Creative Industries from an Evolutionary Perspective: A Critical Literature Review
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Abstract
Although creative industries have been popular as a research topic among social scientists from various backgrounds, most studies lack an explicit evolutionary, history-informed perspective. In this paper, we critically explore whether the notions of evolutionary economic geography can contribute to analyzing and explaining the spatial dynamics of creative industries, which has not been done yet in a systematic way. Although not all evolutionary concepts are useful, we conclude that co-evolution in particular has important potential in helping to explain the spatial dynamics of creative industries in a comparative perspective.

1. Introduction
Over the past two decades, trade in creative industries has grown rapidly: the total value of trade grew from 47.8 billion USD in 1980 to 1.3 trillion in 2005 (Singh 2007). In Germany, for instance, the number of employees in creative industries is 10 times higher than in the steel industry (Lange et al. 2009, 12). These figures clearly show the empirical significance of creative industries. Moreover, the term creative industries has received increasing theoretical and empirical academic attention within the last two decades (Hartley et al. 2012; Rantisi et al. 2006; Cooke and Schwartz 2007; Andari et al. 2007). However, there is no generally accepted definition of the creative industries, and many empirical studies focus on a wide range of sectors (Boggs 2009; O’Connor 2007; Pratt 2009). The classification of creative industries is imprecise and remains controversial. Besides, there is no easy way to measure creativity in creative industries. Nevertheless, the concept of creative industries is useful because it helps us to understand the dynamics of the contemporary economy. In addition, the increasing importance of creative industries reveals the significance of displaying social status and advancing the self-actualization of individuals (Earl and Potts 2004; Potts 2009; Boggs 2009; Hartley et al. 2012).

The first definition of creative industries appeared in the UK creative industries mapping document (DCMS 1998). In this paper, we will adopt this definition, given its close connotations to economic geography. According to that definition, creative industries are “those activities which have their origin in individual creativity, skill, and talent and which have the potential for wealth and job creation through the generation and exploitation of intellectual property” (Flew 2012, 9). They include advertising, architecture, arts and antique markets, computer and video games, crafts, design, designer fashion, film and video, music, performing arts, publishing, software, and television and radio.

As Boggs (2009, 1493) pointed out:

… hundreds of case studies, often (but not always) focused on a single or related group of cultural industries in a single metropolitan location … these case studies routinely focus on the dynamics of a given industry in a given place.
However, few of them have used an explicit evolutionary and history-informed perspective (Rantisi et al. 2006). This is surprising, as recently a specific theoretical framework has been developed around the evolutionary perspective in economic geography. This evolutionary economic geography (EEG) and related concepts, such as path dependence, lock-ins, path creation, related variety, and co-evolution, deal with the processes by which the economic landscape is transformed over time. They can also potentially contribute to analyzing and explaining spatial dynamics – for instance, localization, clustering, and dispersal growth processes (Storper and Walker 1989) – in creative industries. Spatial dynamics can refer to several elements of the creative industries, including production, management, and markets/customers.

As EEG has some clear conceptual notions and research foci to help explain the development of industries through time (Hassink et al. 2014), the following questions are critically examined in this paper:

1. Can EEG theory contribute to analyzing and explaining the spatial dynamics of creative industries?
2. If it can, what kind of concepts could potentially contribute to analyzing the spatial evolution of creative industries and how?

In the following section, we will first introduce the EEG notions of path dependence, lock-ins, path creation, related variety, and co-evolution. Then, in Section 3, we will describe diverse definitions of creative industries and their main characteristics. In Section 4, we review recent case studies implicitly or explicitly using EEG notions. In Section 5, we draw some conclusions and provide a future research agenda.

2. Evolutionary Economic Geography

Although economic geographers, particularly members of the Californian school (Storper and Walker 1989), have worked with evolutionary notions in the past, EEG has been recently constituted as a paradigm in a more systematic and inclusive way (Boschma and Frenken 2011b; Boschma and Martin 2007; Boschma and Martin 2010). It aims to explain the emergence and changes of economic landscapes by the underlying industrial dynamics of firms (Boschma and Martin 2010, 25). It successfully tackles research objectives addressed at different spatial levels: on the micro-level, the decision-making and location behavior of firms; at the meso-level, the spatial evolution of sectors and the co-evolution of firms, technologies, and territorial institutions, whereas the convergence or divergence in spatial systems such as regions or nations is subject to analysis at the macro-level.

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

From evolutionary thinking, several notions, such as windows of locational opportunity and path creation, path dependence and lock-ins, related variety and branching, and co-evolution, are essential to local and regional development and can potentially contribute to analyzing and explaining spatial dynamics in creative industries.
WHERE DO NEW INDUSTRIES EMERGE? WINDOWS OF LOCATIONAL OPPORTUNITY AND PATH CREATION

The evolutionary perspective contributes to the understanding of the emergence of new industries in a spatial perspective. The theoretical concepts of windows of locational opportunity and new industrial spaces both stress the locational freedom of newly emerging industries, whereas path creation emphasizes the interdependence between paths and hence less locational freedom.

The concept of windows of locational opportunity (Storper and Walker 1989) is clearly based on evolutionary thought. The aim of this concept is to explain the locational freedom of companies in new industries in the first stages of industrial development. The emergence of these new industries can be triggered by several factors, such as problems or opportunities (Boschma 1997). 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 to adequately explain the evolution of new industrial regions (Boschma and Frenken 2009, 155). The windows of locational opportunity are thus open for new industries. Boschma (1997), for example, provided evidence for these arguments by analyzing the locations of new industries in the economic history of Belgium. He found that during the three Industrial Revolutions, these industries (cotton, steam engineering, and coal-based iron making during the first one, electrical engineering and automobiles during the second one, and micro-electronics during the third one) emerged in a large variety of regions, including peripheral as well as old industrial regions.

However, 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. Also the concept of path creation stresses the importance of the context for the emergence of new industries, as well as mindful deviation of agents (Garud et al. 2010). According to this concept, initial conditions are constructed and self-reinforcing mechanisms strategically manipulated by actors.

Path creation does not understand agencies to be constrained by the past actions nor is path creation a rejection of the past. It is constituted by the sociotechnical arrangements that shape temporal dynamics of projects as actors frame issues about the future, coordinate their actions in the present and make sense of what may have transpired in the past (Karnøe and Garud 2012, 375).

It has been used, for instance, to explain the emergence of the wind power industry in Jutland, Denmark (Karnøe and Garud 2012).

WHY DO INDUSTRIES IN SOME REGIONS DECLINE? PATH DEPENDENCE AND LOCK-INS

EEG assumes that established spatial patterns tend to be largely irreversible due to its path dependent evolution. “A path-dependent process or system is one whose outcome evolves as a consequence of the process’s or system’s own history” (Martin and Sunley 2006, 399). Closely related to the discussion around path dependence and regional evolution is the issue of lock-ins hindering necessary restructuring processes in regional economies (Hassink 2010). As Martin indicates

… this notion … most fully captures the idea that the combination of historical contingency and the emergence of self-reinforcing effects, steers a technology, industry or regional economy along one “path” rather than another (Martin 2010, 3).
Lock-in situations appear because specialized industrial regions endowed with particular resources, competences, and institutional structures are unable to match changing market requirements. Furthermore, built-up agglomeration economies with respect to infrastructure and services hinder renewal processes (Martin and Sunley 2006, 409). There are several examples where these lock-ins at the regional level have led to decline and the delay of necessary restructuring processes, such as the coal and steel industry in the Ruhr area, Germany (Grabher 1993), and the textile cluster in Daegu, South Korea (Cho and Hassink 2009).

**SPECIALIZATION VS. DIVERSIFICATION: RELATED VARIETY AND BRANCHING**

Moreover, the evolutionary perspective contributes to thinking about the relationship between specialization vs. diversification and regional economic growth and stability (Frenken et al. 2007; Martin and Sunley 2006). On the one hand, variety is seen as a source of regional knowledge spillovers, measured by related variety (a high degree of technologically related sectors in a region) within sectors. On the other hand, in the case of unrelated variety, variety is seen as a portfolio protecting a region from external shocks. The study of Frenken et al. (2007) in the Netherlands showed that between 1996 and 2002, related variety increased employment growth, whereas unrelated variety led to less growth in unemployment. According to Martin and Sunley (2006, 421) “there is a trade-off between specialization and a short-lived burst of fast regional growth on the one hand, and diversity and continual regional adaptability on the other.”

In a very similar vein, Boschma and Frenken (2011a) refer to regional branching. Mechanisms through which this occurs include regional entrepreneurship, firm diversification, spin-offs, and labor mobility. According to Boschma and Frenken (2011a, 191),

countries and regions have a different capacity to diversify successfully into related activities, depending on the degree of related variety: the higher the number of related industries in a region, the higher the number of possible recombinations, and thus the higher the probability that regions will diversify successfully into related products.

**WHAT ABOUT THE INSTITUTIONAL ENVIRONMENT? CO-EVOLUTION**

Another key note derived from evolutionary thinking is that of co-evolution, which can be applied in theorizing local and regional development. In a co-evolutionary perspective, it is not only firms and industries but also local and regional innovation policy, and in a broader sense the institutional environment of firms and industries, that affect the dynamism of regional economies (Nelson 1994; Murmann 2003). The term co-evolution is used primarily in biology and refers to a situation in which “two evolving populations co-evolve if and only if they both have a significant causal impact on each other’s ability to persist” (Murmann 2003, 210). For many economic geographers, co-evolution strongly refers to the systematic embeddedness of firms and industries in an institutional environment, at several spatial scales (Essletzbichler 2012). For them, institutions are actually regarded as the differentiating characteristic of co-evolution. Institutions can be defined as “formal regulations, legislation, and economic systems as well as informal societal norms that regulate the behavior of economic actors: firms, managers, investors, workers” (Gertler 2004, 7). Their starting point of analysis is often firms, industries, and/or clusters in a regional institutional setting, including the influences of institutions at the national and supra-national level. One classical example for the importance of co-evolution in a national context is Murmann’s (2003) study on the synthetic dye industry in the second half of the 19th Century, when Germany managed to carry out necessary institutional changes.
(ineducation and regulations) for the successful emergence of this industry, whereas the UK and the USA failed to do so.

In sum, EEG has recently strived to become the new paradigm in economic geography; it has some clear conceptual notions, and research foci to explain key empirical phenomena in economic geography (Hassink et al. 2014). As it has particular strengths in analyzing and explaining industrial dynamics in space (less so in analyzing and explaining uneven regional economic development (Martin and Sunley 2014), it can potentially contribute to analyzing and explaining the spatial dynamics of creative industries, to which we now turn.

3. The Main Characteristics of Creative Industries

Interestingly, creative industries are differently interpreted in Europe and East Asia. Researchers in Europe tend to divide the definition into two categories – “core” creative (arts related activities) industries and “partially” creative industries (advertising, architecture, and design as well as media industries) (O’Connor 2007). In contrast, researchers in Asian countries define the creative industries in a more inclusive manner (Keane 2007; Cheng 2006). For example, activities such as hairdressing, theme parks, and furniture manufacturing are counted toward the creative industries in China (Cheng 2006).

Creative industries are hence understood in different ways in different contexts. Consequently, diverse governance arrangements for creative industries are developed. For instance, the Japanese Ministry of Education, Culture, Sports, Science, and Technology is in charge of cultural art promotion, whereas the Japanese Ministry of Economy takes charge of creative industry policy. In contrast, the Ministry of Culture plays a key role by providing the main policies on creative industries in Germany, France, the Netherlands, and Italy. The German federal government prosecutes a particularly “bottom-up” approach, which aims for complementary, interdependence, and systematic collaboration between creative industries and other industries – such as tourism (Korean Creative Contents Agency 2013).

Despite diverse contexts and definitions, creative industries have four mutually related characteristics in common, some of which clearly link to the general DCMS (1998) definition of creative industries presented in the introduction. That is not to say that all the characteristics are exclusively valid for creative industries as some of them also count for manufacturing industries. First, creative industries are deeply involved in the process of new value creation, as their value-added works derive from innovation (see, for instance, Lange and Bürkner 2013 on the music industry in Berlin). In addition, they provide various innovation services direct to the consumer market. Creative industries are part of the innovation system given their pivotal role in the socio-economic process of adoption and retention of new ideas.

Secondly, most creative products (for instance, film and television drama) require very diverse and specialized skills and knowledge (Turok 2003). Therefore, they show a high level of concentration in specific locations. The “knowledge pool model” (CURDS 2001; Benneworth and Charles 2005) is a particularly promising tool to analyze creative clusters as, first, it captures the notion of cluster development at the regional scale as a whole and, second, highlights the interactions and activities among creative individuals and firms within the region.

Third, creative industries clearly benefit from both agglomeration economies (a shared specialized labor market, knowledge spillovers, sustained relationships between individuals and firms, and institutional thickness) and urbanization economies (geographical proximity facilitates the creative recombination of knowledge, ideas, and technologies, which is a source of innovation) (Lorenzen and Frederiksen 2008; Florida 2002). However, the tendency to concentrate differs from sector to sector (European Commission 2011). The externalities increase the potential of the places where creative industries are located (Turok 2003; De Propris et al. 2009; Mossig...
2006; Scott 2002; Lazzeretti et al. 2012; European Commission 2011, 27). With high concentrations, these places can be regarded as “creative cities” with specific characteristics – such as cultural amenities of the city or a tolerant social atmosphere – that attracts the “creative class” (people in creative professions) (Florida 2002; Clifton 2008). Creative industries also tend to concentrate in creative clusters, that is, “groups of competing and co-operating businesses that enhance demand for specialist labor and supply networks in a particular location” (De Propris et al. 2009, 11).

Fourth, creative industries affect and are affected by institutional infrastructure and governance structures at several spatial levels (Comunian et al. 2010). Like manufacturing industries, creative industries engage with a range of institutional frameworks such as those for economic development, local regeneration, and social inclusion, and therefore, all of these can affect them in return. Creative industries are shaped “by public policy and significant public investment” (De Propris et al. 2009, 11).

As hinted at above, there are both commonalities and differences between creative and manufacturing industries. Among the differences, two stand out. First, creative industries are generally more deeply involved in the new value creation process than manufacturing industries. Second, most final output in creative industry can only reach consumers with the help of other inputs that respond to ordinary economic incentives. For example, an artist needs a gallery to display his/her works (Caves 2003).

In this paper, we are only able to present some basic characteristics of creative industries. For excellent overviews on definitions and characteristics of creative industries, not least in relation to manufacturing industries, we refer to Boggs (2009) and O’Connor (2007). In this paper, our focus is very much on the evolutionary perspective of creative industries, to which we now turn.

As clear from the discussion above, creative industries are characterized by specialization, localization, geographical proximity, and interactions with the institutional framework. Research on creative industries has mainly focused on localization and geographical concentration. At the same time, however, dynamic, evolutionary and history-informed perspectives are often neglected or as Rantisi et al. (2006, 1796) stated:

A final, often neglected, point … is that history matters. Though most studies present creative industries as contemporary phenomena, concentrating on current organizational features, a narrow focus on the present obscures the role that past practices play in the evolution of such industries. The process of industrial change is a path-dependent one. Past specializations pave the way for certain opportunities and foreclose others.

We see the EEG paradigm (Section 2) as a potentially fruitful means of filling this gap.

4. Exploring Notions from Evolutionary Economic Geography for the Analysis of Creative Industries

Although few studies have been done on the creative industries from an explicit evolutionary perspective (Rantisi et al. 2006), many studies have touched upon an evolutionary perspective without explicitly using EEG terms such as path dependence, co-evolution, and lock-in. Comunian (2011), for example, emphasized the importance of micro interactions and networks between the creative city and the cultural infrastructure (co-evolution) of the city. She argued that the cultural development of Newcastle–Gateshead (England) is a complex adaptive system responding to complexity theory principles. For Comunian, complexity theory emphasizes the interaction between the community and the different elements of its infrastructure. While her paper implied a critique of a “one size fits all,” top–down policy, it drew on the principles of a more agent–focused and interaction–based understanding of sustainable cultural development. Chapain and Comunian (2010) employed the “knowledge pool model” (CURDS 2001),
which takes into account the importance of creative industries and their social networks. By exploring the cases of Birmingham and Newcastle–Gateshead projects, the authors criticized the policy limits of the cities (path creation and lock-in) that hinders “buzzling” in the regions and stressed the importance of the interactions within and outside creative cities. Grabher (2001) also underlined the importance of interaction by drawing on case-study evidence from Soho, London. He focused on the advertising industry in Soho and analyzed the diversity of its organizational ecology. He drew the conclusion that the diversity of organization constitutes (related variety) the evolutionary potential of the district. Pollard (2004) argues that the regeneration strategies of Birmingham undermine the socio-economic network bases of its jewelry quarter. She thus emphasized the importance of interaction between the creative industry and its infrastructure (co-evolution). Finally, Bassett et al. (2002), in their study of the film-making industry in Bristol, pointed to the linkages between the local cluster and the global economy and institutional thickness and cluster support policies (co-evolution).

As stated above, only a very few creative industries studies have explicitly used EEG terminology. We select five studies (summarized in Table 1), which deserve a fuller discussion.

Wenting (2008a, 2008b) worked on the fashion design industry in Paris. The aim of his work was to understand the differential performance of fashion design firms and the spatial evolution of the industry from an EEG perspective. In his work, there is a strong focus on organizational routines and the mechanisms for passing them on in the cluster, namely through spin-offs, labor market mobility, and inter-firm networks. The main conclusions of his research are that organizational routines are important for the performance of fashion design firms, but that localization economies and urban amenities are not (although the latter plays a role to attract talent). In general, his work strongly focuses on spin-off dynamics and the passing on of successful routines from fit mother companies to their spin out companies (Wenting 2008a, 2008b). However, firms in these locations can probably develop successful internal routines thanks to the favorable institutional environment (specialized labor market, training institutions, innovative, or creative milieu); in other locations, they would not have been able to develop these internal routines. In this sense, we think that co-evolution is a useful notion, which should be included in the analysis of the spatial dynamics of creative industries.

Izushi and Aoyama (2006), on the other hand, carried out a comparative study on the video-game industry in Japan, the USA, and the UK. The aim was to analyze the interrelationships between technological progress and skill formation, and the evolution of this industry in the three countries. They concluded that each country went through a unique trajectory due to different sets of creative resources. In their research, they touched upon related variety and branching in terms of cross-sectoral fusion of creative talent in the formation of this new industry. We have summarized these different studies in Table 1.

**Table 1. Overview of studies on creative industries using explicitly EEG concepts.**

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<tr>
<th>Author/s</th>
<th>Type of industry, region/country</th>
<th>Related EEG concepts</th>
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<tbody>
<tr>
<td>Wenting (2008a,b)</td>
<td>Fashion design industry, Paris</td>
<td>Organizational routines and spin-offs</td>
</tr>
<tr>
<td>Izushi and Aoyama (2006)</td>
<td>Video-game industry, Japan, USA, and UK</td>
<td>Related variety</td>
</tr>
<tr>
<td>Lazzaretti (2009); Lazzaretti et al. (2012)</td>
<td>Printing and publishing, architecture and engineering film, video and performing arts, and advertising software and computer services, Spain and Italy</td>
<td>Related variety and regional branching</td>
</tr>
<tr>
<td>Banks and Potts (2010)</td>
<td>Online game industry, Australia</td>
<td>Co-evolution</td>
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industry. The Japanese video-game industry emerged from (i) corporate sponsorships in arcade games and toys; (ii) consumer electronics industries, and (iii) skills drawn from the comic book and animated-film sectors. In contrast, the US video-game industry evolved through computer games at university laboratories and had few links to pre-existing industries, which had reached their peak decades earlier. In the UK, the video-game industry had few links to comics and animated films, which may have caused the delay in the take-off of the UK video-game industry. By showing a variety of new industry formations in different national contexts, Izushi and Aoyama (2006) conclude that countries (or regions) with a higher number of related industries (high degree of related variety) are more prone to cross-sectoral skill transfer and thus have a higher probability of new industry emergence.

Rantisi (2004) studied the New York apparel industry from a path dependence perspective. She stressed the role of the thick institutional infrastructure for the development of the industry, touching upon co-evolution. At the same, she criticized the path dependence concept for neglecting the role of agency in explaining transformation processes in the industry. Rantisi (2004, 104) pointed out that

...New York City apparel offers a story of renewal and transformation... It shows how key actors pursued conscious strategies in the face of exogenous and endogenous crises to nurture and promote local design talent, and in so doing, were able to alter their path of development. ...while path-dependence remains a significant concept for understanding the role of history in the evolution of regional economies, it is limited in that it fails to accord a central role for agency in the process of transformation....

Arguably, the path creation concept could have been used in this study, as the role of agency is emphasized in this case (see Section 2 and Garud et al. 2010).

Lazzarette (2009) recently introduced the concept of related variety into the studies of creative industries by focusing on Spain and Italy. The results of her studies showed that related variety encourages the clustering of creative industries due to cross-fertilization, new combination, and geographical proximities. In the same vein, related variety is considered to increase innovation in local systems thanks to spillover processes of innovation in other sectors (Lazzarette et al. 2012). She also concluded that certain creative industries (Advertising, Designer Fashion and Software, Computer Games, and Electronic Publishing) show a significant trend to co-locate with a variety of other creative industry sectors (see also De Propris et al. 2009; Currid and Williams 2010; Wenting 2008a). It is clear that creative industries have the inclination to co-locate and benefit from inter-sector synergy effects, but it is still unclear what the main triggers of such processes are.

Banks and Potts (2010) details research on the online game industry from a co-evolutionary perspective. They stressed that changes in creative industry factors (identity, practices, and relations) affect the conditions of its institutional context, and at the same time, the institutional settings (markets, infrastructure, regulations, and practices) affect the creative industries. The study is confined to the national level and hence does not take regional differentiations into account.

To sum up, recently promising studies have been carried out on creative industries from an evolutionary perspective. Many studies implicitly touched upon the EEG terminology, but only a few analyzed the creative industries explicitly from the evolutionary perspective. The latter benefits from utilizing the EEG paradigm given its capacity to help explain the spatial dynamics of economic processes – such as agglomeration, dispersal, and restructuring – of creative industries. Moreover, by using these concepts, structural formations and changes occurring within creative industries can be displayed. EEG concepts also enable scholars to complete comparative studies in different contexts or different categories (e.g., creative industry and manufacturing/service industries) as they share common concepts and terminology.
5. Conclusions

The aim of this article has been to critically examine the notions of EEG for analyzing and explaining the spatial dynamics of creative industries, which has not been done yet in a systematic fashion. We are aware of some recently debated shortcomings of EEG. MacKinnon et al. (2009) and Martin and Sunley (2014), for instance, have criticized the lack of attention paid to power relations, agencies, the state, and macro-economic structures, whereas Schulz (2013) criticized the foundations of evolutionary economics in more general terms. Nevertheless, after reviewing the recent general literature on EEG and creative industries, we consider the former to have some potentially powerful explanatory notions – such as windows of locational opportunity and path creation, path dependence and lock-ins, related variety and branching, and co-evolution – to analyze and explain the development of creative industries through time. To use Schulz’ (2013) terms, although these concepts will hardly contribute to evidentiary novelty, that is, the generation of new data, they will certainly lead to heuristic novelty, that is, novel insights into spatial processes or mechanisms, to which we will now turn.

On the basis of the review of studies on creative industries using EEG concepts both implicitly and explicitly, we can conclude that many studies touch upon related variety, branching, and the co-evolution of creative industries. The ideas of, path creation, path dependence and lock-ins are rather less favoured at this point in time. Novel insights into spatial processes or mechanisms are particularly attuned to the concept of co-evolution, as it helps to explain how changes in the institutional environment and the development of creative industries are linked to each other and mutually influence each other through time. Additional insights can be gained from combining concepts to explain the development of creative industries in a spatial perspective. Path dependence, lock-ins, and path creation are, for instance, strongly influenced by the institutional environment, and hence, combining these concepts with co-evolution can lead to novel insights into the development of creative industries.

Since there are currently only a few studies available on creative industries based on explicit evolutionary concepts, we see a clear need for future empirical examinations tackling the following research questions related to co-evolution and related EEG concepts:

- How does the institutional setting at several spatial levels interact with the creative industries through time (co-evolution)?
- Are there differences between creative industries and other industries in relation to co-evolution and related EEG concepts?
- What mechanisms affect the spatial dynamics of creative industries? What role do spin-off creation, labor mobility, inter-firm networks, and the creative class (Florida 2002) play?
- What is the role of path creation, path dependence, and lock-ins in explaining the spatial dynamics of creative industries?
- Do critical events cause sudden changes in the locational pattern of the creative industries?

In sum, we see great future research potential along these avenues linking creative industries with notions of EEG, particularly with the help of cross-sectoral (for example, comparing fashion design with the music industry) and cross-national comparative studies facilitated by the common EEG terminology. Finally, we also see great value in testing EEG concepts with the help of future research on creative industries and other industries, such as tourism industries (Ma and Hassink 2013), in order to challenge and/or broaden the explanatory power of the EEG paradigm.

Short Biographies

Su-Hyun Berg was educated at the University of Flensburg, Germany/University of Southern Denmark and reached her master in 2011. She is currently working on her PhD Thesis at the
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