Creativity and Tourism Networks – A Contribution to a Post-Mechanistic Economic Theory

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Abstract: We criticize 'orthodox' economic theory by applying the philosophical framework developed by K.H. Brodbeck (2008; 2012). Accordingly, we argue that creativity represents the core economic activity conducted within the boundaries of socio-economic networks. After discussing the changing notion of creativity throughout history of thinking, the elements of a post-mechanistic economic framework are presented. By doing so, we elaborate on the idea that market economies are complex network systems of interacting agents (individuals, organisations). In the second part, we conduct network analysis to assess network-topologies of European tourism destinations. By applying the network metric Simmelian brokerage (Latora et al. 2013), we show how network closure and structural holes can affect creativity. Findings reveal that destinations show serious creativity gaps.

Keywords: creativity, tourism networks, post-mechanistic economic theory, network analysis

Introduction

There is broad consensus that creativity and innovation are fundamental determinants for socio-economic prosperity and regional development (Gabe 2011; Piergiovanni et al. 2012; Stieglitz & Greenwald 2014; Hanauer & Beinhocker 2014). A process or its outcome is considered as creative if it is both *new* and *valuable*. Sternberg and Lubart (1999: 3) define creativity more precisely as "the ability to produce work that is both novel (i.e., original, unexpected) and appropriate (i.e., useful, adaptive concerning task constraints)". In contrast, innovation refers to the engineering process through which creative ideas are transformed into *improved* products, services or processual ways to produce or distribute them (Amabile 1988).

While creativity is only vaguely defined in conceptual terms, there is broad consensus that, besides considerations on individual capacities to behave 'creatively', creative processes are, above all, *social* processes (Brass 1995; Perry-Smith & Shalley 2003; Uzzi & Spiro, 2005). By providing a conceptual prescription of the notion of creativity, Woodman et al. (1993: 294) confirm: "Creativity is a function of antecedent conditions (e.g. past reinforcement, history, biographical variables), cognitive style and ability (divergent thinking, ideational fluency), personality factors (self-esteem, locus of control), relevant knowledge, motivation, social influence (social facilitation, social rewards), and contextual influences (physical environment, networks of relationships, task and time constraints)." By referring to findings from above studies, we can conclude that the *social* side of creativity is at least as important

as the individual one. In this paper, we, therefore, link the structural topology of social networks in tourism destinations, at the one side, with the emergence of creativity and its potential innovative outcomes, at the other side (Baggio 2014).

Before sketching the basic elements of a *post-mechanistic* economic framework that puts creativity in the centre of a network composed of socio-economic relationships (Brodbeck 2001), we reflect on how the notion of creativity changed throughout history of thinking (Brodbeck 2012). By doing so, we particularly criticize the capacity of neo-classic ('*orthodox*') economics in failing to grasp the social nature of creativity (Brodbeck 2002). In the second part, we apply network analysis to study potential effects of topological characteristics of networks in destinations on creativity and the formation of social-capital. Following Burt (2004), we argue that cohesively clustered network structures enhance the development of ideas, but make groundbreaking creativity less likely, because they insulate groups from new information, ideas and opportunities. However, if bridging-connections are added, insularity is counterbalanced by bringing in fresh and non-redundant information (Baggio 2014: 142). By applying the local-efficiency metric *Simmelian brokerage* (Latora et al. 2013), we highlight the potential of network topologies in affecting human's creativity in tourism destinations.

Creativity throughout History of Thinking

The ancient (i.e. theological) origins behind the notion of creativity root in the Jewish 'Myths of Creation'. Therein, '*creatio*' is considered as the act of a transcendent subject, which is leading to the "ontological difference between existence and inexistence" (Brodbeck 2012: 1-2). In contrast, Greek 'Theories of Divine and Human Bearing' describe gods as shapers of *presupposed* matter ('*mutatio*'). As such, gods also form '*ideas',* which materialize as the (visible) nature and (thinkable) archetypes. Especially the latter activate and motivate ('*illuminate*') humans to further process the nature and to develop *effigies* from divine archetypes (ibid 2012: 2-3). Through their different philosophical schools of thought, Plato and Aristotle aimed at discovering the *truth,* which both localized in *ideas.* However, while Plato's *Ideology* locates ideas in divine spirit, Aristotle's *Metaphysics* localizes ideas as building blocks in the objects of nature (ibid 2012: 3). Accordingly, Plato's *Dialectics* is making use of the *discursive process,* which 'purifies from (mundane) mistakes until the (divine) truth can be recognized' (ibid 2012: 7). Retrospectively, Plato's philosophical approach of *Dialectics* gave way in favour to Aristotle's *Logic.* The latter highlights the unambiguity of systems of assertions. Thus, the 'art' of judging logical assertions ('*ars iudicandi'*) became the dominant mode of occidental reasoning, while the art of finding *new* topics of assertions (*'ars inveniendi')* was only later added (ibid 2012: 6-7).

From the very beginning, Aristotle's *metaphysical* interpretation of creativity was confronted by a highly effective *social practice* of idea generation: the *discourse about ideas* between conversational partners (ibid 2012: 4). Not by chance, the old-Greek term '*idea*' stands for an ancient architect's wood-pattern, which s/he presented and discussed at Athene's Agora

before the decision to construct the building was made. Thus, idea generation is not only rooted on illumination, but in particular, on *socio-discursive* processes (ibid 2012: 5). Indeed, ideas can be localized in the *social sphere*, as only the use of the language has the capacity to divide ideas from objects (ibid 2012: 4). This allows developing and communicating plans, which can be adapted and socially agreed *before* they are implemented. While mutual dependencies of ideas are revealed, community through joint participation ('*koinonia*') is, thus, most likely to emerge (ibid 2012: 6).

In the Middle Ages, Christian and Arab philosophies adopted Aristotle's soliloquizing Metaphysics. Thereby, the social embedment of the creative idea generation process was mostly eliminated. Thereafter, the dialectically frictioning but stimulating plurality as valuable source for creativity was lost. Creative openness lost ground in favour to a hierarchy of categories (ibid 2012: 5). During Enlightenment and Renaissance, creativity became equivalent with the discovery of 'laws of nature' (ibid 2012: 9). The 'scientific experiment' appeared as the empirical manifestation of Aristotle's Metaphysics ('*ars iudicandi').* As Locke (1697) argued: 'To *have* an idea or to *experience* an idea [through experimentation] is the same '(Locke 1968: 112). At the same time, the new a-priori constructed Natural Sciences (Descartes 1648) subject sensual experiences in favour to geometric-mathematical ones (ibid 2012: 9). Triggered by alterations from soaring monetary processes (Hume 1752; see: Brodbeck 2012: 9), the guidance for creating the '*new*' was the '*utility for the productive act'* (Bacon 1618: 27). The truth criterion for creativity ('*ars inveniendi')* turned into the invention and construction of a new technical world (Brodbeck 2012: 10). '*True is what can be made true*' (Vico 1702).

In Modern-Ages, the '*ars inveniendi'* was banned from sciences and externalized into the *arts* to protect the '*non-rational*' from the 'calculating' rationality (Brodbeck 2012: 12). *Artistry* was studied by the new emerging discipline of *Aesthetics*, while '*genius and madness'* has been conceptualized (deterministically) as the subconscious in humans' '*mental apparatus'* (Freud 1912; see Brodbeck 2012: 13). By referring to the notion of creativity, psychology discharged into *Intelligence Research* (Guildford 1950). Human's intelligence was measured (IQ) to detect executives with high imagination and vision power for the potential use as labor-force (Brodbeck 2012: 14-15). Retrospectively, the attempt of this scientific program can be considered as a failure, especially due to the impossibility to operationalize individuals' capacities to be (or become) 'creative' (ibid 2012: 15). In contrast, and more successfully, *Gestalt-psychology* better grasped the nature of creativity. The notion of '*Creative-Thinking'* was defined as '*well-ordered associative act unifying discrete forms*' (Wertheimer 1957). By doing so, '*ars inveniendi*' and '*ars iudicandi'* was re-united. Accordingly, '*Creative-Thinking'* is conceptualized as *'genuine, beauty, clean and immediate act of thinking … [thereby]… organizing the wholeness judged from within*' (ibid 1957). The related '*emotional tone of appraisal*' (Jung 1925) is well-known today as the experience of '*flow*' (Brodbeck 2012: 15-16).

Creativity and Mainstream Economic Disciplines

(Neo)-classic economic theories consider markets as efficient *selection mechanisms* ('*ars iudicandi*'), which are ruled by supply-side criteria of profit-maximization vis-à-vis consumer preferences (Hayek 1967). However, by presuming the assumptions of *Revealed Preference Theory*, 'orthodox' economists particularly failed to understand the creative nature of consumer preferences (Brodbeck 2012: 24). Consequently, consumer preferences remain imprecisely defined as '*unconscious rules'* (Hayek 1967: 56) or '*exogenous variables'* (Lancaster 1971), thus, are typically externalized from economic model building. More precisely, while neo-classic economics is only focusing on *observable* individual *behaviour*, it particularly fails to interpret humans' *non-observable action* defined as the *freedom* to choose not only from *given* alternatives (e.g. products, production processes, consumption styles, etc.), but rather to creatively *transform* the entire decision space (Brodbeck 2003: 5-6). This notion is crucial, since this transformation potential converts the 'economic decision space', typically characterized by 'orthodox' economic theory as being closed and pre-determined, towards an open and non-determined '*cognitive space*' (ibid 2003: 6). Market economies can, therefore, be interpreted as open networks of social entities (i.e. individuals, organizations), where humans interact and communicate (e.g. about products, services, prices, cost, technology, preferences, etc.), thereby constantly creating *unpredictable* realities which tend to stabilize through social resonance (ibid 2003: 11). This stabilization tendency, however, has nothing in common with the untenable mechanistic assumptions from general equilibrium models as proposed by neo-classic economic theory (Samuelson 1952). Rather, as typical for complex adaptive systems, self-organization is the consequence of reflexively reproduced network structures. Put differently, actors tend to habitually apply decision rules as outcome of adaptive learning within the narrow surroundings of their network (Schweitzer et al. 2009). Following the notion of '*Creative Response',* introduced by the renowned Austrian economist Josef Schumpeter (1947), *unconsciously* and habitually adopted decision rules can, however, be made *aware* as well as be creatively *changed* at any time (Brodbeck 2003: 11). By doing so, decision spaces are continuously *expanded* by *new* alternatives. Defined as a *conscious* act of human *freedom* (ibid 2003: 18), this also includes the *cognitive* adaption of an individual's ego as well as its experience and self-image (e.g. about consumption styles, lifestyles, etc.) vis-à-vis changing positional roles of mass media, politics and product offerings (ibid 2003: 7). This notion contrasts neo-classic's *Methodological Individualism* (Arrow 1994), which reduces human rationality to the mechanized calculus of profit- and utility maximization. Thus, 'orthodox' economics can consider only pre-determined reactive movements within a *closed* decision (e.g. product) space, thereby excluding all (re-)actions, which are triggered by *variations* of the decision (e.g. product) space itself (and by corresponding [relative] price changes) (Brodbeck 2003: 8).

Following Brodbeck (2003), the basic *elements of a post-mechanistic economic theory* can be described by

- *Freedom of choice*. Refers to the *non-observable* component of humans' *freedom* to creatively change *the meaning* of disposable alternatives (e.g. products, consumption styles, etc.). Since this typically happens spontaneously and on a subjective base, it is inherently

impossible to develop scientific approaches for 'modelling' or predicting the outcome of humans' freedom (ibid 2003: 5).

- *Cognitive relativity*. Although assumed by neo-classic economics, a decision moment cannot be 'objectively' described by well-defined 'decision-alternatives' within a decision space and related probability distributions. Rather, humans' decisions are made after experiencing and interpreting each specific situation on the base of prior experience, education, capacity to learn, the cultural environment, media, etc. Thus, decision alternatives are experienced within an *open* and *undetermined cognitive space* which topology cannot be replaced by an inherently closed (e.g. economic) model (ibid 2003: 6).
- *Social interconnectedness and communication*. Markets are embedded into socio-communicative networks of cognitively acting individuals. Thus, markets can be described as open networks with the capacity to create quasi-autonomous realities by continuously creating and mutually relating new facts (ibid 2003: 7).
- *Creativity*. Since each alternative is the result of its prior creation ('*ars inveniendi'*), market economies cannot be reduced to mechanisms for the sole choice of alternatives ('*ars iudicandi'*). Rather, the *creative* generation of *new* alternatives (e.g. products, services, production and distribution modes, but also consumption styles, lifestyles, communication styles, etc.) can be understood as the main activity within socio-economic systems (ibid 2003: 8).

We have shown that decision making habits, especially if based on repetition and imitation, has misled (neo-)classical economists to prescribe the social world mechanistically in the form of equilibrium models (i.e. based on reductionist behavioural assumptions deduced from the model of the '*homo economicus*'). However, from these assumptions can be concluded, neither that habits have a mechanistic nature, nor that these habits could not be made aware and *creatively* changed at any time. Put differently, there exist no 'economic laws' humans inevitably and *unconsciously* follow, as argued by Hayek (1967).

To summarize, a post-mechanistic economic theory puts creativity in the centre, since human action is about the creation of *diversity*, *superfluity* and *selection* in terms of the innovative generation of ideas, linkages and goods (Brodbeck 2008: 6). The strength of human creativity is its potential to trigger *wasteful* and path-dependent processes characterized by trial and error, thus, being *inefficient* by necessity. This notion stands in contradiction to the inherent goal of efficiency maximization as emphasized by 'orthodox' supply-side models (Hanauer & Beinhocker 2014). Similarly, the *selection* criterion related to creative processes is ruled by *aesthetical*, *ethical and psychological* factors, as opposed to the neo-classic assumption of the rational-calculus (i.e. profit and utility maximization) (Brodbeck 2008: 6). Thus, only good moral choices show the potential to create true (i.e. sustainable) prosperity, thereby reaffirming age-old lessons of moral traditions (Boulding 1969; Duhs 2005). As Röpke (1959) puts '*the market presupposes moral resources which it does not generate itself*', it holds true that '*markets don't generate creativity resources by themselves'* (Brodbeck 2008: 5). Indeed, economies can be conceptualized as complex adaptive systems in which path-dependent innovation

processes are characterized by the interdependence and interaction of a variety of *free* and *heterogeneous* agents able to learn and react *creatively* with subjective and procedural rationality (Antonelli 2009, Holt et al. 2011, Hanauer & Beinhocker, 2016).

A complex network view of economics (Foxon et al. 2013) is strongly linked to the concept of 'social capital', which is described as 'social network with shared norms, values and *understandings* that facilitate co-operation within or among groups' (OECD 2001: 41). The term 'capital' suggests the emergence of a valuable 'asset', while the term 'social' suggests that benefits particularly accrue from 'being-connected' to a community. Interestingly, markets (if defined as social networks) and human-brains are *isomorph* in the sense that they dynamically create *meaning* because of their open, variable and free network structure capable to constantly create *new* 'links' (Brodbeck 2000: 5). Thus, innovative places and attractive destinations should be characterized and understood as open, free and well inter-connected territories whose unique history and specific beauty shapes and fosters the *creativity* of place-makers capable to transform inherited location factors into assets with high symbolic value and *meaning* (Uzzi & Spiro 2005; Feldman 2014).

A network analytic approach to creativity

Besides any individual characteristic, as stated, creativity is recognized today in particular as a social process (Ahuja 2000; Granovetter 2005; Lee & Lee 2015). Now, whenever a 'social side' is called into play, a question naturally arises: is there any 'structural' influence due to the composition of the social group in which the individual is embedded? In other terms, what is the role, played by the structural features of the social group? Is there any shape that favours creative processes? How do the strength and the distribution of the relationships between individuals affect the creative process?

The question has been well studied and discussed by many scholars and two lines of thought have appeared. One maintains that the presence of well and tightly connected groups allows a faster and better development of ideas (Coleman 1988; Reagans & McEviliy 2003), while the second argues that loose connections between different "regions" favour the access of new concepts, thus, developing innovative approaches to problems (Burt 1994, 2004; Adler & Known 2002). The natural methodological environment in which the social creativity process can be studied is that of *network science* (Newman 2010). Here, a number of techniques have been devised for mapping, quantifying and analysing the patterns of connections existing between the elements of natural or artificial systems. These techniques are starting from the idea that any such gathering can be represented by identifying its elements and the existing relationships, and map these into a mathematical abstraction: a graph, in which elements are the nodes and relationships are the links (Jackson 2008). A number of structural characteristics (the network topology) can be, then, identified by using powerful mathematical algorithms (da Fontoura Costa et al., 2007).

The two lines of thought described above have been discussed by using network analytic approaches. Some authors state that a closed network is more suitable for enhancing social

capital because information flows more effectively due to the existence of direct connections. Thus, redundant ties create stronger relationships (closure) and a sharper sense of community that, in turn, promotes higher levels of trust and cohesiveness, thus easing the achievement of collective goals (Coleman 1988; Reagans & McEvily 2003). On the other hand, some scholars contend that being loosely connected to other actors, seemingly alien to the own group, builds a bridge between disconnected clusters (structural hole) that favours accessing information and knowledge (re-)sources otherwise unreachable. Network structures rich in structural holes may, thus, provide more varied information compared to other structures and give rise to a fresher set of new ideas (Adler & Kwon 2002; Burt 1992, 2004).

Intuitively, however, the ideal setting for a creative system could emerge from a good combination of weak network ties (Granovetter 1973) with high quality information spread (Hansen 1999), and mixed with a number of strongly connected communities able to provide a more efficient information exchange (Uzzi 1996). This reconciliation of the two approaches has been already examined (Fleming et al. 2007; Podolny & Baron 1997) and the contradictions arising from different empirical results interpreted as due to treating creativity as a single outcome rather than a social process. In essence, cohesively clustered groups greatly improve the development of an idea but make groundbreaking inventiveness less likely, because of an isolation from new information, or opportunities. Adding some bridging connections, however, allows counterbalancing this insularity by obtaining new and non-redundant information that can facilitate the creative process. On this line, recent works have shown that a certain dynamicity in connections, which translate into the structural holes idea, and a higher diversity in the connections existing in a social network seems to signal quite strongly a better prosperity and development of a community, in particular, an improved innovation ability (Eagle et al. 2010; Huggins et al. 2012). Supportive findings are coming from meta-analyses conducted over the past two decades (Baer 2010; Baer et al. 2015), showing that actors were most creative when their networks were of optimal size, weak strength, and high diversity and high openness, while closure, by contrast, had a weak, negative association with innovation.

Network science, as said, provides methods and tools to quantify the structural and dynamic characteristics of the systems examined, thus, it is important to illustrate how the features described above can be calculated, once the network's basic elements are known with sufficient reliability. More technically, *closure and structural holes* can be evaluated by measuring two quantities: *clustering* and *effective size*. The clustering coefficient C_i of a node having more than one neighbour is defined as the ratio between the number of links $K(G_i)$ in the neighbourhood G_i of a node (the set N_{Gi} of nodes directly connected to it) and the maximum possible number of links in the neighbourhood: $C_i = K(G_i)/[\, N_{Gi}(N_{Gi}-1)/2]$ (Newman 2010). It gives the probability that two neighbours of node i are connected by a link, and is normalized by definition (i.e. $0 \leq C_i \leq 1$). By contrast, as defined by Burt (1992), effective size S_i measures the redundancy of the links between a node with degree k_i and the rest of the network. In essence, it is the difference between the node's degree (number of links the node has) and the average degree of its neighbours.

Latora et al. (2013) show that these two measures are linked by a simple functional relation:

$$S_i = k_i - (k_i - 1)C_i$$

Thus, clustering coefficient and the (normalized) effective size are complementary measures that can be defined one in terms of the other. More interestingly, the same authors propose an alternative measure, the *Simmelian brokerage (SB)*. To apply this measure, they use a metric called local (nodal) efficiency $E_{loc,}$ defined as the inverse of the harmonic mean of the minimum distance d_{ij} between node i and the nodes in its immediate neighbourhood:

$$E_{loc,i} = \frac{1}{k_i(k_i - 1)} \sum_{i \neq j} \frac{1}{d_{ij}}$$

The *Simmelian* brokerage metric is then defined as:

$$SB_i = k_i - (k_i - 1)E_{loc,i}$$

The metric is able to render the extent to which the node belongs to multiple groups that are both closely connected and separated from each other.

Creativity and network analysis in tourism destinations

From the discussion above, we may assume that, disregarding the qualities that single actors have, a system with a good average *Simmelian* brokerage (SB) should be one that favours the onset and the diffusion of innovative and creative mind-sets. Such study was conducted on a number of tourism destination networks compared to some renowned creative groups, such as jazz musicians, scientific collaborations, university researchers, management consultants, schools (all details in: Baggio, 2014). Obviously, assessing the level of creativity is an unresolved task, and there is no measurement able to represent this concept, but it looks reasonable to assume that the networks chosen are composed of creative individuals and, therefore, they may represent a useful reference. The networks used were selected for their manageable size (i.e. the largest is of about 5,000 nodes, thus, similar in size to those of the tourism destination considered) and for the public availability of the data. Moreover, the networks were used in their symmetric unweighted version, which rationalises the idea of *bilateral* flows of ideas.

From a network analytical perspectife, all networks show a similar macroscopic structure, characterized by a relatively low density, a compact overall size (i.e. measured by the average distance between any two nodes), and a highly skewed degree distribution (mostly power-law); that is: a small number of nodes has a high number of links while most nodes have very little connectivity (Baggio & DelChiappa 2014). The SB values calculated (and

normalised to the size of the network to ease comparison) for all the networks, along with the mean values per group (tourism and others), are shown in figure 1.

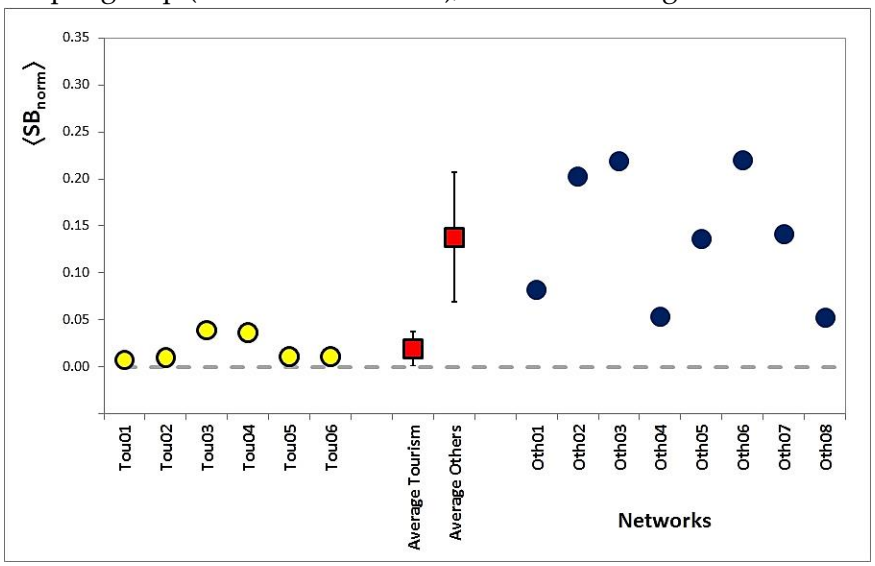

Figure 1: normalized SB values for tourism vs. other networks

Although having similar *macroscopic* structures, the two groups show a clear difference in their *mesoscopic* configurations. The mean SB values calculated for the two groups of networks are: $SB_{Tourism} = 0.019 \pm 0.014$, and $SB_{Others} = 0.147 \pm 0.085$. The same can be said for the median SB values: the grand medians (median of the medians) are $M_{Tourism} = 0.00487$, $M_{Others} = 0.06989$, respectively.

In addition, as figure 2 depicts, the distributions of the SB values have a significantly different shape; this difference is confirmed by a Kolmogorov-Smirnov test (p-value $<< 10^{-3}$).

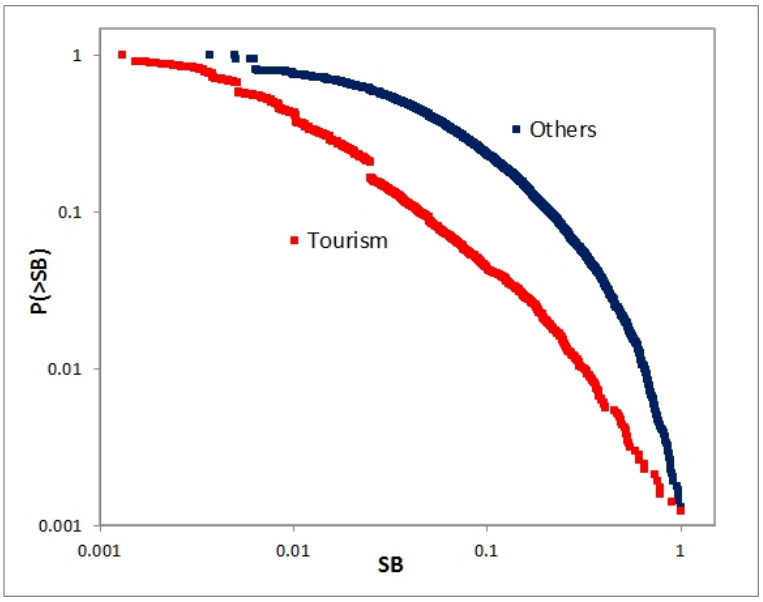

Figure 2 Cumulative distributions of the SB normalized valued for the two groups examined.

These results highlight a clear diversity between the two groups, and a lower average Simmelian brokerage for European tourism destinations. Therefore, we may well claim that tourism destinations might have a structure that does not favour the emergence of new inspirations, at least not at the level of the non-tourism networks under study. These outcomes highlighting creativity gaps in tourism are in line with considerations made in the literature that stress the stagnating development level of tourism destinations, thus, emphasize the need of a higher degree of creativity and innovation rates for their future development (Hjalager 2010; Richards 2011).

The proposed exercise is of great importance because governance bodies and stakeholders can use this type of measure to better understand their configuration and creativity potentialities and, adding their knowledge of the real conditions, they can derive the most suitable strategies and actions to improve the situation (globally or individually). This can be done by reconfiguring the network of linkages and providing a more effective distribution of the connections, even in the simple forms of information exchange or an increase of the number of hyperlinks on websites of tourism organizations (Baggio & Del Chiappa 2014). To conclude, the proposed assessment provides a usable and useful instrument that provides a sound basis for devising guidelines aimed at improving the conditions that favour creativity and innovation at the level of tourism destinations. This important element can be valuable, as other works have shown. One famous example is the case described by Ingram and Roberts (2000). They discuss the benefits obtained after the creation of informal acquaintance connections in a network of otherwise highly competitive hotel managers in a destination. The authors were even able to estimate the monetary value for this new network setting, amounting at 15% of total sales revenue, which is, to all extent, a quite convincing argument for the effectiveness of the increased innovation capacity of the destination network.

Concluding remarks and outlook

After critically discussing the changing notion of creativity throughout history of thinking, this paper shows, that it is human's creativity which makes it possible to *endogenously* change the basic features of '*utility and production functions*', which typically serve as the central argumentative elements of 'orthodox' economics (Antonelli 2009). As soon as market economies are fully understood as open networks of social entities where humans interact and communicate (i.e. about products, routines, prices, cost, technology, preferences, tastes, etc.), the relevance of (neo)-classic general equilibrium analyses is fading away (Chen 2008; Foxon et al. 2013). It is remarkable that the two richest countries, USA and GB, show negative trends of both, social capital and subjective well-being (Sarracino 2011). In the end, the road to durable happiness passes only through *social capital*, and not through economic growth of GDP. Interestingly enough, subjective well-being shows the capacity to explain up to 25% of total factor productivity (TFP) gains in 20 EU countries (OECD 2001; Di Maria et al., 2014). Thus, enhancing individual's freedom and autonomy, self-expression, social participation, feeling of belonging and control over own time and mobility, significantly contributes to subjective well-being, what, in turn, positively affects TFP, defined beyond the

growth of GDP as 'true prosperity'. Indeed, happy people do not work harder, but are more creative and *better* contribute to innovation (Antonelli 2009).

Hence, future network studies in tourism should focus on the multiplicity of destination networks, thereby considering in particular the *type* of social ties within the '*idea network*', such as informal advice, friendship, professional knowledge sharing and collaboration (Ahuja 2000; Baer 2010; Lee & Lee 2015). It becomes imperative to theorise and investigate on network size, (weak) network strength and (high) network diversity, thus, to highlight the '*openness*' dimension for idea generation. However, by doing so, we fully agree with Klocker & Gibson (2005), who criticise how the notion of creativity becomes subsumed within the neoliberal economic development discourse (ibid 2005: 93). In this discourse, creativity is linked to the primacy of global markets, and is a factor in place competition, attracting footloose capital and 'creative class' migrants to struggling regions. It is, thus, vital, to overcome this *uncreative* framework in which the ideal of private sector solutions to regional problems and the primacy of place competition in global markets remain paramount. Rather, conceptually new *cognitive* (!) spaces would only build on *socialised* humans with the capacity to build community, provide stable jobs and incomes, form partnerships and open networks, thus, become more tolerant, but without having to weld these impulses to necessarily neoliberal agendas (ibid 2005: 100-101).

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