

Place brand as an emergent property: The case of Vascitour and Naples

Mario Tani (corresponding author)
University "Federico II" Naples
Napoli, Italy
mario.tani@gmail.com

Gianpaolo Basile
Universitas Mercatorum
Rome, Italy
basilegianpaolo@gmail.com

Gandolfo Dominici
University of Palermo
Palermo, Italy
gandolfo.dominici@libero.it

Abstract

In this paper by adopting a systemic framework, we argue that place's adaptive connotation: be considered as a mere result of endogenous processes, but as a viable system that will remain viable if it can continue to answer the needs of its numerous heterogeneous internal and external socioeconomic agents.

Place can be seen as a Complex Adaptive System (CAS) characterized by a more or less planned evolution, driven by both top-down and bottom-up processes, and composed of various interconnecting parts that, at the same time, can be seen as wholes at different levels as an holarchy.

The model of the holarchy allows to consider the place as the result of both planned and spontaneous relationships between social and economic (sub)systems and components, implemented in order to achieve a common goal.

We than apply this framework to mthe anlysis of a case study in the tourism industry in Naples (Italy).

Keywords place; complex adaptive systems; local networks; holarchy; tourism.

Introduction

A systemic approach is crucial to researchers, practitioners, and managers involved in place studies. It helps to foster differentiation and cooperation between territories, by allowing the emergence and evocation of distinctive features, which are the result of economic, political, and social dynamics.

The awareness of being different from other places—whether created, stimulated, or detected—make the territory into a semantic space, in which both social and economic actors create and maintain sustainable relationships with relevant stakeholders; that is, with those who hold the resources necessary for the sustainable survival of the territory (Ashworth & Voogd, 1994). Such an awareness lies at the basis of both, on one hand, the methodological conditions behind systems thinking and the theory of complexity and, on the other hand, of place marketing and the branding processes which aim to achieve a dynamic equilibrium.

In this regard, the importance of Complex Systems Theory lies in its contribution to General Systems Theory (von Bertalanffy, 1972), which postulates that it is possible to define a global model that represents dynamic systems in different scientific fields. Beside the representation of such systems, the theory of complex adaptive systems tends to focus on the emergent properties of the place characteristics needed to help social actors interact (Churchland & Sejnowski, 1988). This scientific orientation, which aims to reduce the Ashby variety, implies an approach which is predominantly a participatory one (Ashby, 1956; Pumain, 2005).

On this basis, we can argue that the territory, as well as the city, can be seen as a whole that builds itself: all its elements play an active role in forming the *âme de la cité* (Rossi, 1982, p.55). It follows that we can describe place behavior as emerging from both endogenous and exogenous processes (White *et al.*, 2015).

In light of these considerations, we factor in the place's adaptive connotation: it cannot be considered only as the result of endogenous processes, but it will survive—that is, it will remain viable—if it can continue to answer the needs of its numerous heterogeneous internal and external socioeconomic agents, helping them to create new relationships and to maintain the existing ones.

We argue in this paper that place can be seen as a complex adaptive system (CAS) characterized by a more or less planned evolution, driven by both top-down and bottom-

up processes, and composed of various interconnecting parts that, at the same time, can be seen as wholes at different levels; that is, these systems can be seen as a holoarchy (Koestler, 1967).

Adopting the model of the holoarchy allows us to interpret the hierarchical interconnections that we can observe in the place as a containing–contained relationship between autonomous elements (Mella, 2009). A place can then be considered the result of both planned and spontaneous relationships between social and economic (sub)systems and components, implemented in order to achieve a common goal. Moreover, according to Giret and Botti (2004) the Holoarchy is an effective and efficient organization for getting the most out of place resources.

The place as a CAS can thus be composed of two extreme forms of agent, differentiated by their viable autonomy in the place government:

- as agents with reflex vitality, tightly structured in a top-down hierarchy that justifies their existence and their place’s functional role (for example, the local institutions and their ability to manage the place);
- as agents with autonomous vitality, able to survive as individual holons with a functional role in the place (Mella, 2009; pp. 63–64; Holland, 2006).

Complex adaptive systems

The CAS approach we adopt in this work is characterized by a large number of components, often called *agents*, simultaneously interacting, adapting, and learning among themselves (Holland, 2006).

These agents include any social or economic entity that will interact with other agents and with the context as a whole. They perceive the context, share information, learn, adapt, and act. Each agent is an autonomous entity and can choose whether to follow the rules or not. An agent’s behavior can be influenced by several factors resulting from personal characteristics (such as economic factors, social standing, level of education, religion, and experiences) and from the characteristics of place (as demographic, social structure, and culture) (Atun, 2013).

The numerous interactions are composed of feedback loops between agents and flows, in which the agents or components represent the state of the system (White *et al.*, 2015). In the constructivist view, they are seen as the “memory” of the place, and they enable the viewer to describe the system’s current status (Forrester, 1970).

The structure of the system that results, built up from the stocks of resources and the flows affecting and interlocking them, could be defined as the behavior of the system when the relevant stakeholders have been individuated (Gebetsroither-Geringer, 2014).

On this basis, we can define the place as one of the largest complex spatial dynamic systems consisting of heterogeneous and interconnected elements in both physical and social structures, such as human organizations, infrastructure, and in the place economic subsystems as a whole.

In this scientific context, the term “complex” denotes a composite whole that is formed of a large number of interconnected elements. Put differently, the term “complexity” is used to refer to a great number of heterogeneous and highly interconnected elements that function as a whole (Gell-Mann, 1995). Mitchell (2009) states that another way of understanding the meaning of “complexity” is to characterize the features of a complex system, such as interdependency, heterogeneity, and autonomy, and to observe how these features affect interactions within the system.

In this regard, interdependency includes interactions among people and all physical entities in the context, such as creating bus stops to provide access to monuments, or building hospitals for elders.

Kauffman’s 1996 model of a Boolean network (Kauffman, 1996) explains aspects such as interconnectivity and interdependence within complex systems. Kauffman represents the system, as a complex network, with buttons interlinked by strings (see Fig.1). If a button is removed, all the other buttons are affected, and a place system could be understood to react in the same way whenever a physical or intangible component stops functioning.

Figure 1: Kauffman’s model of a complex system’s interconnectivity and interdependence

The links between buttons—and so the relationships between tangible or intangible components—allow the information flows needed to change the holons' behavior, giving the system as a whole the characteristic of adaptability, and allowing it to become more stable in a dynamically changing context.

In these dynamics, social and economic agents can freely interact among themselves and with other classes of agents operating in their specific context (Janssen & Ostrom, 2006; Ferber, 1999). The various actors taking part in these interactions have the role of providing the system with the needed *variety*.

Each interaction can be defined as a two-way path in which the actions and perceptions of the various agents affect each other, helping in the process of knowledge sharing between the agents and between them and their context (see Fig. 2).

In any given context, agents collect information in three ways: they obtain new information through their own perception of the whole, they can interact with other agents to share their knowledge, and they can act on the evolution of the environment to influence the perception of other agents using the knowledge they possess.

Figure 2: A scheme of cognitive interactions between agents and their context.

In this system model, each agent may be described as an autonomous entity that can choose if it will follow the general rules; its behavior can be influenced by several factors resulting from personal characteristics (such as economic and social standing, level of education, religion and experiences), and from characteristics of the place (such as demographics, social structure, and culture) (Atun, 2013).

On the basis of these considerations, we consider a place as a spatial whole in which there are specific social practices; the place then represents a large number of forms of behavior. Hence, the complexity of the system can be expressed in terms of the multiplicity of states it can form, which is the variety or, adopting the words of Beer (1979), “the measure of complexity is called variety, and variety is defined as the number of possible states of whatever it is whose complexity we want to measure” (Beer, 1979:32).

Regarding variety, Ashby argued in 1956 that only “variety can absorb variety”, meaning that a system can deal with the changing nature of a higher-level system only if it has at least the same level of variety in itself. Therefore, according to Ashby, any regulator agent—whether manager, practitioner, researcher, or regulator—can keep a place system under control only when he or she possesses, at the very least, the same amount of flexibility as the evolution of the system that is to be regulated.

How the system deals with its own complexity is even more important: according to the Good Regulator Theorem of Conant & Ashby (1970; Ashby, 1956), every good regulator of a system must be a model of that system; and as highlighted by Schwaninger (2010), a management process can achieve better results than its underlying model only by chance.

In planning conditions, when we try to observe or design a system that is intended to meet certain goals in a dynamic context, we must first identify the variety that the system must face—that is, the variety of needs the intervention will have to satisfy. Once these needs have been recognized, it is necessary to design or adapt a system to satisfy them. This means that the system must be able to generate an amount of variety that is coherent with the identified and required variety. Thus, in order to deal with the context’s complexity, a manager or an observer needs to act in various ways to align the system’s complexity with the contextual complexity; he or she can increase or decrease the number of elements, resources and agents and can plan or stimulate the holon creation process in order to alter the potential behaviors of these agents. Hence, the system that results should have the capacity to adapt and, ideally, evolve in response to the evolution of the needs of the broader context it is nested in.

On the basis of these concepts, we can define the viability of a system as its capacity to survive by creating new relationships, while maintaining existing relationships with other components of the context, in order to individuate or intercept changes. This process needs the system to be able to self-regulate, to learn, to adapt, and to evolve, changing its functional and physical structure and its component behavior, and stimulating the development of subsystems (Beer, 1981, 1985).

The place as a network of holons

This condition grants a limited but definite opportunity to create a coherent whole based on the personality of the place (its history, memory, strategies, and so on) (Pérez Ríos, 2010).

Beer argued that “the purpose of the system is what it does”, reminding us that different observers (such as clients, and even potential clients) may see different purpose in the same place or system, and that different subsystems can communicate different purposes or identities, even in a spontaneous way (Checkland, 1989; Checkland & Scholes, 1990). Efforts to design an identity for a place and its purposes depend on how the system’s boundaries are defined and on the identification of the triplet of context, relevant stakeholders, and goals and targets. In this, according to Ashby’s Law, it is meaningful to deal with the variety of the context (i.e., the complexity of the system using the cybernetic lexicon) by identifying subcontexts (such as specific targets) and by creating or stimulating corresponding subsystems (holons) (Schwaninger, 2009). In this way, the system’s complex can face increased complexity, dividing itself into subsystems (i.e. into holons), sometimes without a planned effort, to target the need of a specific part of the context, of a specific goal, or of a specific stakeholder. This reduces the importance of the place’s spatial boundaries, as the nonlinear relationships between the holons imply, and increases the importance of its adaptive and self-organizational features through both endogenous and exogenous processes, thus configuring the place as a multiagent holonic model characterized by the presence of different actors (Koestler, 1967; Gerber *et al.*, 1999).

This model is the result of moving from hierarchically conditioned processes, based on a top-down logic—or in some cases on a collaborative logic—to holoarchic processes, based on agents having, at the same time, cooperative, competitive, and participative roles. Moreover, the agents participating in the holoarchy cannot be known beforehand, as their participation is tied to each agent’s ability to adapt their own behavior in order to increase the informative variety, as we will see in the case study.

Figure 3: Holonic Network

A holon, be it the whole system or one of its subsystems, survives regardless of changes in its context if it has the capacity both to maintain an existence separate from the higher level wholes and has the characteristics of self-regulation, learning, adaptation, and evolution (Suarez & Pérez Ríos, 2014:103-119). Furthermore, in his Viable System Model, Beer argues that a system can be considered *viable* if and only if it has a set of management functions with an identified and formalized set of characteristics and interrelationships. These functions need to show regulatory capacities of the basic units, autonomous adaptation to their context evolution, and optimization of ongoing activities. Moreover, they need to attenuate or amplify the interrelationships so as to dampen oscillations and coordinate activities via information and communication, establishing an overall optimum among the basic units, allocating resources and providing for synergies. The system's working processes are based on activities that are shared among the system's components for investigating, validating, and at the same time dealing with the long-term consequences, in order to comprehend the outside context and model the organization's characteristics. Such an approach, according to Beer, is needed to avoid conditions in which any deficiencies in this system—such as missing functions, insufficient capacity of the functions, or faulty interactions between them—could impair or endanger the viability of the organization as a whole. Finally, the viability, cohesion, and self-organization of a system depends upon these functions operating recursively at all levels of organization. A recursive structure consists of autonomous units within autonomous units.

Place marketing

Place marketing is considered a marketing challenge, as it is the set of activities “designed to create favorable dispositions and behavior toward geographic locations” (O’Leary & Iredal, 1969:156).

The first publications really dedicated to place marketing came from regional economists, geographers, and other social scientists (for an overview, see Braun, 2008) with one of the first examples being an article by Burgess (1982) questioning the benefits of place advertising. All the initial efforts to create a territorial marketing discipline have mostly focused on redesigning corporate brand concepts. Unfortunately, most publications throughout the 1980s and early 1990s were limited to the promotion of places. In the early

1990s, the scope of the contributions became broader, and several attempts were made to develop a strategic planning framework for place marketing (e.g. Ashworth & Voogd, 1990). It is important to note that, since the early 1990s, place marketing has been discussed in the broader context of structural change in cities and regions (Van den Berg & Braun, 1999), arguing that marketing has become more important because of economic restructuring and competition between cities. Furthermore, attempts to reimagine cities have received considerable attention from place-related researchers. Paddison (1993) observed that places have adopted “targeted forms of marketing to bolster directly the process of image reconstruction”, and that these essentially differ from the earlier planning practices adopted in cities. Place marketing became more central thanks to the book *Marketing Places* by Kotler *et al.* (1993). That volume, along with Keller (1993), attempted to apply a corporate brand approach to territorial needs, thus enriching the marketing field of study.

Competition among cities for tourists, investors, companies, new citizens, and especially qualified workers, has increased in the past twenty years (Anholt, 2007; Hospers, 2003; Kavaratzis, 2005; Zenker, 2009). Unfortunately, place marketers often hold that place brand, like corporate brand, is a controllable and fully manageable communication tool. Yet place brand is different from corporate brand, so if on one hand both can be defined as a network of associations in the minds of consumers (Keller, 1993; Keller & Lehmann, 2006) based on the perceptions of different target groups, making branding a multifaceted subject, on the other hand the various perceptions of a place, and thus its various brands, may be significantly different, such as in the case of the place where there is a greater variety in target groups’ preferences and interests (Zenker, 2011).

This means that place branding should focus more on brand perception of its different target audiences and should thus develop strategies on how places might build an effective place-brand architecture. The academic discussion of this has displayed significant shortcomings (Grabow *et al.*, 2006), since it has mainly focused on the explorative description of a certain city brand without distinguishing properly between target groups (e.g. De Carlo *et al.*, 2009; Low Kim Cheng & Taylor, 2007). Place marketing deals with many different target groups, with complex and related products, as well as with the different political settings in which marketing decisions are made (Van den Berg & Braun, 1999).

At the beginning of the new millennium, the focus of the place marketing debate shifted somewhat in the direction of place branding (e.g. Kavaratzis, 2008). As a matter of fact, the branding of places—and of cities, in particular—has gained popularity among city officials in recent years. This is illustrated by the development of city brand rankings, such as the Anholt–GMI City Brands Index (Anholt, 2006) and the Saffron European City Brand Barometer (Zenker & Martin, 2011). Medway and Warnaby (2008) observed that places can be conceptualized as brands produced by relations established with and within stakeholders, referring to the work of Hankinson (2004) and Kavaratzis and Ashworth (2005). In particular, Iversen and Hem (2008) discussed the opportunity to develop place umbrella brands for different geographical scales.

The main target groups of a place have been identified as: (1) visitors; (2) residents and workers; and (3) business and industry (Kotler et al., 1993). However in practice, each of these groups is further segmented in order to identify more homogeneous segments. Tourists, for example, can be divided into business and leisure visitors (Hankinson, 2005). Even more complex is the grouping of residents: the first distinction is that between internal residents and external, potential, new residents. Within these groups, further and more specific target audience segments might be found, such as students, talents, or the so-called creative class (Braun, 2008; Zenker, 2009). The differences between these target groups are not only associated with different perspectives, as they often have different needs too; Leisure tourists, for example, look for leisure spots and activities, such as shopping malls or cultural events; while business tourists are more interested in infrastructure and conferences venues.

City customers are generally not interested in ticking off points on a map. They need a suitable environment for their purposes. As potential residents, they look for an attractive living environment, and businesses look for a suitable business environment; similar reasoning applies to visitors. Conflicts and synergies arising from the needs and desires of different target groups are therefore inevitable.

The brand communication for target groups of a city or place should be developed with these factors in mind.

The very same place branding evolution, tightly linked to product branding, does not take into account the diverse context of place brands, limiting the scientific and empirical diffusion of these studies. Place marketing scholars who are committed to contributing to

the application of brand concepts to the territory tend to neglect the interdisciplinary effort extending to the definition of a territory which, besides having to interact with a diverse and heterogeneous target, should also recombine the relationships between its components over and over, in order to meet their interlocutors' and stakeholders' needs at all times.

Focusing on a more complete definition of the territory would allow the contextualization of marketing definitions and applications so as to finally bring out a well-defined discipline. In this way, the territory would not be considered, rather superficially, as a social organization like a standard business enterprise, in order to justify the application of corporate marketing theories and practices.

Indeed, while a company might lack endless possibilities for self-organization and adaptation as a result of turbulence and market dynamics, the territory is always in a state of continuous adaptation to the needs of its many and heterogeneous stakeholders.

Brand as systemic emerging property

The significance of a brand and the role it plays have been debated for decades by scholars and by practitioners. All seem to agree on the fact it presents a semiotic meaning that can be displayed or conveyed when performing relational activities or tasks (see Gambetti & Graffigna, 2011).

In this regard, Zenker and Braun (2010) define the place brand as a “network of associations in the consumer’s mind based on the visual, verbal, and behavioral expression of a place, which is embodied through the aims, communication, values, and the general culture of the place’s stakeholders and the overall place design”.

On this basis, we can consider the function of a place brand as the selective narrative of a territory, or part of it, that contributes to the creation of consonant relationships with an identified target (Johansson, 2012).

Indeed, if a brand expresses on one hand the signification of territorial distinctive features, then on the other hand it also concerns reception and negotiation, exchange and enrichment, in terms of value and information, and as a result of interactive phenomena between the agents involved.

The brand thus plays a mediating role between the place as a whole (with its values, tangible and intangible features, and culture), its agents, and its recipients, and in turn

acts as an expression of cultural and value characteristics. It can be seen as a symbolic and social space that represents the character and reorientation of values resulting from the constant and simultaneous interactions between its components and between these and the interlocutors.

Brand determination is increasingly the result of a process aimed at the creation of a semiotic and social space, which for its creators is an expression of identity to look upon, and an environment in which to cooperate so as to find common values for its recipients. In line with these notions, a brand can be described as a property that emerges, in the context of an interactive space that cannot always be actively managed, from bidirectional relations aimed at meeting the perceptive needs of the agents involved. This property is characterized by a community of culture, values, and languages among social actors with different goals (see Figure 4).

Figure 4: Brand as emerging property

Indeed, if the territory or one of its holons needs to compete or co-operate, the social actor, whether an individual or stakeholder, has to sediment his or her own identity (that is, self-esteem or social identification) through the purchase or use of the value features conveyed by the brand (Basile, 2013; Dominici *et al.*, 2013).

Individual behavior, besides being aimed at meeting individual needs, tends to satisfy the need for self-representation in social contexts. This trend can be seen in forms of communication that, if previously intended to represent the quality of a product, service, or territory, now aim at evoking lifestyles and identity moments that express values and cultures.

This form of mediatization of the territory or brand, which is typical of the postmodern era, is likely to reduce the readability of the origin of products and services, leaving room for an imaginary space that is difficult to handle for marketing and communication practitioners. The aim of such space is to enable the interlocutor or recipient to build a mental mapping of the processes of completion regarding the territorial system.

We can say that, from a symbolic point of view, the brand—seen as an emerging property of a self-organizing system—carries with it the distinctive features of a complex system,

or of a specific subsystem, and rises in evocative terms to play a role as a social actor. Such a role is in itself adaptive, due to the behavior of the actors playing it. It is capable of creating the conditions of interaction between as many social players, represented by visitors and members of the territory, in order to meet the needs of the latter.

The entire workload can be carried out quite naturally if the brand, besides representing that particular value, cultural, and semantic platform, also manages to be a faithful representation of the system identity by overlooking the differences between identity and image.

This condition leads first to the evolution, and then to the emergence, of moments or spaces of encounter which display an experiential value; here a process of co-creation and adaptation between the interacting systems takes place naturally.

History, memory, and the archeology of knowledge (*à la* Foucault) therefore represent the cognitive basis that allows a system to interact appropriately with the reference contexts, while at the same time developing dynamics of mutual adaptation and knowledge transfers, which are useful in making such relationships last over time.

Research hypotheses and research design

Availing of the perspective described in the literature review, the place brands can be considered as an emergent property that can only be partially defined by the expectations of, and the interactions between, its agents—which are tourists, businesses, residents, and external stakeholders. This depends on the interactions between the various agents and on their actions in the environment (Janssen & Ostrom, 2006), and it also depends on the various experiences that the actor has gained from the place, of its resources, and of the other actors who share the place (Kauffman, 1996). Moreover, the effect of these experiences will depend even on the interactions between the personal characteristics of the agents involved (Atun 2014). The degree of variety (Ashby, 1956) of the place will depend on the number of states its resources can constitute (Beer, 1979) and on its ability to interact with the external environment (Beer, 1981, 1985).

The various agents of the place can successfully create and maintain relationships when they can envision the synergic effect of their resource endowment (Pfeffer and Salancik, 1978; Wernerfelt, 1984). These relationships will help the various actors (Gerber *et al.*, 1999) coalesce in subsystems (Schwaninger, 2009) in order to answer the external variety.

These considerations drive us to formulate our first research question.

RQ1: Can we model a tourism service in a destination as a holon?

A holoarchy (Koestler, 1967) can be considered viable when its subsystems can be defined as viable systems (Beer, 1979). In these models, the holons must be able to be simultaneously autonomous and coordinated. This coordination comes out of the place subsystems' capability to interact and share their knowledge (Janssen & Ostrom, 2006). Moreover, the interactions between place agents and between agents and stakeholders will help increase the place's variety if the resulting organizations or processes can adopt a dynamic long-term perspective and coordinate among themselves without losing their strategic independence. In this way, the place will be able to respond to, if not to anticipate, the turbulent evolution of the context in which places are considered to compete (Holland, 2006; Mella, 2009).

Moreover, they must be able to create knowledge flows if they are to combine exploitation and exploration processes in their actions (Andriopoulos & Lewis, 2009). It follows that places can be modeled as viable systems only when new holons are able to act in the semiotic boundary of the place's resources, heritage, and culture (Beer, 1979). When place actors are able to act according to these premises, the place then meets the main conditions identified by Beer (1979) as the main characteristics of those complex systems he called viable systems. This allows us to formulate our second hypothesis.

RQ2: Can we see the holon as a viable system?

When a place can be considered a viable holoarchy, it will be characterized by several autonomous and interrelated services that can drive the actors experiencing them to have really different, autonomously defined, ideas of the place itself (Checkland & Scholes, 1990; Basile *et al.*, 2014). It follows that, using these complex system configurations, the place brand is no longer considered a prespecified factor that other actors evaluate in order to understand its coherence with their own experience; instead, it becomes the emergent characteristic defined by the very same actor interactions with the values, social norms, and all the social, economic and functional components of the place (Zenker & Braun, 2010; Johansson, 2012). Our third research question tests this property.

R3: Will this holon's activities make the place image an emergent property?

In order to determine whether this theoretical perspective can be used to describe the place as a viable holoarchy and, as a consequence, whether we can define its brand as an emergent property, we have employed a case study approach (Yin, 2017), as we are trying to understand the consequences of the interactions of the various actors in the systems. This research methodology allows us to meticulously analyze the effectiveness in a real-life context of the items identified in the literature review (Yin, 2017). The case study method is usually considered essential to an explorative approach, as it follows a “constructivist”, a “qualitative”, and an “inductive” logic (Gombult, 2005).

We have chosen to focus on the city of Naples, as this is a place with a set of heterogeneous resources (leisure services, heritage, food, wine, and tradition) that are actively used to create a broad set of services to target different market niches. It follows that it can be classified as a complex system using the definitions of von Bertalanffy (1972) and of Chuchland & Sejnowski (1988). Adopting an interaction perspective to place branding, the various services can be leveraged to create a diverse set of experiences for tourists.

We particularly focus on a single case study of the practices and activities of a Neapolitan tour operator, Vascitour, whose mission states that they are not attempting to sell a standard perception of the place, but rather to help tourists to “live Naples like a resident”, according to the specific needs and desires of each tourist.

We consider this case relevant for two main reasons:

- They do not try to sell the standard “tourist experience” of the city.
- They do not have a preconceived “experience” to market.

From the first element, it follows that this player should be able to act independently of the traditional tourism channels; the second suggests that they need to continuously redefine their services, adapting them to the specific experience they are trying to market. In order to develop the case of Vascitour, we have studied its website and its communications on social media (in the form of its Facebook and official blog) in order to see how the company has presented its services and the emerging experiences that arise from a more in-depth interaction with the city of Naples. We then contacted the management of the tour operator to interview them, to learn about the stories and the

experiences from one of their guides, the motivations driving them to define their “atypical” business model, and to learn some more about their operations.

The interviews were afterwards transcribed and reread by the researchers, and the excerpts relevant to the research questions were tested against the main characteristics of the holoarchies and the viable systems we have identified in the literature review.

Case study: Vascitour

Vascitour is an atypical alternative tour operator operating in the city of Naples. Vascitour emerged from a University of Naples startup lab, having been developed by two social sciences students in 2015.

Its main offer is to help tourists “live the city” like a resident through different services:

- Dormi: alternative housing
- Mangia: social eating
- Visita: personalized tours
- FrataMMè: personal local guides

Vascitour was created around the concept of using a traditional type of house typical of the center of Naples, the *vascio*, as a way to help people understand the not-tourism-related-sides of a city as complex as Naples.

The founders of the company believe that helping people avoid the traditional hotel chains can get them more deeply involved in the city’s life. This is facilitated by the *vascio*, whose name refers to its position on ground level. These traditional houses have direct access to the street, so the street itself becomes part of the “house” for those who live in the *vascio*, and they can use this to create stable relationships with their neighbors. The street in front of the *vascio* can be considered a shared area where the various neighbors live a good part of their life together.

According to the original vision of the founders, tourists living in a *vascio* could more easily interact with locals and, through these unplanned interactions, the *vascio* becomes the gateway to creating new, different, experiences each and every time.

In order to help tourist find the “real” Neapolitan experience, the founders decided to skip the traditional restaurants and canteens and to bring tourists to have social dinner

experiences in the houses of selected hosts. These are selected using one of two principles:

- They are embedded in local traditions
- They are able to reimplement local traditions in new ways.

The main idea behind adding a social dinner to tourism packages is to allow tourists to interact with real Neapolitan families. The “reality” effect lies at the core of these dinners, as Vascitour does not ask hosts to behave in the “traditional” way; instead, they ask them to behave as they would normally usually behave at a family dinner or some other family-related special event. This choice helps a whole set of different experiences emerge from the guests’ interactions with the host family. For example, one host was able to arrange some music, as he and his wife played guitar; another host has the habit of providing her guests with food created by blending Arabic traditions with the Neapolitan traditions of her husband’s family.

The third service offered by Vascitour is the local tour. These shy away from the usual traditional tourist area and instead focus on helping tourists see the real everyday working parts of Naples. These tours are not designed to help tourists visit a “living zoo”, but instead engage local inhabitants and workers to help tourists feel part of a real true-to-itself, experience.

In order to reach these goals, Vascitour’s guides follow three main directives:

- Guides can autonomously decide how to present the local area to tourists.
- Tours are usually designed to engage specific local actors (shops and associations) in order to highlight specific parts of Naples life.
- Guides encourage local people to interact with tourists in a natural and unmediated way (though where translation, where needed).

Vascitour’s services have been designed to avoid resembling the “standard tour”, so guides do not have to follow a strictly defined procedure in their visits. This is strengthened by the managerial decision to empower the tour guides to alter the way they present the various aspects of the tour, modifying the tour on the fly where needed, to create a more satisfying experience for the tourists.

They aim to foster interaction with local actors. For example, during tours in the Quartieri Spagnoli, a neighborhood in the old city center that is sometimes seen as dangerous, they visit a traditional greengrocer's shop that teaches people to cook some dishes; these lessons are not organized for the tourists; they are instead an initiative of the owner to market the shop's products to younger generations and to foreigners living in the area. The tour provides only some of the attendees to these public lessons.

The guides have also been instructed to allow locals to interrupt them in their storytelling, in order to enrich the tourists' experiences with different versions of local stories and traditions. Sometimes, tourists have been invited to spend some time in local residents' *vascio* as they were judged to be "the real deal".

Another example of this engagement of local actors is the "San Giovanni Experience", a tour of the eastern part of Naples. These tours have been designed to help young people from Naples see how people live in the area near San Giovanni a Tedduccio. In order to create an interesting experience, Vascitour has partnered with a local NGO, the *Maestri di Strada* ("street teachers"). This organization has been engaged to help the guide in explaining the habits and traditions of the communities in the local area, and they have been able to engage the local women to provide *marennna*, a traditional street food consisting of a bun filled with ham or salami.

The tours are a necessary part of creating a "real Naples experience", as they allow tourists to escape the beaten track and begin collecting experiences rooted in the place. In line with this perspective on the role of tours, the owners of Vascitour offer a fourth service, which they call *FrataMMè*, from the Neapolitan for "my brother".

This fourth service developed out of the previous one, and involves personalized tours designed using the interaction of tourists with a local expert in a given field. The main idea is for this guide to help tourists discover the real places in Naples that people go to when they want a specific service or experience.

For example, in one *FrataMMè*, the guide helped a foreign baker to visit traditional bakeries in order to taste traditional Neapolitan pastries, instead of the ones usually offered to tourists. Vascitour begins interacting with the tourists as soon as the booking is made, in order to create the shared knowledge that is needed to design the tours correctly. As the tours are tailored to the specific requests of the tourists, they are one-of-

a-kind packages. For example, one German woman wanted to share with her daughter some of the experiences she had had when she visited Naples in her student days; the guides needed to ask her about her own experiences in order to engage her in the design of their own tour, as a way to satisfy her specific needs.

This fourth service is very interesting, as it highlights the fact that Vascitour needs to continuously redefine partners they engage with in these services if they are to satisfy the specific needs of their clients. It follows that the Vascitour's guides need to create an ever-changing set of interactions to leverage in the creation of different experiences.

In order to help them in creating these experiences, the managers of Vascitour schedule a weekly meeting to help the guides share best practices (contacts, experiences, and stories) they have learnt in the week.

Even though each guide is allowed to independently design the various parts of a tour, all the tours share a single characteristic: they usually end with some kind of food-related experience. This allows the tourists to enjoy a slower phasing out of the guided experience while, at the same time giving them the option to discuss another experience, often an unplanned one.

In order to be more effective, the management of Vascitour has forbidden certain words and topics, training their guides to avoid any discussions and words that could cast a negative shadow on the context of Naples. They believe that avoiding negative outlooks on the context of the tours is the cornerstone of creating a meaningful and fun experience. In the case of Vascitour, it is clear that this organization is not suited to accommodate many tourists, as tailoring services to each participant takes a great deal of effort. At the same time, the founders understand that they need to grow if they are to become more effective in their services. In order to achieve this growth, the managers have proposed two main strategies:

- A guide policy handbook
- Franchising

They are writing a handbook of general policies to help training people as good guides in order to create a smoother experience in cases where multiple guides lead the same tourists. More guides need to be trained in order to diversify the company's offer and to be able to leverage different competences in designing new experiences. The founders of

Vascitour are also looking at some other cities in the south of Italy, such as Palermo, where they think their model can be successful.

Discussion

The interviews highlighted that Vascitour can be indeed defined as a holon in a complex system, namely the city of Naples.

The entrepreneurs behind Vascitour have a clear definition of what they want to accomplish. This is evident from their website, where they state that “the guest is one of us”. This is even clearer when we read the material presented on their website and Facebook page, as they do not only speak of the touristy side of Naples but also focus on presenting various local traditions, as shown by their video of the Christmas Eve tradition of buying fish during the night at Pignasecca, a popular street in the old city center of Naples.

The same concept was highlighted by one of the founders in the interview, when she told us that the main idea behind Vascitour was to “help tourists see the real Naples”.

At the same time, the founders of Vascitour value the opportunity to work with guides that have different competences and interests, as this helps them in creating a better experience for each and every tourist; moreover, within the area they being visited, in order to provide the experience requested by the tourist, each guide is free to select a different set of elements that will complement the main services with explanations of the local area, helping the tourists to interact with the other stakeholders of the place.

Our interview with one of the guides has also highlighted that the guide knows their role well: they see themselves as facilitators who assist tourists to have meaningful experiences, just as if they were cultural mediators.

Yet the experiences created by Vascitour do not only emerge out of the interactions of tourists with local area stakeholders; instead, they pivot around several specific experiences built on engaging different sets of stakeholders in order to leverage their competences. A good example of this is the project undertaken with the Maestri di Strada. This service was developed to target a niche other than those focusing on traditional tourists (such as those visiting on business or for leisure), and they have been designed with two main objectives: to engage children attending schools in Naples to experience

first-hand the difficulties of living in city’s periphery, and to help youth in San Giovanni a Tedduccio to gain some initial work experience and training in the tourism industry. These considerations show that the case of Vascitour has all the main characteristics needed to model it as a holon in the sense of Koestler’s model (1967), as shown in Table 1.

Table 1. Interview excerpts and topics relating to the first research question

Characteristic	Ev.	Excerpts and Topics
Purpose	Yes	<ul style="list-style-type: none"> • “the guest is one of us” • “help tourists see the real Naples”
Autonomy	Yes	<ul style="list-style-type: none"> • Each guide acts on his or her own
Awareness (role)	Yes	<ul style="list-style-type: none"> • “We are not tourist guides, we just explain the context in order to create meaningful experiences”
External coordination	Yes	<ul style="list-style-type: none"> • “We coordinate with other actors in order to provide better experiences” • “The San Giovanni Experience has been designed with other social actors”

Legend:

- Characteristic: as in the Koestler model
- Ev.: evaluation
- Excerpts and Topics: excerpts from the interviews or topics discussed with the managers

The second research question aims to investigate whether the modeled holon has been designed with the characteristics of a viable system. The results of the analysis of the data gathered during the case-building phases are summarized in Table 2.

Table 2. - Interview excerpts and topics relating to the second research question

Characteristic	Evaluation		Excerpts and Topics
	Syst.	Hol.	
Autonomy and optimization of each BU	Yes	Yes	<ul style="list-style-type: none"> • “Each guide decides what to visit with the tourist” • “Each trip is really different and tailored to the tourist”
Internal information and coordination	Yes	Yes	<ul style="list-style-type: none"> • Procedures to “let citizen interact with tourists”
Resource allocation	Yes	Yes	<ul style="list-style-type: none"> • Shared tours to acknowledge the differences among the guides

Monitoring and auditing	Yes	Yes	<ul style="list-style-type: none"> • Weekly meetings to share information and contacts
Long-term focus	Perhaps	Perhaps	<ul style="list-style-type: none"> • Internal growth (handbook, forbidden words) • Franchising
Ethos of the system	Yes	Yes	<ul style="list-style-type: none"> • “Avoid the zoo effect” • “Avoid all the words casting a dark light on Naples”

Legend:

- Characteristic: as in Beer’s VSM
 - Evaluation Syst.: evaluation at the system level
 - Evaluation Hol.: evaluation at the holon level
- Excerpts and Topics = excerpts from the interviews or topics discussed with the managers

In particular, the entrepreneurs have explained several times that each business unit (in this case, the guides) is autonomous, and they can modify the tour in order to provide the tourist with a better experience. On the other hand, the tourist is the key element in designing the package as is engaged in the tour design from its initial phase.

The Vascitour holon possess the internal procedures to help information flow between the agents and to coordinate their actions. These procedures highlight that each guide must stimulate the interaction between the tourists and local area stakeholders; for example, they should never stop local area stakeholders from “telling their own story” about the area being visited.

Moreover, as each guide has different competences and skills, sometimes the guides need to alternate for a given tour in order to provide the tourists with the best available knowledge. It follows that each tour will have access to the tour operator’s resources. At the same time, there are weekly meetings for sharing information and contacts in order to increase the knowledge resources of each single guide.

Respect for the culture of the local area has been embedded in the Vascitour project since the beginning, as shown by two main excerpts from the interview with the founders:

- “We want to avoid the zoo effect”
- “Our guides should avoid any word that casts a dark light on Naples”

The first of these points highlights the choice to let the tourists really play an active part in the local area, without setting them apart from it or having a separate external position

from which to observe the place. As an actor in the local area, the quality of the tourist’s experience will be more thoroughly influenced by the local area culture.

The second point instead aims to remove all possible obstacles to experiencing the city of Naples at its best. In particular, as some tourists arrive in Naples with negative prejudices about certain neighborhoods, the choice of avoiding “negative words” can help them not be deeply influenced by their prejudices.

The holon has only mixed results in terms of its long-term focus, which is one of the characteristics of viable systems. In fact, although one of the founders explained to us that the tour operator is trying to create a franchising network to leverage its business model in other cities (such as Palermo), its internal growth is strongly limited by the need to learn a broad set of internal procedures (such as the internal operative handbook and the list of forbidden words and topics).

Finally, we have looked at the data to see whether there is any support for defining the brand as an emerging property that is not fully manageable by a single actor; we have thus considered how each agent is engaged in the tour starting with its design. The results of the analysis, and the excerpts of the interviews related to it, are reported in Table 3.

The tourists have a pivotal role in defining their tour from the very beginning, as the managers of Vascitour aim to understand their needs and culture so as to tailor the experiences for them. Tourists will thus be able to influence the design of their tour using their previous experiences and their own culture.

The procedures and policies of Vascitour ensure that even the guides play an active role in defining the experience of the tourists, as each guide is an autonomous entity who can leverage his or her own competences in explaining the local area to the tourists.

Table 3. Interview excerpts and topics related to the third research question

Agent	Eval	Interview excerpts and topics
Tourists	Yes	<ul style="list-style-type: none"> • “Each tour is created around the tourists’ needs” • “The organization of a tour begin when we are hired, as we need to understand what each specific tourists wants”
Guides	Yes	<ul style="list-style-type: none"> • “Each of us has different tastes, so we tend to give different perspectives on things”

Residents	Yes	<ul style="list-style-type: none"> • “When residents want to intervene in a visit, we let them explain their point and tell their story”
Shops	Yes	<ul style="list-style-type: none"> • “We let people visit local shops so that they can gain a real experience of what life is like in the local area”
Third sector	Yes	<ul style="list-style-type: none"> • “We have relationships with several local associations and co-ops, which are often involved in specific visits, such as the one with Maestri di Strada in San Giovanni”
Public institutions	No	<ul style="list-style-type: none"> • “...”

Legend:

- Agent: Agent involved and interacted with
- Excerpts and Topics: excerpts from the interviews or topics discussed with the managers

In a similar way, the Vascitour experience has been designed in order to make the residents active agents of the local area. As the residents are not employed by Vascitour, all the interactions involving them are accidental and cannot be planned in advance.

Another class of actors that the guide can engage in explaining the local area are the old shops in the local area; these are included in the tour, as they are considered as a living repository of local culture that can enrich the narrative with anecdotes and stories from their past. In a similar way the tour operators interact with the local area NGOs, as their knowledge of real life in the local area may help tourists gain a more detailed vision of the place.

At the same time, we have not found any evidence of the agent’s ability to engage public institutions in the design process or in the provision of its service. We think this is a serious issue as, in the holoarchic model, public institutions play the role of coordinating interactions between the various holons and helping them to create information and coordination flows at a higher level.

Conclusion and further research

This paper has examined the case of Vascitour to determine whether we can understand a place as a holoarchy, and whether this approach can help to explain the place brand as an emergent property. We have found full support for the first hypothesis, mapping a specific part of a place as a holon, and we have found some support for the second and third hypotheses too; however, there no clear sign of a long-term focus in the viable

system characteristics, and we found no process for systematically engaging public institutions in designing the tours and in carrying them out.

At the same time, we think the case study has shown how the place brand can be easily read as an emerging property in a complex system and, moreover, has provided meaningful evidence of how the place brand cannot be easily managed as a product brand, because not only does the experiential part of tourism depend on tourists, but the interactions of tourists with local area stakeholders cannot be fully planned beforehand in a modern urban area that can be considered a complex system.

In consequence, the case highlights that there is no single, predefined place brand; it has moreover shown how the systems thinking approach can be helpful in understanding how this can develop and, as a consequence, it can assist local public institutions in understanding their role in influencing, rather than determining or managing, some of the forces that shaping each of its numerous aspects.

The case studied here highlights the need to factor the tourist—the receiver—into the place-branding process, but as our case study was designed to determine whether Vascitour can be understood as a viable holon, we have not investigated the tourist's perspective. We leave it to future research attempts to address the tourists' perception of the place, how it depends to some extent on their personal, cultural, and demographic characteristics, and partially also on the agents they interact with—even when the interaction happens outside of the place itself, and with combinations of these two classes of factors.

We think that this approach should be enriched with the study of other cases, possibly even starting from the perspective of other place agents, as this maybe be a good way to shed light on some of the roles that each of these actors can play in marketing places.

References

- Andriopoulos, C., Lewis, M. W. 2009. Exploitation-exploration tensions and organizational ambidexterity: Managing paradoxes of innovation. *Organization Science*, **20**(4): 696-717.

- Anholt, S. 2006. The Anholt-GMI city brands index: How the world sees the world's cities. *Place branding*, **2**(1): 18-31.
- Anholt, S. 2007. What is Competitive Identity?. *Competitive Identity*. Palgrave Macmillan: London.
- Ashby, W. R. 1956. *An introduction to cybernetics*. Chapman & Hall: London.
- Ashworth, G. J., & Voogd, H. (1990). *Selling the city: Marketing approaches in public sector urban planning*. Belhaven Press.
- Ashworth, G. J., Voogd, H. 1994. Marketing of Tourism Places: What are we doing?. *Journal of International Consumer Marketing*, **6**(3-4): 5-19.
- Atun, F. 2014. Understanding effects of complexity in cities during disasters. *Understanding Complex Urban Systems: Multidisciplinary Approaches to Modeling*. Springer: Cham.
- Basile, G. 2013. *Relazioni tra impresa e individuo-consumatore: il ruolo sociale del brand*. FrancoAngeli: Milano
- Beer, S. 1979. *The heart of enterprise*. Chichester: Wiley.
- Beer, S. 1981. *Brain of the Firm*. 2nd Ed. John Wiley: London.
- Beer, S. 1985. *Diagnosing the System for Organizations*; John Wiley: London
- Braun, E. 2008. *City marketing: Towards an integrated approach*. ERIM PhD Series in Research and Management, 142, Erasmus Research Institute of Management (ERIM), Rotterdam, <http://hdl.handle.net/1765/13694>.
- Burgess, J. A. 1982. Selling places: environmental images for the executive. *Regional Studies*, **16**(1): 1-17.
- Checkland, P. B. 1989. Soft systems methodology. *Human Systems Management*, **8**(4): 273-289.
- Checkland, P., Scholes, J. 1990. *SSM in Action*, Wiley: Chichester.
- Cheng, L. K. P., Taylor, J. L. 2007. Branding of former soviet cities: the case of Almaty. *The ICFAI University Journal of Brand Management* **4**(4): 7-13.
- Churchland, P. S., Sejnowski, T. J. 1988. Perspectives on cognitive neuroscience. *Science*, **242**(4879): 741-745.
- Conant, R. C., Ross Ashby, W. 1970. Every good regulator of a system must be a model of that system. *International Journal of Systems science*, **1**(2): 89-97.

- De Carlo, M., Canali, S., Pritchard, A., Morgan, N. 2009. Moving Milan towards Expo 2015: designing culture into a city brand. *Journal of Place Management and Development*, **2**(1): 8-22.
- Dominici, G., Basile, G., Palumbo, F. 2013. Viable systems approach and consumer culture theory: A conceptual framework. *Journal of Organisational Transformation & Social Change*, **10**(3): 262-285.
- Ferber, J. 1999. *Multi-agent systems: an introduction to distributed artificial intelligence* (Vol. 1). Reading: Addison-Wesley.
- Forrester, J. W. 1970. Urban dynamics. *IMR; Industrial Management Review (pre-1986)*, **11**(3): 61-67.
- Gambetti, R. C., Graffigna, G. 2011. Consumer Brand Engagement: lo stato dell'arte. Teoria, applicazioni, prospettive di ricerca. *Micro & Macro Marketing*, **20**(2): 199-226.
- Gebetsroither-Geringer, E. 2014. Multimethod modeling and simulation supporting urban planning decisions. *Understanding complex urban systems: Multidisciplinary approaches to modeling*. Springer: Cham.
- Gell-Mann, M. 1995. Complex adaptive systems. In, *The mind, the brain and complex adaptive systems*. SFI studies in the sciences of complexity, Morowitz, H., Singer, J (Eds.) vol.**XXII**. Addison-Wesley, Reading; 11-23
- Gerber, C., Siekmann, J., Vierke, G. 1999. *Holonics Multi-agent Systems. Technical Report DFKI-RR-99-03*. Deutsches Forschungszentrum für Künstliche Intelligenz-GmbH: Postfach 20 80, 67608 Kaiserslautern, FRG.
- Giret, A., Botti, V. 2004. Holons and agents. *Journal of Intelligent Manufacturing*, **15**(5): 645-659.
- Gombault, A. 2005. La méthode des cas. Dans P. Roussel & F. Wacheux (Dir). *Management des ressources humaines: Méthodes de recherche en sciences humaines et sociales*, , De Boeck Supérieur: Louvain-la-Neuve; 31-64
- Grabow, B., Hollbach-Grömig, B., Birk, F. 2006. City marketing—current developments an overview. *Stadtmarketing-Status quo und Perspektiven*; 19-34.
- Hankinson, G. (2005). Destination brand images: a business tourism perspective. *Journal of Services Marketing*, **19**(1): 24-32.

- Hankinson, G. 2004. Relational network brands: Towards a conceptual model of place brands. *Journal of Vacation Marketing*, **10**(2): 109-121.
- Holland, J. H. 2006. Studying complex adaptive systems. *Journal of Systems Science and Complexity*, **19**(1): 1-8.
- Hospers, G. J. 2003. Creative cities in Europe. *Intereconomics*, **38**(5): 260-269.
- Iversen, N. M., Hem, L. E. 2008. Provenance associations as core values of place umbrella brands: A framework of characteristics. *European Journal of Marketing*, **42**(5/6): 603-626.
- Janssen, M. A., Ostrom, E. 2006. Empirically based, agent-based models. *Ecology and society*, **11**(2): 37-49.
- Johansson, M. 2012. Place branding and the imaginary: The politics of re-imagining a garden city. *Urban studies*, **49**(16): 3611-3626.
- Kauffman, S. 1996. *At home in the universe: The search for the laws of self-organization and complexity*. Oxford University Press: Oxford.
- Kavaratzis, M. 2005. Place branding: A review of trends and conceptual models. *The Marketing Review*, **5**(4): 329-342.
- Kavaratzis, M. 2008. *From city marketing to city branding: an interdisciplinary analysis with reference to Amsterdam, Budapest and Athens*. Rijksuniversiteit: Groningen.
- Kavaratzis, M., Ashworth, G. 2008. Place marketing: how did we get here and where are we going?. *Journal of Place Management and Development*, **1**(2): 150-165.
- Keller, K. L. 1993. Conceptualizing, measuring, and managing customer-based brand equity. *The Journal of Marketing* **57**(1): 1-22.
- Keller, K. L., Lehmann, D. R. 2006. Brands and branding: Research findings and future priorities. *Marketing science* **25**(6): 740-759.
- Koestler, A. 1967. *The Ghost in the Machine*. Hutchinson: London
- Kotler, P., Haider, D. H., Rein, I. 1993. *Marketing place*. The Free Press: New York
- Medway, D., Warnaby, G. 2008. Alternative perspectives on marketing and the place brand. *European Journal of Marketing* **42**(5/6): 641-653.
- Mella, P. 2009. Systems Thinking: The Art of Understanding the Dynamics of Systems. *International Journal of Learning*, **15**(10).
- Mitchell, M. 2009. *Complexity: A guided tour*. Oxford University Press:Oxford.

- O'leary, R., Iredale, I. 1976. The marketing concept: quo vadis?. *European Journal of Marketing* **10**(3): 146-157.
- Paddison, R. 1993. City marketing, image reconstruction and urban regeneration. *Urban studies* **30**(2): 339-349.
- Pérez Ríos, J. 2010. Models of organizational cybernetics for diagnosis and design. *Kybernetes* **39**(9/10): 1529-1550.
- Pfeffer, J., Salancik, G. R. 1978. *The external control of organizations: A resource dependence approach*. Harper and Row Publishers: New York.
- Pumain, D. 2005. Cumulativité des connaissances. *Revue européenne des sciences sociales. European Journal of Social Sciences* **XLIII**(131) 5-12.
- Rossi, A. 1982. *The architecture of the city*. Oppositions Books: London
- Schwaninger, M. 2009. Complex versus complicated: the how of coping with complexity. *Kybernetes* **38**(1/2): 83-92.
- Schwaninger, M. 2010. Model-based management (MBM): a vital prerequisite for organizational viability. *Kybernetes* **39**(9/10): 1419-1428.
- Suárez, X. L. M., Ríos, J. P. 2014. An organizational cybernetics approach to university planning in an urban context: four intervention experiences. In *Understanding Complex Urban Systems: Multidisciplinary Approaches to Modeling*. Springer: Cham; 103-119
- Van den Berg, L., Braun, E. 1999. Urban competitiveness, marketing and the need for organising capacity. *Urban studies* **36**(5-6): 987-999.
- Von Bertalanffy, L. 1972. The history and status of general systems theory. *Academy of Management Journal* **15**(4): 407-426.
- Wernerfelt, B. 1984. A resource-based view of the firm. *Strategic Management Journal*, **5**(2): 171-180.
- White, R., Engelen, G., Uljee, I. 2015. *Modeling cities and regions as complex systems: From theory to planning applications*. MIT Press: Boston.
- Yin, R. K. 2017. *Case Study Research and Applications: Design and Methods*. SAGE Publications: London.
- Zenker, S. 2009. Who's your target? The creative class as a target group for place branding. *Journal of Place Management and Development* **2**(1): 23-32.

Zenker, S. 2011. How to catch a city? The concept and measurement of place brands. *Journal of Place Management and Development*, **4**(1): 40-52.

Zenker, S., Braun, E. 2010. Branding a city—a conceptual approach for place branding and place brand management. In *39th European Marketing Academy Conference, Copenhagen, Denmark*; 1-4.