



## **Costs, incentives, and institutions in bridging evolutionary economic geography and global production networks**

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COMMENTARY



# Costs, incentives, and institutions in bridging evolutionary economic geography and global production networks

Andrés Rodríguez-Pose 

## ABSTRACT

Two of the most influential strands in economic geography and regional studies – evolutionary economic geography and global production networks – have run on parallel tracks with limited cross-fertilization. The Regional Studies Annual Lecture 2020 paper by Henry Yeung proposes building bridges across both strands to improve our understanding of the uneven distribution and evolution of economic activity across the world. He puts forward the concept of strategic coupling as the foundation of such bridges. In this reply I argue that strategic coupling will not suffice, unless the variations in costs and incentives for engaging in networks and the different capacity of cities and regions to assimilate the benefits of innovation diffusion through networks are taken into consideration.

## KEYWORDS

evolutionary economic geography; global production networks; strategic coupling; institutions

JEL F23, L22, R58

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## INTRODUCTION

Henry Yeung's Regional Studies Annual Lecture paper (Yeung, 2020) aims to link and mutually reinforce two of the most influential current strands at the heart of regional studies and economic geography.

One is the now omnipresent evolutionary economic geography (EEG), which has grown out of the work of a cluster of researchers at Utrecht University (e.g., Boschma, 2004; Boschma & Frenken, 2006; Boschma & Lambooy, 1999; Boschma & Martin, 2007; Frenken & Boschma, 2007). This strand has championed many fundamental ideas and concepts – such as knowledge and innovation in regional evolution, proximity and distance, path dependency, related variety, and complexity for regional diversification – and elaborated a theoretical framework that is transforming how we approach economic geography. In doing so, EEG provides a much-needed dynamic perspective for understanding the location and evolution of economic activity in space (Boschma & Martin, 2010; Kogler, 2015).

The other is the global production networks (GPNs) approach. Built around the research of Henderson et al. (2002), Humphrey and Schmitz (2002), Coe et al. (2004) and Yeung (2009), among others, GPNs have brought to the fore the relevance of regional actors and assets, putting at centre stage the competitive advantage

of engaging in global networks as a way to improve industrial production and promote regional development (Coe & Yeung, 2015; Gereffi, 2018).


Both strands, in their own particular ways, have become dominant and continue to shape regional studies and economic geography. However, and despite notable exceptions (e.g., Barratt & Ellem, 2019; Dawley et al., 2019; MacKinnon, 2012; Trippel et al., 2018), the great paradox is that they have run, as highlighted by Yeung (2020), on parallel tracks, with limited interaction or cross-fertilization. This represents a missed opportunity, considering that there are considerable synergies between these two approaches. Hence, building bridges between them will propel regional studies and economic geography to a higher level.

But how can this be done? Why have the two most influential strands in regional studies ignored one another for so long? How can they be bound together in a way that gives regional studies a new boost? Yeung (2020) concentrates on what GPNs can offer to EEG, rather than the other way round. The reverse task is left for a later date or for what he calls other 'well-meaning' researchers.

## STRATEGIC COUPLING

Yeung's (2020) starting point is what the two strands share in common, that is, Storper's (1993) regional worlds

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framework. This is a framework built on local context, institutional constructs, collective learning and innovation, as the drivers of economic specialization and diversification. However, while sharing this general framework, EEG concentrates, he claims, on local characteristics and neglects external connections and linkages as forces of change. GPNs can fill in this gap for understanding related variety and regional diversification, he argues, by zooming into the importance of extra-regional linkages and the formation of firm-level networks and partnerships. After all, the participation in networks that spread beyond national borders is a catalyst for the transformation of local economies (Coe & Yeung, 2015).

To do this, Yeung (2020) delves into the concept of strategic coupling as the bond between EEG and GPNs. Strategic coupling is a fundamental construct for GPNs through which transregional mechanisms shape economic development. Strategic coupling adopts different forms in different types of regions. It varies between core areas and emerging and peripheral regions. Different types of strategic coupling can influence the capacity of a region to move towards greater diversification.

By promoting the idea that strategic coupling can influence some of the basic internal transformations proposed by EEG, Yeung whets our appetites for building bridges between EEG and GPNs.

## **COSTS, INCENTIVES AND INSTITUTIONS FOR BRIDGING EEG AND GPNs**

However, even though this sounds appealing, there are two additional areas in this bridge-building exercise that would be necessary in order to ensure that the bridge does not collapse. They concern the mechanisms through which engaging in GPNs can yield the desired transformations for economic actors and firms that participate in them and, as a result, transform the economies of regions and cities. These two areas are: (1) the variations in costs and incentives for engaging in networks; and (2) the different capacity of cities and regions to assimilate the benefits of innovation diffusion through networks.

Regarding the former, engaging in networks is not costless. Networks facilitate the spread of knowledge – both codified and tacit – and contribute to the transfer of innovation (Huggins & Johnston, 2009). But engaging in networks is costly, in both monetary and time terms (Aalbers et al., 2013; Fitjar & Rodríguez-Pose, 2017). It is also often the case that networks can lead to lock-in (Grabher, 1993) and, therefore, become irrelevant for the transformation of local economies. This is more likely to happen in the case of local networks and in less auspicious economic and institutional contexts (Rodríguez-Pose & Fitjar, 2013). Hence, the geographical dimension of networks is far from trivial (Torre & Rallet, 2005). Extra-regional and extra-national networks are likely to be a greater source of innovation and transformation than local networks. But, on their own they are neither necessary nor sufficient to overcome lock-in. Long-distance networks are also more difficult to get involved in

and require alternative types of proximity – cognitive, organizational, institutional or social proximity – to cope with the barriers derived from sheer geographical distance (Boschma, 2005). These barriers put small and medium-sized firms as well as the public sector at a disadvantage when engaging in GPNs. This is something that has not been overlooked by EEG. From the very beginning – as was also the case of the work done by relational geographers (Bathelt et al., 2004) – the role of production networks, value chains or global pipelines was deemed important, although variations in local conditions, together with geographical and other types of distances, made the formation of such networks far more difficult in some places than in others.

This brings me to the second point, which is the capacity to absorb knowledge and innovation funnelled through the network pipelines into the local context. This requires a minimum threshold of collective learning as well as the actors capable of activating that collective learning. Collective learning is a concept at the centre of Storper's (1993, 1997) regional world or Morgan's (2007) learning region. Yet, it remains subdued in Yeung's proposal and is often identified by him with the cluster and regional innovation systems literature.

Here two dimensions have to be considered. The first is related to the actors involved in the networks and to human capital. Questions need to be asked about who participates in networks, what are their characteristics, motivations and goals, and who can reap the potential benefits of that new information and knowledge and transform them into innovation. This implies examining the actors. But the actors (in both GPNs and EEG) often remain weakly conceptualized with limited attention paid to the spatial intricacies and scope of intervention (Fuller & Phelps, 2018). In particular, those participating in GPNs – because of the skills required and the complexity of the task – are bound to be limited in numbers. Those potentially benefiting from the networks will be larger, but only if systems of collective learning can be developed. Therefore, understanding the channels of interaction between those generating and transmitting the knowledge and those absorbing it is of paramount importance if strategic coupling is to make a difference for the transformation of local economies.

The second dimension is the institutional dimension, which is mentioned frequently in the paper, but which would require additional development. What type of institutions are necessary? Is it just formal institutions? Or do informal institutions play as important a role, if not more important? Do we need to focus just on the institutional quality of the place of destination in a network? Or does the difference in institutional quality between place of origin and place of destination play a part in the formation of networks and in the diffusion of knowledge and innovation?

Weak institutions, especially in emerging and less developed economies, can rapidly unravel any benefits linked to participation in global pipelines and global networks (Rodríguez-Pose, 2013; Rodríguez-Pose &

Zhang, 2020). We are seeing, for example, that large special economic zones often have no or a limited impact on their surrounding environment, mostly as a result of a combination of weak human capital and poor local institutional conditions (Frick et al., 2019). Therefore, we need to understand better how the benefits of belonging to a global network are received and assimilated at a local level, as the benefits of reaching out to the rest of the world by local economic actors, firms and agents can easily dissolve in hostile or unfavourable institutional contexts. Place leadership is also crucial in generating an enabling system for a collective learning and for strategic coupling to take place (Beer et al., 2019; Sotarauta et al., 2017).

Considerable progress can be made in our understanding of how local economies evolve and transform themselves into something new from existing conditions, if these two factors are accounted for. Bringing together EEG and GPNs around these areas and linking both strands to the advancements made of recent in innovation research on the diffusion and assimilation of new knowledge and on the role of institutions for economic development can lead to a considerable leap in our understanding of differences in the distribution and evolution of economic activity. This is a challenge that all strands within the regional studies and economic geography communities must undertake together, as the theoretical tools of individual research approaches remain insufficient to fully understand how urban and regional economies across the world learn, evolve and progress.

## DISCLOSURE STATEMENT

No potential conflict of interest was reported by the author.

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