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Evolutionary economic geography and creative industries: A critical literature review

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Abstract

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Recently not only many economic geographers have introduced evolutionary thinking into their discipline (Boschma & Frenken 2011), also in other disciplines, such as economics, planning and sociology, this has been the case (Frenken 2007). In contrast to neoclassical theory, this school takes history and geography seriously by recognizing the importance of place-specific elements and processes to explain broader spatial patterns of technology evolution. Evolutionary economic geography 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).
From evolutionary thinking the following notes are essential to local and regional development: path dependence, lock-ins, path creation, related variety and co-evolution. These concepts can potentially explain why it is that some regional economies loose dynamism and others not. Closely related to the discussion around path dependence and regional evolution is the issue of lock-ins hindering necessary restructuring processes in regional economies. The evolutionary perspective also 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 inter-dependence between paths and hence less locational freedom. Another key note derived from evolutionary thinking is that of co-evolution, which can be applied in theorising about 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.

However, empirical research on these notions strongly focuses on the spatial dynamics of the manufacturing industry, much less so on the spatial dynamics of creative industries as has been rightly pointed out by Wenting (2008). In this context Boschma & Frenken (2011, 298) recently stated: ?Another question holds whether the theory equally applies to services and creative industries as to manufacturing?. So they see it as one of the future research avenues in evolutionary economic geography. From the perspective of creative industries, on the other hand, Rantisi et al. (2006) noticed that most studies on creative industries lack an evolutionary, history informed perspective. In this review paper, therefore, I explore whether the above-mentioned 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. Moreover, on the basis of these theoretical explorations, an agenda for future research is developed on the spatial evolution of creative industries.

Key words: Evolutionary economic geography; path dependence; related variety; co-evolution; creative industries

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Creative industries and evolutionary economic geography: 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 evolutionary, history informed perspective. Since we regard this as an important deficit, we 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. We conclude that it is particularly co-evolution that could potentially be an important notion to explain the spatial dynamics of creative industries in a comparative perspective.

Key words: creative industries, evolutionary economic geography; path dependence; related variety; co-evolution

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 us that creative industries no doubt play an important role.

Moreover, the term “creative industries” has been increasingly receiving theoretical and empirical attention within the last two decades (Hartley et al. 2012). Creative industries have been fascinating many sociologists, geographers, and economists. Many studies focused both on the economic functions of creative industries, mainly in terms of employment, value-added production, and exports, as well as on their current organizational features (see Rantisi et al., 2006; Cooke & Schwartz, 2007; Andari et al., 2007; Pratt, 1997). However, evolutionary and history-informed perspectives are often neglected (Rantisi et al., 2006).

Although evolutionary economic geography would potentially be an appropriate framework to study creative industries, until now the empirical research of evolutionary economic geography primarily focuses on the spatial dynamics of the manufacturing industry (for an exception concerning creative industries, see Wenting 2008a, 2008b, 2009, or other service industries, such as tourism see Ma & Hassink, 2013). In the same vein, Boschma & Frenken (2011b, 298) recently stated: “Another question holds whether the evolutionary economic geography theory equally applies to creative industries as to manufacturing?” Evolutionary thinking has not only been introduced into economic geography (Boschma & Frenken 2011b), but also into other disciplines, such as economics, planning and sociology (Frenken 2007). In contrast to neoclassical theory, this school takes history and geography seriously by recognizing the importance of place-specific elements and processes to explain broader spatial patterns of technology evolution. Evolutionary economic geography 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). From evolutionary thinking several notions, such as path dependence, lock-ins, path creation, related variety and co-evolution, are essential to local and regional development and can potentially contribute to analyzing and explaining spatial dynamics in creative industries. Closely related to the discussion around path dependence and regional evolution is the issue of lock-ins hindering necessary restructuring processes in regional economies. The evolutionary perspective also 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 inter-dependence between paths and hence less locational freedom. Another key notion derived from evolutionary thinking is that of co-evolution, which can be applied in theorising about 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. However, so far empirical research working with these notions strongly focuses on the spatial dynamics of the manufacturing industry, much less so on the spatial dynamics of creative industries as has been rightly pointed out by Wenting (2008a).

This review paper therefore explores whether evolutionary economic geography theory can contribute to analyzing and explaining the spatial dynamics of creative industries, which has not been done yet in a systematic way. Our paper will bridge the literatures on creative industries and evolutionary economic geography. In the following we will first describe diverse definitions of creative industries and their main characteristics in Section 2. Then we will further introduce evolutionary economic geography notions, such as path dependence, lock-ins, path creation, related variety and co-evolution. In Section 4 we will discuss the contribution of the above-mentioned notions of evolutionary economic geography to the spatial dynamics of creative industries. In Section 5 we will draw some conclusions.

2. Main characteristics of creative industries: A literature review

There is no generally accepted definition of the “creative industries” and many empirical definitions focus on a wide range of sectors (Boggs 2009). The first definition of creative industries appeared in the UK creative industries mapping document (DCMS 1998). After that many scholars have been defining creative industries in different ways.

Coy (2000), for instance, considered creative industries as production of virtual value that based on individual creativity and ideas and emphasized creative industries as a

regional development strategy. Howkins (2002) considers creative industries as production activities of goods and services from creativity and Drake (2003) sees the output of creative industries as products [satisfying] individual symbolic value. Boggs (2009) distinguishes clearly between cultural industries and creative industries, the latter experiencing higher rates of innovation.

According to Flew and Cunningham (2010:115), the creative industries can be defined in a broad sense as following:

- The cycles of creation, production, and distribution of goods and services that use creativity and intellectual capital as primary inputs;

- A set of knowledge-based activities, focused on but not limited to the arts, potentially generating revenues from trade and intellectual property rights;

- Tangible products and intangible intellectual or artistic services with creative content, economic value, and market objectives;

- At the cross-roads among the artisan, services, and industrial sectors; and

- Comprising a new dynamic sector in world trade.

At the beginning of the 2000s, there was a debate among policymakers about definitions of the creative industries and particularly about the question what sectors should or should not be included. After these debates, broadly speaking a consensus was reached in the UNESCO definition which includes the following sectors (UNESCO 2007; see also Figure 1):

1. Publishing and literature.

2. Performing arts.

3. Music.

4. Film, video, and photography.

5. Broadcasting (television and radio)

6. Visual arts and crafts.

7. Advertising.

8. Design, including fashion.

9. Museums, galleries, and libraries.

10. Interactive media (Web, games, mobile, etc.).

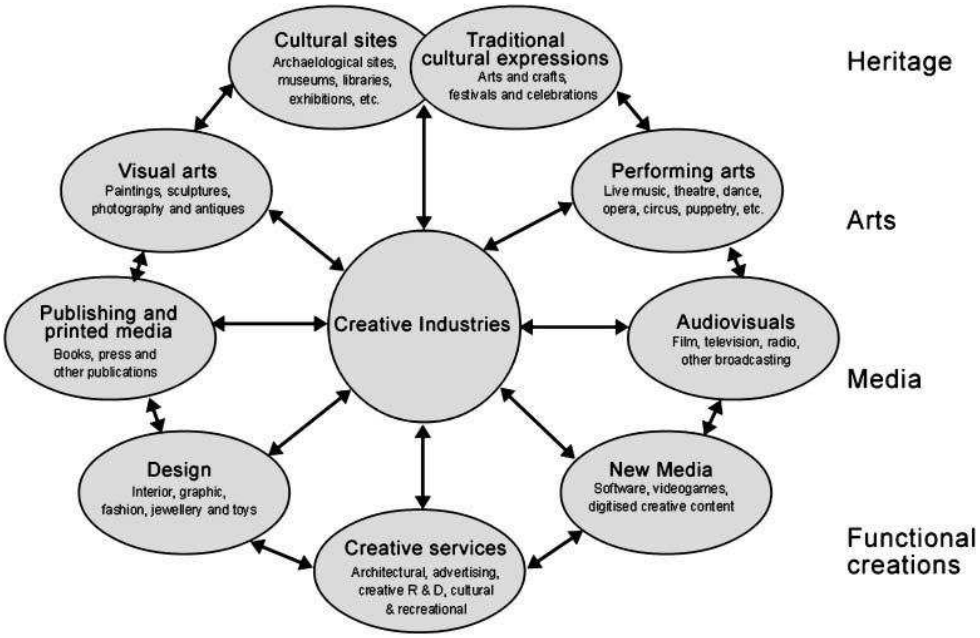

Figure 1: UNCTAD model of the creative industries.

Source: Flew and Cunningham (2010: 115)

Although we endorse the UNESCO definition of creative industries, we adopt above-mentioned definition developed by the DCMS (1998) in this paper, because it has close connotations to economic geography. According to that definition creative industries are “those activities which have their origin in individual creativity, skill and which have the potential for wealth and job creation through the generation and exploitation of intellectual property and they include: Advertising, Architecture, Arts and antique markets, Computer and video games, Crafts, Design, Designer Fashion,

Film and video, Music, Performing arts, Publishing, Software, Television and Radio" (Flew 2012: 9).

Interestingly enough, creative industries are differently interpreted in Europe and Asia. Researchers in Europe tend to the definition divided into two categories - "core" creative (arts related activities) industries and "partially" creative industries (advertising, architecture, and design as well as media industries) (Flew and Cunningham 2010: 118). On the other hand, researchers in Asian countries define the creative industries in an 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).

Despite diverse definitions creative industries have four characteristics in common.

First, creative industries are deeply involved in the new value creation process, as their value-added works derive from innovation (see for instance Lange & 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 because of their pivotal role in the socio-economic process of adoption and retention of new ideas. Therefore, the creative industries are experiencing higher rates of innovation and they should be understood as part of the process of economic evolution (Earl & Potts 2004; Potts 2009; Boggs 2009; Hartley et al. 2013).

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.

Thirdly, creative industries engage in institutional infrastructure such as governance, and all of these can affect creative industries vice versa.

Fourthly, creative industries benefit from agglomeration and urbanization economies. However, the tendency to concentrate differs from sector to sector (European Commission 2011).

In the following we will focus on the characteristics of creative industries which are related to economic geography.

2.1 The geography of the creative industries

Creative activities concentrate in specific ‘creative cities’ with specific characteristics – such as cultural amenities of the city or a tolerant social atmosphere - that attract the ‘creative class’ (people in creative professions) (Florida 2002). Depending on the size of the location, global cities and also smaller cities and rural areas have different location factors for creative industries. Location factors include place-specific features (architecture and streetscapes), social and cultural infrastructure (such as art galleries or theatres) and the vocational qualification level of creative sectors, such as graphic design, fashion or others (Hall (2000; Florida 2002; Scott 2000b; Comunian et al. 2010). These factors determine the potential of certain locations for the growth of creative industries. In order to support the growth of the creative industries, the following four interrelated dimensions are required (Clifton 2008; Potts et al. 2008; Lorenzen et al. 2008):

1. Infrastructure: this broad dimension includes factors that can impact on the development of local creative industries. For instance, the availability of business spaces, the wealth of the local population or transport infrastructure of a place;

2. Governance: includes aspects of policy infrastructure at various spatial levels. Like manufacturing industries, the creative industries can engage with a range of institutional frameworks such as economic development, local regeneration and social inclusion, and therefore all of these can affect them in return;

3. Soft infrastructure: refers to meaningful factors in terms of support for creative and cultural industries to develop and grow. Soft and idiosyncratic infrastructure means networks, an image or identity of the place that can attract creative people to live and work in some specific places;

4. Markets: the creative industries work in very fast-changing markets. For creative industries, markets do not only stand for physical places but also for virtual spaces that provide global perspectives in creative production (see also Figure 2).

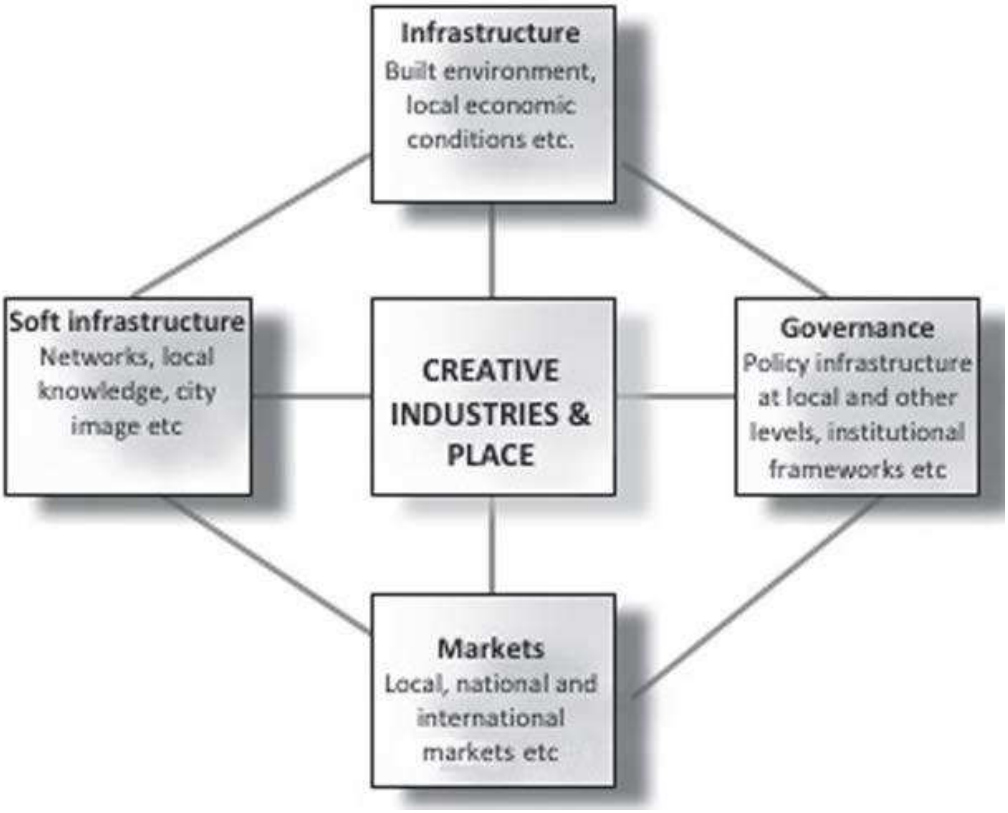

Figure 2: The complex interconnections between creative industries and place
Source: Comunian et al. 2010:7

2.2 Co-location and Clustering

The creative industries can create benefits for businesses by clustering. The DCMS (2000: 56) defines those *creative clusters* as “groups of competing and co-operating businesses that enhance demand for specialist labor and supply networks in a particular location. Such infrastructure depends not only upon the vitality of the creative sector itself, it is also underpinned by public policy and significant public investment” (NESTA 2009:11).

De Propris et al. (2009) define a creative cluster as a place that brings together:

a) a community of ‘creative people’ (Florida, 2002) who share an interest in novelty but not necessarily in the same subject;

b) a catalyzing place where people, relationships, ideas and talents can spark each other;

c) an environment that offers diversity, stimuli and freedom of expression; and finally

d) a thick, open and ever changing network of inter-personal exchanges that nurture individuals’ uniqueness and identity.

The creative industries benefit from localization in the form of the agglomeration (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).

Many studies highlight different ways in which the geographical concentration of creative industries generates externalities (agglomeration and urbanization economies) that increase the potential of the places where they are located (Turok 2003; NESTA 2009). For example, many studies have been done on Hollywood displaying it as a creative cluster with strong international dimensions as well as local agglomeration economies (Mossig 2006; Scott 2002; 2005). Recently, Lazzeretti et al. (2012) focused on the geographical concentration of creative industries in Italy and Spain. The creative industries in these countries tend to locate close to each other based overlap in their economic and social networks, as well as differences and similarities amongst them. This geographical proximity leads to specialization and complementarities between creative sectors, and it influences the co-location patterns of different creative sectors.

However, the tendency to concentration differs from sector to sector in the creative industries. Production and manufacturing activities (games publishing, recorded media and film and television activities) are the most regionally concentrated, and consumer/end-user oriented activities (nearest to the consumer – such as bookshops, cinemas, exhibition spaces, business services, printing, programming, photographic,

or pre-press/pre-media services) are the least regionally concentrated (European Commission 2011: 27).

In sum, creative industries are characterized by specialization, localization, geographical proximity and interactions within 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 concerning creative industries: “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 potentially a fruitful bridge to the recently debated paradigm of evolutionary economic geography to fill this gap.

3. Evolutionary economic geography

Economic geographers have recently been confronted with the attempt to constitute a new paradigm within their field of study, namely evolutionary economic geography (Boschma and Frenken, 2006, 2011b; Boschma and Martin, 2007; Frenken 2007; Boschma and Martin, 2010)[1]. Evolutionary economic geography 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, evolutionary economic geography 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, one of the key articles which propose the epistemological paradigm of evolutionary economic geography.

[1] This part draws heavily on Hassink & Klaerding (2012).

Evolutionary economic geography 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, 2012; Stam, 2007; Hassink, 2005, 2010), special issues (Hassink and Shin, 2005; Boschma and Martin, 2007; Grabher, 2009; Schamp 2012), edited books (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 (Uyarra, 2010) and clusters (Staber, 2010; Menzel and Fornahl, 2010; Klepper, 2007). Evolutionary economic geography also has something to say about regional policy issues (Hassink and Klaerding, 2011). Scott (2000a, 494), in his seminal overview of economic geography theorising, clearly indicates the influence of evolutionary thinking on current research in economic geography.

Evolutionary economic geography 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 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, evolutionary economic geography – 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.

The major terms and concepts of evolutionary economic geography 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. Based on Nelson and Winter's (1982) evolutionary theory of economic change, and most contrary to

alternative approaches such as institutional economic geography 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.

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. In the following we will introduce these notions and in Section 4 we will explore their usefulness for analysing creative industries.

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 inter-dependence between paths and hence less locational freedom. These concepts are highly relevant for local and local and regional development policies, as they can support policy-makers in predicting where new industries might emerge (Martin and Sunley 2006).

The concept of windows of locational opportunity (Storper and Walker 1989) 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 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).

Path dependence and lock-ins

Closely connected to analysing emerging industries is the notion of industrial decline and regional lock-in. Evolutionary economic geography 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 (Martin and Sunley, 2006, 409).

“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 (Grabher 1993; Martin and Sunley 2006; Hassink 2010). Grabher (1993) has defined these obstacles as three kinds of lock-ins, which together can be referred to as regional lock-ins. First, a functional lock-in refers to hierarchical, close inter-firm relationships, particularly between large enterprises and small and medium-sized suppliers, which may eliminate the need for suppliers to develop critical boundary spanning functions, such as research and development and marketing. Secondly, a cognitive lock-in is regarded as a common world-view or mindset that might confuse secular trends with cyclical downturns. Thirdly and closely related to cognitive lock-ins is the notion of political lock-ins that might come up in a production cluster (Grabher 1993). Political lock-ins are thick institutional tissues aiming at preserving existing traditional industrial structures and therefore unnecessarily

slowing down industrial restructuring and indirectly hampering the development of indigenous potential and creativity.

Related variety and branching

Moreover, the evolutionary perspective contributes to thinking about the relationship between specialisation vs. diversification and regional economic growth and stability (Frenken et al. 2007; Martin and Sunley 2006; Essletzbichler 2007). On the one hand, variety is seen as a source of regional knowledge spillovers, measured by *related variety* within sectors. On the other hand, in the case of *unrelated variety*, variety is seen as a portfolio protecting a region from external shocks. 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 labour 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” (Boschma and Frenken 2011a: 191).

Co-evolution

Another key note derived from evolutionary thinking is that of *co-evolution*, which can be applied in theorising about local and regional development policy. 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).

Institutions are ascribed 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).

In sum, evolutionary economic geography 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, 2012) and potentially can contribute to analyse and explaining spatial dynamics of creative industries.

4. Exploring notions from evolutionary economic geography for the analysis and explanation of creative industries

As stated before, until now only a few studies have been done on the creative industries from an evolutionary perspective (Rantisi et al. 2006). In the following we will briefly discuss these studies in order to find out whether they have touched upon the notions presented in Section 3.

Wenting (2008a, 2008b, 2009) worked on the fashion design industry in Paris. The aim of his work was to understand differential performance of fashion design firms and the spatial evolution of the industry from an evolutionary economic geography perspective. In his work there is a strong focus on organizational routines and the mechanisms for passing them on / diffuse among firms and the cluster in space, namely 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 (the latter play a role though to attract talent). Diffusion mechanisms of organizational routines are highly localized. Local institutions can negatively affect mechanisms of routine transfer because of institutional lock-ins. In general, though, 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 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. In that sense we think that co-evolution would be a useful notion which should be included in the analysis of the spatial dynamics of creative industries.

Izumi and Aoyama (2006), on the other hand, carried out a comparative study on the video-game industry in the Japan, the United States and the UK. The aim was to analyse the interrelationship 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.

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

Lazzeretti (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 the 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 creativity and innovation in local systems thanks to spillover processes of innovation in other sectors (Lazzaretti et al. 2008, 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 NESTA 2009; Currid and Williams 2008; Wenting 2008). It is clear that creative industries have the inclination to get together by inter-sector synergy effect, but it is still unclear what the main triggers of such processes are.

Banks and Potts (2010) did research on the online game industry from 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.

To sum up, recently promising studies have been carried on creative industry from an evolutionary perspective. Although creative industries exist already during a long time, it is only recently that evolutionary studies have been carried on the industry. Therefore we found few studies on creative industries working with the notions of windows of locational opportunity and path creation and path dependence and lock-ins. Most studies we found touched upon related variety, branching and co-evolution.

5. Conclusions

Although creative industries have been popular as a research topic among social scientists from various backgrounds, most studies lack an evolutionary, history-informed perspective. Since we regard this as an important deficit, in this paper we have explored 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. In that sense we are in line with Wenting's (2008a: 14) statement concerning the relationship between creative industries and evolutionary economic geography: " … the application to creative industries is lacking in the evolutionary economic literature on industrial dynamics, and on the other hand, a systematic approach to the firm-level dynamics underlying the spatial evolution of creative industries is lacking in the economic geography literature. …. We offer theoretical concepts and novel empirical work that offer building blocks to further both creative industry research and evolutionary economic

geography". Evolutionary economic geography has potentially some powerful explanatory notions to analyse and explain the development of creative industries through time. In the paper we discussed windows of locational opportunity and path creation, path dependence and lock-ins, related variety and branching and co-evolution. We also presented some recent studies on creative industries analysed from an evolutionary perspective. Most of these studies touch upon related variety, branching and co-evolution of creative industries, whereas path creation, path dependence and lock-ins are not much dealt with yet. In contrast to most other notions, co-evolution takes the institutional context of the creative industries seriously, which is particularly important if we compare creative industries across different countries. Thus we conclude that co-evolution could potentially be an important notion to explain the spatial dynamics of creative industries in a comparative perspective. More comparative research is needed on case-studies of creative industries in different countries, as well as cross-sectional research within a country (for example comparing fashion design with the music industry).

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