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**Theoretical advancement in economic geography by engaged pluralism**

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### **Abstract**

Economic geographers have recently been confronted with attempts to constitute a new paradigm of evolutionary economic geography. The paper aims at advancing theoretical economic geography by reviewing its core critique and proposed solutions, particularly that of integrating the perspective of a geographical political economy. Although we sympathize with the identified shortcomings of an evolutionary economic geography we criticise the alternative approach for being too narrow and reductionist. In contrast, a relational economic perspective is argued to theorize the core weaknesses of EEG, namely power,

social agency and particularly the interrelatedness of influences on different scales, more comprehensively. By combining evolutionary and relational approaches in certain respects we, furthermore, plead for an advancement of theoretical economic geography by engaged pluralism.

Key words:

Evolutionary economic geography, sympathetic critique, relational perspective, engaged pluralism

## **1. Introduction**

As several scholars have observed, human geography in general and economic geography in particular, is full of enthusiastic, but often superficial attempts to embrace theoretical thinking from neighbouring social and economic sciences (Cloke and Johnston, 2005; Allen et al., 1997; Massey et al. 1999; Jones, 2009; Hamnett, 2003; Sunley, 2008; Scott, 2000). What starts with the adoption of some ideas and notions to explain phenomena, sometimes ends with a so-called turn in the discipline or the proposal of a true paradigm. Economic geographers have recently been confronted with the attempt to constitute such a new paradigm within their field of study, namely evolutionary economic geography (Boschma and Frenken, 2006, 2011; Boschma and Martin, 2007; Frenken 2007; Boschma and Martin, 2010).

Evolutionary economic geography (from here on EEG) deals with “the processes by which the economic landscape—the spatial organization of economic production, distribution and consumption—is transformed over time” (Boschma and Martin, 2007, 539). Although economic geographers, particularly members of the Californian school (Storper and Walker 1989), have worked with evolutionary notions in the past (see also Grabher 1993), EEG has been recently constituted as a paradigm in a more systematic and including way. The paper by Boschma and Frenken (2006) is, due to its high number of citations<sup>1</sup>, one of the key articles which propose the epistemological paradigm of EEG.

EEG has recently attracted much attention in economic geography, both theoretically and increasingly also empirically, which is documented by the number of publications (Boschma and Martin, 2010; Simmie and Carpenter, 2007; Schamp, 2005; Grote, 2004; Stam, 2007; Hassink, 2005, 2007, 2010; Cho and Hassink, 2009;), special issues (Hassink and Shin, 2005; Boschma and Martin, 2007; Grabher, 2009), edited books (Shapira and Fuchs, 2005; Frenken, 2007; Boschma and Martin, 2010), workshops, such as in Cambridge and Jena (at the Max Planck Institute of Economics) as well as special sessions at the Global Conference on Economic Geography in Beijing and at AAG Annual Meetings. Moreover, evolutionary thinking has been applied to define and improve existing theoretical concepts in economic geography, such as regional innovation systems (Cooke, 2004; Uyarra, 2010) and clusters (Staber, 2010; Menzel and Fornahl, 2010; Lorenzen, 2005; Klepper, 2007). EEG also has something to say about regional policy issues (Boschma, 2005, 2008; Hassink and Klaerding, 2011). Scott (2000, 494), in his seminal overview of economic geography theorising, clearly indicates the influence of evolutionary thinking on current research in economic geography.

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<sup>1</sup> According to the ISI database, accessed on 9th of August 2010, the paper is cited 57 times.

The increased importance of EEG can finally be underlined by The Times Higher Education Index where 'relational and evolutionary economic geography' ranks third by the number of citations in social sciences journals (Coe 2011, 82).

Although EEG is still in an embryonic stage of development, its future seems to be promising as it has shown to have strong explanatory power of the theoretical notions and concepts in economic geography. However, it has currently been criticised for the strong emphasis on organisational routines, thereby relegating the role of institutions as well as under conceptualizing social agency and power (MacKinnon et al 2009, Pike et al 2009). This paper contributes to the theoretical advancement of economic geography by reviewing this core critique and proposed solutions, particularly that of integrating the perspective of a geographical political economy (from now on GPE) (MacKinnon et al 2009, Pike et al. 2009). We sympathise with some of the criticism but also evaluate GPE as too limited. In addition to GPE, we argue that theoretical economic geography can be advanced by including some selected institutional and relational approaches. While institutional concepts in terms of 'old' institutional economics (Hodgson, 2009) are seen as relevant solutions, neither MacKinnon et al 2009 and Pike et al. 2009, nor the other contributors to the special issue in Economic Geography (2009, Vol. 85) have paid much attention to relational economic geography, or parts of it. This is surprising, as we see high potentials to compensate for some of the weaknesses of the EEG paradigm. In broadening up EEG to additional theoretical avenues we argue in favour of engaged pluralism, a term recently coined by Barnes and Sheppard (2010). Although we take the proposed paradigm of EEG as a starting point of our discussion, we are against fragmented pluralism with paradigmatic boxes existing in isolation to each other.

In order to clarify our points we summarize the core characteristics of EEG and its main criticism with respect to the weak significance of institutions, the under conceptualized notion of social agency and power as well as the neglected multi-scalar interrelatedness and embeddedness of firms (Section 2). Section 3 deals with the proposed alternatives to enhance EEG whereby we advocate certain elements of a relational perspective in addition to GPE which is criticised for being too reductionist and narrow. The paper concludes by reflecting on the revised understanding of EEG regarding theoretical stability and engaged pluralism within our discipline (Section 4).

## **2. EEG and its weaknesses**

EEG aims to explain the emergence and changes of economic landscapes by the underlying industrial dynamics of firms (Boschma and Frenken 2009, 152; Boschma and Martin 2010, 25). It successfully tackles research objectives addressed to different spatial levels, which, in our view, represent the research scope of contemporary economic geography (Boschma and Frenken, 2006: 293, 295): on the micro-level the decision-making and location behaviour of *firms* are analysed; the spatial evolution of *sectors* and the co-evolution of firms, technologies and territorial institutions are focused at the meso-level, whereas the convergence or divergence in spatial systems such as *regions or nations* is subject to the analysis on the macro-level. However, as shown later, EEG – as understood by Boschma and Frenken – explains spatial economic outcomes on the meso- and macro-level from the micro-behaviour of firms, thus, relegating the influence of other spatial scales. This reasoning is thought to be rooted in some of the disciplinary origins of EEG.

The major terms and concepts of EEG are derived from evolutionary economics, generalized Darwinism and complexity theory which highlight, amongst others, the roles of path dependence, variety, selection and organizational routines for regional development and adjustment (Boschma and Frenken 1999, Coe 2011). Based on Nelson and Winter's (1982) evolutionary theory of economic change, and most contrary to alternative approaches such as institutional economic geography (from here on IEG) or neoclassical thoughts, for Boschma and Martin (2007: 541) *routines* are the key: they coordinate and control firm behaviour and thereby shape distinctive competitive advantages at the micro-level which unfold onto other spatial layers through processes of interaction.

In contrast, territorial institutions are argued to affect industrial dynamics only weakly, hence opposing central assumptions of institutional approaches to economic geography (Boschma and Frenken 2006, 2009). They are attached to the meso- and macro-level of economic landscapes (Schamp, 2005: 618-19) and perceived as more durable compared to the rather temporary, more dynamic organisational routines (Essletzbichler, 2009). The marginal role of institutions, for instance materialized as industrial relations or technology standards, is considered to result from its "too loose", "nonbinding" and "so general" characteristics (Boschma and Frenken 2009, 152, 153); differences in institutional frames, as argued from an institutional perspective, would not sufficiently explain intra-regional variety of local networking activities or the replication of the same routines across national institutional boundaries.

Moreover, the weak influence of institutions on the spatial formation of new industries is shown in the concept of windows of locational opportunity (Storper and Walker 1989) which is clearly based on evolutionary thought. Since sector-specific institutions are assumed to only co-evolve with new industries, existing institutional endowments such as general knowledge, skills, service providers or a reliable judicial system are not expected to match new industrial requirements. Such basic institutions seem to be too widely available in space as if they adequately explain the evolution of new industrial regions (Boschma and Lambooy 1999: 423, Boschma and Frenken 2009, 155). Although one cannot predict where new industries emerge, it is not an entirely random process and differs from industry to industry. Boschma and Wenting (2007), for instance, demonstrated that the British automobile industry emerged on the foundations of related industries (such as coach and cycle making sectors), which provided related knowledge and skills (see also Klepper, 2007).

Closely connected to analysing emerging industries is the notion of industrial decline and regional lock-in. EEG assumes that established spatial patterns tend to be largely irreversible due to its path-dependent evolution. Lock-in situations appear because specialized industrial regions endowed with particular resources, competences and institutional structures are unable to match changing market requirements; also, built-up agglomeration economies with respect to infrastructure and services hinder renewal processes (Boschma and Lambooy, 1999, 418; Martin and Sunley, 2006, 409). However, the main argument from an EEG perspective is, again, focussed on the firm level. Organisational routines shaping the learning and creative capability of firms and whole industries are dangerously limited because they do not fit the new situation any longer whereas, at the same time, the internal selection



process fails due to consolidated routines regarding problem solving (Boschma and Lambooy, 1999: 416).

Nonetheless, institutions are ascribed some relevance for economic change, namely in the process of co-evolution. "If institutions play a role, it will be more often in an endogenous manner as entrepreneurial firms, consumers and government officials engage in collective action to establish new institutions" (Boschma and Frenken, 2009, 5). Bathelt and Boggs (2003, 278), for instance, take such an approach to explain regional development through interactive learning. "Thus, interactive learning is concerned not only with creating technological and organizational innovations (...), but with creating wider institutions that circulate capital in all its forms. Thus, regional development paths take place within a wider social context." Regional actors are hence, challenged to shape their own capabilities to adjust and (re-)invent industrial and economic structures, for example by rebundling local resources which had previously been neglected (Bathelt and Boggs, 2003, 276-77).

The co-evolution of institutions, technologies and sectors contributes to the transformation of previously 'neutral' places, endowed with generic factors, into 'real' places (Boschma and Frenken 2006, 291). This is in contrast to an institutional approach which argues from existing institutional differences, thereby, assuming 'real' places as a starting point for regional economic analyses but fatally neglecting the processes of emergence (Boschma and Frenken 2006, 277).

Reasoning almost exclusively from the firm level, however, is very prone to criticism, too.

*The weak significance of institutions, the under conceptualized notion of social agency and*

*power* as well as the *neglected multi-scalar interrelatedness and embeddedness* of firms are at heart of most recent critique of EEG from a GPE point of view (Pike et al 2009, MacKinnon et al 2009)<sup>2</sup>. While many economic geographers would agree that institutions matter for regional development (Rodríguez-Pose, 2009; Gertler, 2010, 3), MacKinnon et al (2009, 135) reveal that, in contrast, “some of the recent contributions to EEG have risked relegating the role of institutions in shaping processes of economic change. (...) There seems to be little interest in how institutions are actually constructed and endure over time, which requires a deeper engagement with older institutionalist conceptions of instincts, habit, language, and power”.

Hodgson (2009) in response to MacKinnon et al (2009), however, has concluded such an institutional understanding from generalized Darwinism which needs to be explored further. Institutions, especially in terms of habits, would represent rule-like social structures which may stimulate economic changes due to the cumulative effects of their repeated application. Altogether a *broader approach of institutions* is proposed which emphasises its strong impact on individual agency (Hodgson, 2009), expands beyond the firm-level and acknowledges the entanglement of various scales instead of conceptualizing an almost linear relationship between institutions and organisational routines (Pike et al 2009, 179; MacKinnon et al 2009, 140). We criticize that some evolutionary economic geographers fully leave out the institutional environment and its influence on firms, particularly those who study spin-off dynamics and the passing on of successful routines from fit mother companies to their spin out companies, e.g. in the car industry or fashion design industry (Klepper, 2007;

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<sup>2</sup> We do realise that GPE is broader in scope than the one discussed in Pike et al. (2009) and MacKinnon et al. (2009), but will stick to this narrow view as it is the view that is used in the current paradigmatic discourse in economic geography. For an overview of the broader view on GPE, see Sheppard (2011), where for instance also gender and cultural aspects of GPE are discussed.

Wenting, 2008, 2009). However, firms in these locations can probably develop successful internal routines thanks to the favourable institutional environment (specialised labour market, training institutions, innovative or creative milieu etc.); in other locations they would not have been able to develop these internal routines.

Privileging the firm as an initiator of economic change is furthermore criticised for recently neglecting other actors such as state, labour and civic society groups as well as for *losing sight of the positioning of firm in wider networks, processes and structures*, such as the embeddedness in global production networks (MacKinnon et al 2009, 139). By widening the scope of actors and scales, the EEG concept might also become more amenable towards the *role of power*. Induced by different capacities of agents to enforce interests or access information, power is regarded as a crucial source of uneven social and economic development. This appears to be overlooked in the current reading of EEG (MacKinnon et al 2009, 137; Pike et al 2009, 180), but also within the wider economic geography literature dealing with embeddedness (Jones 2008, 72). Finally, the concept of *social agency* within EEG is suggested to be reconsidered. Close attention should be paid to both, the crucial function of social structure and institutions – beyond the firm level – as enabling and constraining factors of human agency and the intrinsically evolutionary notion of structure as being constantly reproduced and transformed by collective agency (MacKinnon et al 2009, 135; Pike et al 2009, 180). In the current reading of EEG firms misleadingly appear to shape their routines almost detached from a wider institutional context.

In conclusion, we agree with the outlined critique on EEG posed from a GPE angle, particularly the ones related to institutions and real places. On the one hand, we believe to

broaden the “reductionist” and “incomplete” understanding of institutions currently applied within EEG (Pike et al 2009, 179); on the other hand, we sympathise with its focus on “the processes and mechanisms by which the economy *self-transforms itself from within*” (Boschma and Martin, 2010, 4; italics in original text) reinforcing the capability of firms to create ‘real’ places. In order to overcome most criticism the next section evaluates the main conceptual contributions to EEG by three alternative approaches, namely, institutional economic geography (IEG), GPE and relational economic geography (REG).

### **3. Advancing theoretical economic geography with an institutional, geographical political economy or relational perspective?**

In order to enhance the role of institutions as complementary factors of influence to organisational routines we, along with other critics, suggest including an institutional economic thinking in the theoretical advancement of EEG. This way, institutions at different spatial level do not only gain more attention in general, thus complementing the firm-centred perspective of EEG, for instance, with the notion of institutional thickness; but also, it is emphasised how human agency is enabled and constrained by social structures and its representative formal and informal institutions (Section 2).

Linking constitutive aspects of IEG and EEG has recently been discussed by Gertler (2010) who proposes a revised institutional economic geography, after it has been advocated around 2000 by Martin (2000) and Amin (2001), among others. Both, the old and new version highlight to analyse “how individual institutions – as well as their interaction with

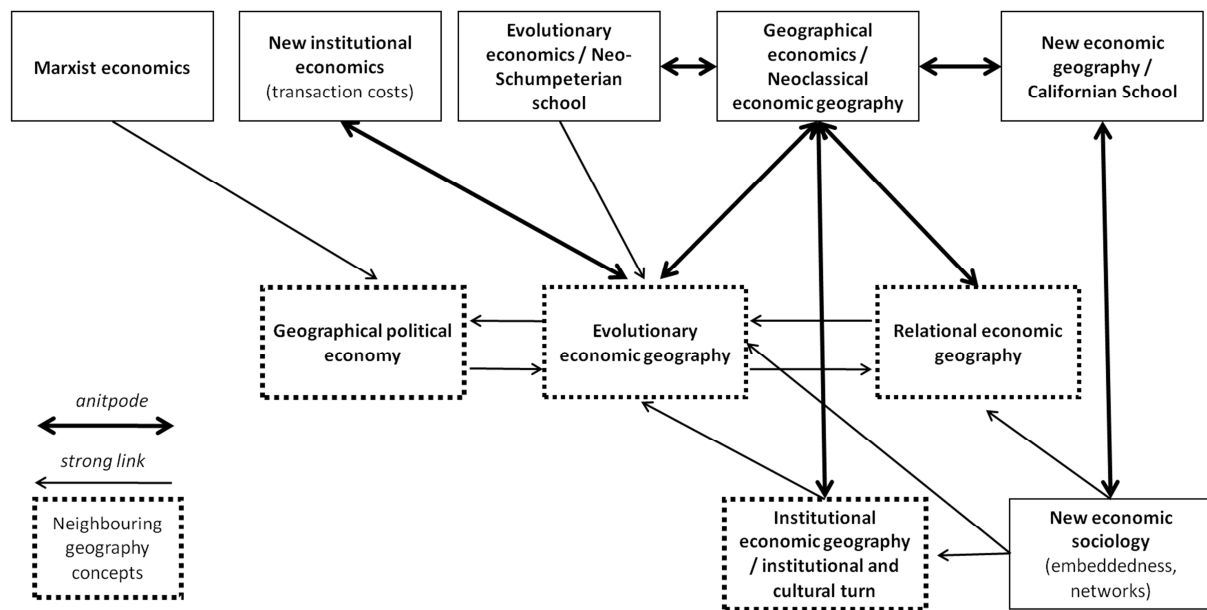
other institutions – evolve and change over time” (Gertler 2010, 6). An institutional approach to economic geography represents a perspective for explaining the transformation of economic landscapes because institutions are considered as path dependent and carriers of history (Martin, 2000, 80; Martin, 2010, 2012). Path dependence, as defined by MacKinnon (2009, 499), is finally anchored in “institutional and evolutionary economics which highlights the influence of past decisions and experiences in shaping how economic actors respond to wider processes of economic change.” Schamp (2007, 247) bases his argument for relating EEG and IEG particularly on the notion of co-evolution. Hence, he elaborates on the point that has been described as most significant for bringing institutions back in (Section 2). It provides a better understanding about how regional economic development trajectories are socially constructed instead of centring on firms only. Given those reasons for a conceptual integration, we may interpret Boschma and Frenken’s (2006) strict separation of IEG and EEG in their constituting article as necessary means to draw borders and caricature neighbouring fields in order to launch the new paradigm of EEG.

But besides IEG it might also be inspiring to look at relational economic geography (from here on REG) and GPE to eliminate some of the shortcomings of EEG. Both are regarded as neighbouring geographic disciplinary paradigms, turns or theories because they imply evolutionary thoughts of path dependent development<sup>3</sup> (Figure 1).

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<sup>3</sup> In their conceptual paper about REG, Bathelt and Glückler (2003, 134) define evolution as an important constitutive elements besides organisation, innovation and interaction. Regarding GPE, the design of economies is explained by its “spatialized social relations, social agency, and socio-institutional context *over time, across space, and in place*” (Pike 2006, 206; italics by authors), clearly indicating to the notion of path dependence.

Figure 1: The pedigree of recent theories of economic geography and related disciplines<sup>4</sup>



Source: authors' design, inspired by Scott, 2000 and Schamp, 2007

Since the last three decades economic geography has become increasingly pluralistic in terms of integrating insights from social sciences and economics, but also from cultural and political sciences (Boschma and Frenken, 2006, 273, 274; Schamp, 2007). Although EEG is mainly informed by evolutionary economics we can draw links to the core ideas of new economic sociology, too. Embedding economic agency and outcomes in structures of ongoing social relations has significant impacts on the institutional, relational and evolutionary turns of economic geography (Hess, 2004, 165). This is important in order to distinguish EEG from disciplinary streams that might be regarded as contrary to it and hence qualify less as sources for its potential contributions. Insights from Krugman's geographical economics, new institutional economics and the Californian School around Scott and Storper

<sup>4</sup> Please note that, in order to be clearly laid out, Figure 1 illustrates only main theoretical links between disciplines which are thought to be relevant for this paper. Particularly the conceptual contributions from economics (top row of Figure 1) are considered.

are assumed to relegate institutional and socio-cultural foundations of economic systems (Hess, 2004, 165) and thereby reveal themselves as antipodes to EEG (Figure 1).

So, what do REG and GPE, respectively, have to say about critical points of EEG in terms of institutions, social agency, power and the interrelatedness of scales? Although GPE has been recently proposed several times (MacKinnon et al 2009; Pike et al 2009) we suggest insights from REG to complement EEG, in particular, and hence advance theoretical economic geography, in general (Yeung, 2005; Bathelt and Glückler, 2003; Boggs and Rantisi, 2003; Sunley 2008). A relational perspective is argued to provide better concepts for *comprehensively* theorizing institutions, power, social agency and particularly the interrelatedness between scales, which can be criticised for being too narrow and reductionist in political economic approaches.

In our view, REG represents a broader set of streams of relational thinking within human geography (for an overview see Jones, 2009) and economic geography (see Sunley, 2008). Its emergence coincides with major shifts in economic organization in terms of outsourcing, specialisation and increased interfirm linkages in a post-Fordist production system (Boggs and Rantisi 2003, 109). Thematic concepts gained attention that stressed the relational embeddedness of actors, firms and organizations in networks, e.g. global production networks (Dicken et al., 2001; Coe et al., 2008). At the same time knowledge creation in firms, temporary work organisations (projects) as well as a socio-cultural embeddedness of actors emerged as new research fields of economic geography (Ibert, 2008: 7). Altogether, Yeung (2005, 42) identifies three categories of theoretical frameworks, namely relational assets, network embeddedness and relational scales, which constitute a thematic turn

towards a REG. The next four paragraphs outline how we understand REG to complement EEG and advance theoretical economic geography.

### ***Significance of institutions***

REG considers formal and informal institutions as central influences on the evolution of industries and the development of regional economies. Special emphasis is placed on the embeddedness of firms and organisational structures in a wider network of social relations and institutions at different spatial scales (Bathelt and Glückler 2003, 131, 133). As Yeung (2005) points out, relational assets such as institutional thickness, social capital and untraded interdependencies, all of them transcending firm levels, constitute the core themes of REG.

Furthermore, applying a relational perspective highlights the significance of institutions for the rise of new sectors. For instance the new media cluster in Leipzig developed not only from firm initiatives, such as the regional television and broadcasting service (MDR) which stimulated the co-location of media-related companies. But also, the specific socio-economic embeddedness in “specialized local resources, skills and shared trust, norms, routines and other local institutional structures [e.g. higher education and training programmes and incubators]” (Bathelt 2002: 587) is emphasized as a source of regional competitiveness and growth which clearly goes beyond the impact of organizational routines at the micro level.



With respect to institutions, scholars who wish to integrate GPE into EEG do not differ significantly from the outlined arguments of REG since both highlight the importance of institutions in the understanding of 'old' institutionalism (MacKinnon et al 2009). However, the approaches might differ in the *scope* of institutions perceived as relevant for explaining the evolution of economic landscapes. GPE primarily thinks of capital-labour relations and the state regularities as influential factors (MacKinnon et al 2009, 131). As Yeung (2005, 39) points out, this thematic focus limits the progress of whole disciplines such as radical political economy. Its decline in the late 1980s is assumed to be based in the core argument, namely the deterministic relationship between capitalist relations and spatial structures. It overemphasises the effects of class and division of labour on spatial economic development which is criticised from a relational economic geography as being too limited. A relational approach, in contrast, tends to be less preoccupied with certain categories of relevant institutions or actors, which is reinforced by the next two points closely connected to the concept of institutions.

### ***Multi-scalar perspective of influences on economic development***

Due to the consideration of a variety of actors and institutions, REG broadens the range of influences and capabilities of political regulation of regional development. In contrast to primarily reasoning economic evolution and transformation from the micro-level of firms, REG stresses the *interdependencies* of factors on local, regional, national and global scales as well as the *embeddedness* of individual agents in multiple networks (Boggs and Rantisi 2003, Yeung 2005). However, this does not mean to "dissolve scalar units into long chains of

networks and spatial relations” which has been convincingly criticised by Sunley (2008, 15) but to be more sceptical towards scale. A relational perspective helps to avoid the fallacy of EEG to conceptualise institutions and the formation of economic landscape as mere reflections and outcomes of organisational routines within this region (Pike et al 2009, 178). Darwinism clearly propagates such unidirectional influences of “structured algorithms and rule-like dispositions, interacting at the micro-level to create complex and unpredictable marco-outomes” (Hodgson 2006, 23) which are seen as problematic for two reasons:

Firstly, informed by the embeddedness concept, “microentities [such as firms] are never isolated atoms but are shaped and evaluated by their meso- and macroenvironments. Any explanation that focuses only on one level is reductionist and incomplete” (Essletzbichler 2009, 162). And secondly, even if the firm is a preferred level of analysis a relational approach would question the supposed homogenous, conflict-free and self-contained entity of agency implied by the current treatment of firms in EEG. Instead, REG reveals them as intersections of associated individuals who are involved in numerous networks within and across company boundaries, e.g. conceptualized as communities of practice, with each following their own logic and providing individuals with different access to resources and capabilities of power (Boggs and Rantisi 2003, 112; Ettlinger 2003). Accordingly, in order to explain the success of firms and regions, the focus should be shifted from firm-centred organisational routines to actors’ networks and interrelations (Dicken et al 2001, 89; Boggs and Rantisi 2003, 114), resulting in no prioritization of a specific scale per se.

At the same time, such broad and unspecified understanding of relations and networks is problematic: who and which institutions should be included and excluded from the analysis? “Networks are defined in such an elastic manner that they can include virtually anything. One cannot escape the conclusion that such a loose and ubiquitous idea explains everything and nothing” (Sunley 2008, 8). We agree that this view lacks analytical clarity and boundaries, on the one hand. On the other hand, however, we sympathize with the notion of openness towards the factors that influence economic outcomes. In contrast to REG, these are clearly defined by GPE as state, trade regimes, labour and class. Although Pike et al (2009, 128) argue that they are sufficient “to dissect the causal relations, mechanisms, and processes that matter to our explanation”, we, still, perceive them as too reductionist. Institutions are neglected such as the cultural and cognitive embeddedness of actors (Zukin and DiMaggio 1990, 15-23)<sup>5</sup> which are regarded as crucial sources for explaining economic behaviour.

### ***A balanced view of structure and social agency***

REG considers human agency to be enabled and constrained by wide institutional structures, thus enhancing the scope of influences on individual behaviour beyond intra-firm processes, rules and practices. Economic decisions are thought to be generally path dependent and context-specific (Bathelt and Glückler, 2003, 127) and the presence or absence of institutions is assumed to influence economic behaviour, for instance in terms of creating and maintaining business networks (Murphy 2003) or shaping transnational business practices

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<sup>5</sup> According to Hess (2004, 171), Zukin and DiMaggio’s concept define cognitive embeddedness as regularities of mental processes that shape the economic reasoning of individual actors. Instead of thinking purely rational in terms of homo oeconomicus, the notion of bounded rationality is emphasized. Cultural embeddedness refers to the shared collective understandings in shaping economic strategies and goals. Both, cognitive and cultural, are later on included in Hess’s (2004, 176) notion of societal embeddedness as part of a revised concept of embeddedness in economic geography.

(Jones, 2008). At the same time, however, both, REG and EEG deny a structure-oriented perspective which strictly determines economic outcomes by the macro-institutional environment. Instead, REG is argued to represent parts of “midrange theoretical themes” (Yeung 2005, 39) because it provides a balanced view of structure and agency where identical structural preconditions do not necessarily have the *same* effects at any time and place (Bathelt and Glückler 2003, 127) but might vary according to specific conditions (contingency).

### ***A relational concept of power***

REG has been heavily criticised, particularly with respect to its struggle to explain broader social and institutional structures in contrast to mere description of constituting network relations (Sunley, 2008; Yeung 2002, 13). We agree with that but also see EEG to be at this risk because power relations are under conceptualized (Section 2). Yeung’s (2005) notion of ‘power geometries’ may provide promising means to address this limitation (Boggs and Rantisi 2003, 114).

Economic change and spatial differences of economic outcomes are explained by different degrees of power inscribed in three dimensions of relationality, namely actor-structure, socio-spatial and scalar relationality (Yeung 2005, 43). Within them, firms are considered to be exposed to specific tensions which lead to different strategies, practices and firm behaviour as a whole, even if they are objectively involved in the same situation. For instance, being integrated into local business networks does not sufficiently explain the

success or failure of firms per se; further analyses is required regarding the importance of extra-local linkages and the position within the production network in order to scrutinize the role of local, regional, national and global dimensions of scalar relationality (Yeung 2005, 43).

The incorporation of power in terms of capital-labour conflicts and class by a GPE perspective (MacKinnon et al 2009, Pike et al 2009) has been strongly criticised as being too vague (Hodgson 2009) and also, too limited to explain economic landscapes: “Although class is a central category and capital-labor conflict is the key driver of change in a political economy framework, it is one of many progenitors of change in evolutionary theory” (Essletzbichler 2009, 163). We agree with the shortcoming and again, refer to the specialised focus of GPE in contrast to a broader, more comprehensive of perspective of power in a relational framework. Outsourcing production processes, for instance, is, of course, linked to the wider scope of capital accumulation and political regulation as proposed by GPE but also, cultural, organisational and spatial proximities may play roles in re-organising firm structures. By analysing tensions between the political, economic, social and spatial dimension of socio-spatial relationality (Yeung 2005, 43) a tool is provided to reveal power relations causing distinct spatial outcomes of economic organisation.

#### **4. Conclusion**

The paper started with a conceptual overview of EEG and presented its main criticism with respect to institutions, power, social agency and the interrelatedness of influences at different spatial scales. EEG has recently strived to become the new dominating paradigm in economic geography; it has some clear conceptual notions and research foci to explain key empirical phenomena in economic geography (Hassink and Klaerding, 2009). The paper therefore clearly brings the discussion about EEG forward by giving an additional solution, other than the GPE approach proposed by MacKinnon et al. (2009) and Pike et al. (2009), to eliminate the identified conceptual shortcomings of EEG. We advocate a selective relational perspective to complement EEG because it provides a better approach for comprehensively theorizing power, social agency and particularly multi-scalar impacts on the formation of economic landscapes. Proponents of GPE appear too focussed on impacts emanating from the state, class and capital-labour relations whereby other factors that shape regional economic development, such as for instance factors related to culture and cognition, are under conceptualized.

REG derives from the wide range of frameworks subsumed under a relational perspective in economic geography (Yeung 2005, 40). It may be understood as a transdisciplinary way of conceiving economic behaviour (e.g. 'relationality in organisational research' by Bradbury and Bergmann Lichtenstein, 2000) which, by its nature, is more comprehensively designed than a rather clear political approach to economic geography. In our view, REG is particularly strong in explaining important phenomena in economic geography, such as knowledge transfer, production networks, supply chains and money flows which place emphasis on actor-network relations. REG and EEG are argued to be capable of being combined rather easily: both approaches show only subtle difference (Hassink and Klaerding, 2009), mainly

with respect to their fundamental disciplinary influences: whereas REG has strong links to economic sociology, EEG is heavily based on evolutionary economics (Schamp, 2007). But this is rather seen as an advantage than a barrier to conceptual exchange because it allows considering complementary influences, e.g. scope of institutions, on economic evolution.

In sum, we see high potentials to complement EEG with the key ideas of REG presented in this paper. Promising research in which EEG is already used in a relational way to look at the evolution of global value chain has been recently published by Oro and Pritchard (2011).

To be clear, complementing EEG by a relational perspective does not mean to propose an alternative paradigm. We rather intend to advance theoretical economic geography in order to meet today's and tomorrow's research challenges of economic geography. With our paper we facilitate *theoretical stability* instead of provoking shifting and short-lived paradigmatic commitments caused by criticism and the rise of new ideas from neighbouring social sciences which has been generally observed by Amin (2001, 1238) and Grabher (2009) in economic geography.

Combining complementary theoretical perspectives, as has been recently done by MacKinnon (2012) linking global production networks, strategic coupling and EEG, underlines '*engaged pluralism*' which is contrary to fragmented pluralism in economic geography (Barnes and Sheppard 2010). The divisions between EEG and Marxist political economy, on the one hand, and EEG and institutional economic geography, on the other hand, "presents evolutionary economic geography as self-sustaining and autonomous but at the cost of setting up 'us' against 'them'" (Barnes and Sheppard, 2010, 204). Fragmented

pluralism which is arguably necessary to constitute a new paradigm at the beginning, crucially limits the opportunities for cross-fertilisation (MacKinnon et al. 2009, 130) which can be inspiring for progressing paradigms that are still in its infancy like EEG. Hence, in line with MacKinnon et al. (2009) and Grabher (2009) we advocate EEG as a pluralistic project which is open to engage with relational perspectives, or others, that may be discussed in the future.

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