nevertheless, represents only one particular view of what theory ought to be in an epistemological sense, that is, what kind of theory. I certainly do not pretend that this explanatory kind of theory ought to represent the universe of all possible theories – that would suffer from ‘Hume’s Guillotine’ described in Whiteside’s (2019) commentary. Nor has the forum paper provided an adequate ontology of the open-ended social world for which this kind of theory can be developed. To (over)compensate for this ontological inadequacy, I have grounded my argument for causal theory in a particular philosophy of social science, critical realism, and offered a clearer conception of mechanism to speak to the kind of ‘processual’ or process-based theories in the existing geographical literature on uneven development, such as neoliberalization and path dependence.

Given this specific epistemological concern with reworking the mechanism–process conflation in those large strands of literature, it is not realist(ic) to expect my forum paper to deal with the much bigger ‘unresolvable problem’ of ontological incompatibilities in human geography identified in Whiteside (2019: 270) – the fundamental irreconcilability of this grounding in critical realism with ‘anti-realist ontologies’, such as postmodern, constructivist, non-human, behaviouralist or otherwise non-social centred philosophies of being. In her commentary, MacLeavy (2019) has also characterized my framework of mechanism and process as raising and examining ‘conventional ideas through measurement and causal modelling’ and contrasted it with ‘broadly defined geographies of economies informed by feminist, antiracist, postcolonial and queer perspectives’ that can illuminate contemporary inequality and injustice (see also Strauss, 2019). Clearly, all of these critical perspectives matter in geographical scholarship, but I wonder if their ultimate goals are concerned with causal explanation? If not, they might not be the primary audience for my forum paper. Mixing them together with the specific literature cited in my paper makes it hard to see the paper’s real purpose – to make better causal explanations in human geography in order to reclaim our role in the wider social sciences.

Meanwhile, despite Whiteside’s (2019: 269) characterization of the forum paper as ‘a hard
advocacy for a critical realist geography’ and Hsu’s (2019) sympathy for a renaissance of critical realism in human geography, I do not see the paper as a blanket push for a return to critical realism as a guiding philosophy for human geography. My paper is not even primarily on/about critical realism, unlike a previous forum paper by Cox (2013) and its various commentaries. Identifying the lack of mechanism–process distinction in realist philosophy, I drew upon critical realism to support my theory of mechanism as necessary relations for empirical outcomes and my call for an explanatory kind of theory. As argued consistently by the late Roy Bhaskar (1986, 1989), the original founder of critical realism, the role of realist philosophy is to serve as an ‘underlabourer’ and occasional ‘midwife’ to the social sciences. It is a transcendental philosophy that enables a certain social scientific enquiry, but the precise practice of that enquiry, including theory development, rests with the social scientist. In short, critical realism is a philosophy in search of a method (Sayer, 1984; Yeung, 1997). It is therefore important to acknowledge that critical realism appreciates the possibility of philosophical discourse contingent upon the actuality of social practices. While it does not tell us the precise form of mechanisms for a given empirical phenomenon, critical realism does recognize that some real mechanisms must exist for our explanatory theory development to be possible and meaningful. In Bhaskar’s (1975: 52) own words, ‘philosophical argument cannot establish which ones actually do; or, to put it the other way around, what the real mechanisms are. That is up to science to discover’. Critical realism has given us the possibility of causal theory, a hope that can be fulfilled by various generations of social scientists.

This clarification of the epistemological role of critical realism can be further developed in relation to the various commentaries. First, I argue for a different kind of normative position in human geography in which causal explanations are a necessary first step towards emancipatory research. Unlike those ‘anti-realist ontologies’ listed in Whiteside (2019), my approach to normative efficacy demands that our socio-spatial interventions can be better developed if we have a clearer sense of why and how causal mechanisms interact with contingent contexts to produce specific uneven geographical outcomes (e.g. the debate on neoliberalization and its outcomes discussed in the forum paper). Without this clarity of mechanisms at work, how do we know if our advocacy for change on behalf of the marginalized, the underprivileged and the exploited can lead to meaningful outcomes and better futures? I am not entirely convinced that unpacking theoretical categories and understanding their epistemological positionalities and constitutions in some ‘anti-realist ontologies’ can go beyond immanent critique and self-reflexivity. While it is useful to ‘contextualize’, ‘situate’, ‘explore’, ‘interrogate’, ‘examine’ and ‘empathize with’ specific socio-spatial phenomena, these analytical procedures are ultimately insufficient in explaining and changing uneven geographical outcomes.

Second, this mechanism kind of theory does not require the sort of ‘objectivity’ and ‘closed systems’ pointed out in MacLeavy’s (2019) commentary. Indeed, critical realism contends that such conditions, commonly demanded in the natural sciences (i.e. the physical world ‘reproduced’ or ‘controlled’ in laboratories), are neither possible nor necessary in the social world. Objectivity is not necessary because the analytical specification of a causal mechanism from its underlying condition/process in context is always an interpretive procedure. As pointed out in Strauss’ (2019: 258) commentary, this ‘is not a neutral process; it is informed by the positionality of the researcher; the discipline or field in which they are working; the places, spaces and contexts that shape their work’. But just because there are limits to explanation (Knowles, 1990) and knowledge production is always situated and partial does not necessarily mean we cannot seek to specify causal mechanisms and possibly produce better explanatory theories through different iterative rounds of debates and dialogues, much like in this forum.

Closed systems are also not necessary in social science insofar as we are not aiming for universal laws and predictive models. My analytical approach takes to heart Amin and Thrift’s (2000: 5) appreciation of open systems and context. There is thus a certain degree of uncertainty in our causal
explanations, and an interpretation by the researcher (not necessarily objective!) can be judged on the basis of its empirical adequacy, that is, better than existing explanations. Taking further MacLeavy’s (2019: 275) empirical example, her research into the UK referendum on its European Union membership seems to aim for identifying and making sense of the uneven geographies of leave and remain voting through ‘a process-based conception of referendum’. The work is apparently not so much about specifying the underlying causal mechanisms of such uneven geographies. And yet her preferred ambition is ‘to remove ignorance and false views, or to help improve economic fortunes as an extension of understanding uneven development and social inequality’. Supporting her ambition, I question if a clearer and more explanatory theory can help better understand these false views and challenge them head-on that might lead to better emancipatory action, practice and outcomes?

Mid-range theory wanted!

If theory is indeed necessary and important to our disciplinary identity and future, as Amin and Thrift (2000) reminded us some 20 years ago, I believe a more explanatory kind of theory can be developed at the analytical level between the grand deterministic theories of capitalist formations and the anti-realist theories of social beings and identities. I call these ‘mid-range theories’ because they draw upon meso-level concepts and analyses to intermediate between system-level generalizations and pure description/storytelling at the individual level. In this kind of theory, the causal mechanisms of empirical events are more likely to be specified from general processes to account for social action and emergent powers connecting abstract causes and their concrete outcomes within particular historical/geographical contexts.

Causal mechanisms in this kind of mid-range theory, however, differ from the macro-causal structures that constraint and interact with human agency in the capitalist space-economy. Whiteside’s (2019: 268) commentary has invoked one central element of the late Doreen Massey’s ‘philosophical blueprint’. Arguing for the importance of understanding ‘causal structures in which processes intersect to impact upon each other, to influence/encourage/restrain/mould the operation of each other’ (Massey, 1995: 316), this blueprint emerges from Massey’s reflection on a decade of debate since the first edition of her Spatial Divisions of Labour in 1984 that was situated in an era of heated structure vs. agency debate in British geography (Gregory and Urry, 1985). Massey’s then theory of spatial divisions of labour was firmly grounded in a Marxist analysis of the class structure of capital (after sociologist Erik Wright) and its social relations of production. In this majestic work, Massey (1984: 6, 1995: 6) argued for a more particularistic mode of explanation that tries to break with the dichotomy between formal models and empirical description. It recognises underlying causal processes, but recognises, too, that such processes never operate in isolation. For it is precisely their operation in varying combinations which produces variety and uniqueness.

Taking a more explicitly relational view a decade later,¹ Massey (1995: 4) reflected that in her 1984 work, ‘particular “causal relations” are seen as enabling rather than as determinate in their effects, and forever liable to be altered in their implications, or even nullified, by other sets of relations existing in the particularity of their occurrence at that precise point in time-space’.

Clearly, Massey’s discipline-shaping theory of spatial divisions of labour has causal explanation in mind. But it differs from the kind of mid-range theory advocated in my forum paper in several important ways. First and foremost, the mechanism–process distinction in her original theory and her revisit a decade on is not as clearly articulated. There is a sense that ‘underlying causal structures/relations/processes’ are used interchangeably and referred to as the same as underlying causal mechanisms in a critical realist sense.² In her 1995 edition, Massey (1995: 297–298) reprised her book’s central arguments in relation to ‘the mechanisms of a specifically capitalist economy and society. It is important to be precise about what this statement means’. Despite this plea for precision,
she proceeded to deploy terminologies such as ‘economic mechanisms/causal processes’ (p. 298), ‘capitalist accumulation’ as ‘mechanisms at work’ (p.298), ‘causal processes immanent in capitalist relations’ (p. 305) and process as ‘necessary’ and within ‘causal structures’ (p. 316).

Second, the necessary relation between causal mechanism and empirical events is perhaps too contingently defined such that causal relations or causal processes are more ‘enabling’ and therefore can be ‘altered’ or ‘nullified’ by other sets of causal relations (Massey, 1995: 4). The necessity of causal powers in these structures/relations/processes is at best unclear. Indeed, if these causal relations can be nullified by other relations at the time of their realization or ‘occurrence’, these relations are unlikely to be causal mechanisms since their necessary relations with specific empirical outcomes are not guaranteed, that is, not necessary. Third, causal relations in spatial divisions of labour may appear to be too ‘macro’ in conjunction with the capitalist class structure. These social relations of production are closer to the system-level generalizations expounded in Marxist geography then. It is hard to see how these macro-causal relations might be meso-level concepts amenable to further development into mid-range theories. Instead, these causal relations are more likely the general capitalist processes (e.g. capital accumulation) shaping empirical outcomes.

How then does/can a mid-range theory work? Here, I take on Hassink’s (2019: 280) invitation for me to offer a ‘more explicit reflection on his own work on global production networks and strategic coupling. How did he go about process and mechanism in his own work?’ This is not the space for even a brief recap of the theory of global production networks (GPN 2.0) developed fully in Coe and Yeung (2015). Suffice to say the concept ‘strategic coupling’ serves as an important causal mechanism for explaining empirical outcomes in this mid-range theory of GPN 2.0 (Coe and Yeung, 2019; Yeung and Coe, 2015). In my recent in-depth empirical work on the changing role of firm-state relations in East Asian development since the 1990s, I have written in great detail my conceptualization of strategic coupling as a dynamic mechanism of industrial transformation in a world of global production networks (Yeung, 2016: 190–203). In a more generic form, strategic coupling can be a general process applicable to many different phenomena, such as regional development, industrial change, social formation, political coalitions and so on. This meso-level process becomes a causal mechanism when applied in a necessary relation to a particular case and/or outcome (i.e. East Asian industrial transformation); it is constituted by several component mechanisms or ‘concatenations of mechanisms’ in Gambetta’s (1998) terminology. Specifically, this process-to-mechanism transformation is made possible through the empirical specifications of several coupling mechanisms, such as strategic partnership, industrial market specialization and (re)positioning as global lead firms. In Strategic Coupling (Yeung, 2016: Chs. 4–6), this particularity of coupling mechanisms and their concomitant firm-specific initiatives have been fully spelled out in empirical terms. In such a mid-range theory of industrial transformation, strategic coupling serves as a causal mechanism connecting opportunities in the global economy (as embodied in intra- and inter-firm global production networks) to development outcomes in national economies (e.g. the rise of domestic firms, their technological–organizational innovations and changing roles in the global divisions of labour).3

As should be clearer by now, a mid-range theory can be about processes at different spatial scales because it is not analytically tied to a particular scale in theorizing and specifying these processes into causal mechanisms. Strategic coupling can operate at the local, regional, national and international scales. There are two distinct advantages to this multi-scalar conception of mid-range theories. First, a mid-range theory may afford greater possibility for multi-scalarity in its empirical application. This scalar flexibility allows it to build better connections with, and contribute more productively to, other mid-range theories in the wider social sciences – the original impetus of my forum paper. It can also address Strauss’s (2019) concern with my ‘blackboxing’ of mid-range concepts from higher-order/scale abstractions (e.g. capitalism and national development).
Second, a mid-range theory tends to be theoretically coherent and empirically specific because its analytical targets are phenomenon-specific (e.g. deindustrialization, financialization, regional development and political shifts). In this sense, a mid-range theory such as strategic coupling might work better in addressing actor-specific roles in (co)shaping geographically uneven development, within the broader social relations of production. As noted in Dunford’s (2017: 975) recent revisit of Massey’s (1995 [1984]) classic, ‘In examining the firm, while acknowledging that profit is (sometimes) a driver, the chosen approach does not have the scope/richness of analyses of enterprise strategies and strategic coupling found in global value chain and global production network theories’. He argues that a broad theory focusing on the class structure of capital, such as Massey’s theory of spatial divisions of labour, can close off significant insights into firm-specific strategies as economic subjects shaping uneven development and the major reasons for broader processes such as (de)industrialization and differential regional growth.

**So what (kind of human geography)?**

Despite these possible advantages, mid-range theories are obviously not grand and comprehensive enough to be a ‘theory of everything’. It is also not ‘critical’ enough to account for all kinds of situatedness, positionalities and identity politics theorized in anti-realist approaches. But does a mechanism-based kind of mid-range theory make sense for human geography at all? This is a question raised in Hassink (2019), Strauss (2019) and Whiteside (2019). In this final section, I briefly outline the kind of human geography that may benefit more from the explanatory kind of theory advocated here. To me, geographical uneven development must remain as a raison d’être for human geography and thereby one of our key analytical foci. Massey (1995: 1) declared clearly that uneven development is ‘perhaps the central concept in economic geography’s field of enquiry’. To account for such uneven development, geographical political economy has been one of the most robust approaches. Here, I support Sheppard’s (2011: 327) view that '[g]eographical political economists have articulated a rigorous, wide ranging set of theories of the capitalist space economy, connecting agency with socio-spatial structure, through extensive multi-method case study research as well as theoretical analysis’.

The original forum paper was meant to speak to this kind of human geography avowedly devoted to the geographical political economy analysis of uneven development. In clarifying the mechanism–process conflation in some of this literature, the forum paper intends to make a meaningful contribution. In doing so, it might be less relevant for the kind of constructivist and humanistic critical geography that Whiteside (2019) cautions what I/we wish for may stifle. She points to my ‘assumption’ that ‘causal explanation is what ought to drive human geography’ and notes that ‘but with an equally strong array of interpretive, postmodern scholarship in human geography, to whom is this article speaking?’ (Whiteside, 2019: 269). I hope by now my original intention is clearer; it is about specifying better what causal mechanisms ought to be for developing more mid-range theories of uneven development. By focusing on mechanisms and processes, my approach inadvertently has far less to say about discursive constructions, identity politics and subjective representations that are likely better addressed in these critical approaches in human geography.

Meanwhile, Whiteside (2019: 271) concludes that ‘Causal mechanisms live in a realist world, geography increasingly does not’. This seems to imply that human geography ought to adopt anti-realist ontologies and these ontologies are perhaps more amenable to ‘engaged pluralism’ (cf. Rosenman et al., 2019). A critical realist pathway is construed as not ‘engaging’ due to its fundamental irreconcilability with these constructivist ontologies. But how can such an engagement, pluralistic or otherwise, be possible if its fundamental irreconcilability has been assumed a priori? This view does not seem to be a fair and reciprocal demand for constructive engagement. In this sense, I find much more comfort in Hassink’s (2019) call for more dialogues and MacLeavy’s (2019) plea for a diverse set of ideas and practices if geographers were to advance an emancipatory political agenda. Indeed,
my forum paper is never meant to be the only set of ideas and practices. Rather, it serves as an under-labourer for geographers interested in causal explanations (likely in geographical political economy, institutionalist and relational approaches and so on) and, hopefully, sheds some light on what might work better in such an endeavour. Grounded in the mechanisms literature in social science, my conceptual discussion represents a modest epistemological contribution and a pragmatic form of immanent critique towards what might be called an ‘analytical turn’ in human geography.

In the final analysis, a mechanism-based kind of mid-range theory must be both a form of analytical abstraction and a set of causal explanations for understanding geographical uneven development in context. Revisiting *Explanation in Geography*, this explicitly explanatory and yet contextualized kind of theory seeks to address Harvey’s (1969: 481, original italics) warning of geographers ‘spiralling off into heady abstraction only to land with an uncomfortable thud on the *terra firma* of geographical reality’. Indeed, this heady abstraction devoid of the richness of geographical reality is as pervasive in *some* quarters of today’s critical social theory as in the heydays of positivist formal models then – their practitioners often did not exercise adequate control of the sort of ‘intellectual trampoline’ offered by Harvey and others. And yet I agree with him that ‘the world of ideas, images, abstractions, concepts, and the like, are as much a part of the *terrae incognitae* of the geographer as is the world of direct experience’. Despite the inherent limits to our knowledge production, my sense is that we need better mid-range theories and more robust causal explanations of an ever more complex and uneven geographical reality. A clearer specification of causal mechanisms for the empirical phenomena under investigation represents only one small, albeit critical, step towards such a lofty goal of accounting for the enormous complexities of geographical uneven development. As pointed out by Massey (1995: 323, original italics), ‘It *is* possible to unearth by in-depth analysis key causal relations, including combinations, which may be replicated, even dominant, in numbers of situations. It is perhaps this approach, rather than a formulation of rules, which will be most productive’. To conclude, my vision for geographical knowledge production should not be confused and conflated with normative boundary setting that pretends to claim the core of the discipline’s intellectual project(s). Instead, it is an invitation for more constructive dialogues and meaningful engagements.

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**Notes**

1. In Yeung (2005), I discussed in depth and critically this ‘relational turn’ and ‘relational thinking’ in human geography in terms of its multifaceted themes and issues.
2. It is necessary to note though that Massey’s (1984) original thesis was grounded in the Marxist understanding of capitalist relations of production and did not invoke critical realism. She did cite Andrew Sayer’s earlier work on conceptions of space to argue for why geography matters in such capitalist relations of production. But it is only in the new ‘Reflections’ chapter in the book’s second edition (Massey, 1995: 312, 324) that she engaged briefly with the realism work of Bhaskar (1975) and Sayer (1984).
3. Interestingly and to be fair to Massey’s spatial divisions of labour theory, she made a claim in her 1995 reflections that her 1984 ‘small example’ of the differential responses of large British apparel and electronics firms to international competitive pressures since the 1970s (Massey, 1984: 157) can be understood as ‘a principle which both allows strategic connections to be made between different parts of the economy and links individual firms/subsectors to the major structures of society, whether that be political power or global economic movements’ (Massey, 1995: 319, original italics). While this idea of strategic connections might have some resemblance to the mid-range concept of ‘strategic coupling’ as a causal mechanism in GPN 2.0,
Massey (1995) did not specify further the causal mechanisms in such strategic connections. Her conception of spatial structures in constructing spatial divisions of labour was also primarily located at the intra-firm level rather than the inter-firm level, both of which fall squarely within the GPN 2.0 theory. As acknowledged in her reflections chapter, ‘However, there are other kinds of economic relations which contribute to the constitution of the spaces of industrial geography. Chief among these are market relations between firms, and these are far less considered in the preceding chapters . . . Spatial Divisions of Labour concentrates firmly on only one aspect of these multifarious possibilities: spatial structures within firms’ (Massey, 1995: 336–337, original italics). She further noted that ‘Extending the kind of analysis suggested in the preceding chapters for intra-firm relations to all the varied kinds of economic relations, especially including those between firms, would give a much fuller, and more complex and internally disintegrated and possibly contradictory, picture of spatial divisions of labour’ (Massey, 1995: 339). This call seems to validate the analytical approach taken in recent GPN research (Coe and Yeung, 2019).

4. At the suggestion of the journal’s handling editor, I have brought into my forum paper the recent debate in Environment and Planning A about economic geography’s core intellectual project. While this issue has attracted the attention of two commentators (MacLeavy, 2019; Strauss, 2019), I do not see my paper’s main focus on the mechanism–process conflation being an attempt to reassert economic geography’s core intellectual project – that would be self-defeating! Going beyond James et al.’s (2018) diagnosis, my forum paper has instead provided one possible epistemological reason why economic geography’s wider analytical purchase might be undermined by such an analytical conflation, irrespective of whether one views from ‘the project’s’ alleged core(s) or edges described in Strauss (2019).

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