

Space and Species. Business School Exemplifications

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Abstract

The purpose of the paper is to contribute to develop, illustrate, and apply the concept of space management using facility performance from the evolutionary perspective in the public & non-public business school in Poland. The retrospective case study has been used so as to

establish the context of the studies. In the public business school, space management has not been under the influence of environment external mechanisms reducing the growth of organizational space so far. Nevertheless, the research on the non-public business school authorized the statement that changes in environment explicitly influence the space occupied.

Keywords: evolutionary approach, space management, facility management, species, routines

1. Introduction

The characteristics of the Polish university system inspire to consider the interior of an educational organization in order to identify the changes of internal space. The various researchers' interests in phenomena analysed in the space context imply the variety and permeation of understanding that notion. According to Van Marrewijk and Yanow (2010), space and spatiality have been 'present absentees' of organization studies for decades. Taylor and Spicer (2007) as well as Dale and Gibson (2008) highlight some groups of studies in the field of spaces: space as distance; space as the materialization of power relations; and space as experience. They use the term 'organizational spaces' as an 'umbrella construct' (Hirsch and Levin, 1999). Perceiving an organization as space with particular characteristics makes it be separated from the environment hence the boundaries of organizational space might be defined precisely (Santos and Eisenhardt, 2005). The elements of space might be identified and divided into different ways, yet in the context of evolution the space occupied by species is relevant – in details, the forces resulting in the evolution of the species and in changing organizational space. According to evolutionary metaphor, researchers have recognized that life can be organized into several different levels of function and complexity (Frost, Carpenter, Ives and Kratz, 1995; Loreau et al., 2001): species, populations, and ecosystems. However, the researchers in the field of studying an organization from the evolutionary perspective emphasize another level - routines (Breslin, 2010, 2011; Hodgson and Knudsen, 2006; Murmann, 2003; Sober and Wilson, 1998). The research presented is concentrated on the level of species stressing that evolutionary mechanisms (such as variation, selection, and retention of competencies and routines) could change the occupied space through the species and influence the space of other ones. This framework is adapted to higher education context.

The purpose of the paper is to contribute to develop, illustrate, and apply the concept of organizational space using facility performance from the evolutionary perspective (in terms of species, organizational routines, and evolutionary mechanisms) in the public & non-public business school in Poland. The paper illustrates the logic describing the relations between species and space in the public & non-public business school in Poland. Specifically, the research problem is revealed in the question: Do natural changes of organizational species influence organizational space? Consequently, the extreme exemplifications have been described to present the differences in the field of organizational space and FM from the perspective of organizational species understood as populations co-sharing routines (McKelvey, 1982; Nelson and Winter, 1982; Dosi et al., 2000).

The paper is organized four-fold. The first section emphasizes organizational space as a multi-faceted concept. The perspectives of space perception, especially the evolutionary

approach and FM one have been presented in the second section. The third section illustrates the educational system in Poland as the context of exemplifications. Finally, discussion and conclusions have been highlighted.

To summarize, the paper content is exploratory and directed mainly towards testing the intent to guide further research on the disciplinary status and direction of space management in terms of evolutionary lens, particularly as they pertain to its challenging status in Polish business schools.

2. Organizational Space – A Multi-Faceted Concept

The space as the subject of researching is present in many fields such as psychology, geography, biology, organizational science, strategic management – especially evolutionary approach what results in a high variety and permeation of phenomena analysed in that area.

In line with organizational studies, according to Van Marrewijk and Yanow (2010), space and spatiality have been ‘present absentees’ of organization studies for decades. In the book *Organizational Spaces. Rematerializing the Workaday World* theoretical and methodological questions for the processes of spatial design and the treatment of workspaces in organizational settings of various kinds can be found. In line with that, they show the need of practical field research on spatial settings and materiality in organizations of various sorts.

Taylor and Spicer (2007) and Dale and Gibson (2008) highlight some groups of studies in the field of spaces: studies of space as distance; studies of space as the materialization of power relations; and studies of space as experience. They use the term ‘organizational spaces’ as an ‘umbrella construct’ (Hirsch and Levin, 1999) referring to the various locations that organization and management can be analysed through, and under which organizations can be understood as spatially embedded at various levels.

The inspiration for analysing the space from a different from material-physic perspective one could be a white space construct. It is a management process concept described by Rummler and Brache (1990). They regarded there were areas between the boxes in an organizational chart in which no one was in charge – those areas have the potential for improvement as things often ‘disappear into black holes’. According to Maletz and Nohria (2001), ‘white space exists in all companies...where rules are vague, authority is fuzzy, budgets are nonexistent, and strategy is unclear’. If a white space is undefined, then the rest of the corporation operates in what they call ‘black space’.

In searching for a white space, routines are presumed as a promising area of spatial analysis. The space of organizational routines constitutes an important area of the interests of both scholars and practitioners independently if they support evolutionism or socio-biology.

According to the context of organizational space, the ambiguities in the field of the space context are not the only ones (Wineman et al., 2014). As for ontology, conceptualizing an organization and its structure is crucial for any considerations and analyses. For instance, Morgan (1988) suggests that any management theory and practice is based on images or

metaphors that lead us to understand situations in powerful, yet partial ways. Another instance is resource-based view that emphasizes idiosyncratic firm attributes (Barney, 1991).

Looking from an alternative epistemology, Nelson and Winter (1982) took into consideration a dynamic approach to an institution and development having been represented by Schumpeter. For that purpose, they used the theory of an organization and the category of dynamic equilibrium. The authors also were interested in the elements of evolutionary theory of an enterprise – routine patterns of organizational behaviour. Additionally, they make assumptions stating that institutional and organizational limitations between enterprises and environment are created by maximizing the advantages of developing such routine behaviour.

Due to that approach, an organization is a derivative of a set of routine behaviour and environment.

According to Nelson and Winter (1982), the subjects of organizational analysis are routines and competencies. Their diffusion determines, as a result, the survival or death of an organization. By contrast, Dawkins (1976) regards that routines and competencies are provided with a selfish gene and that routines and competencies do not take care of an organization and the organization lives so long that it is necessary for promoting routines (retention, alternatively replication).

One more perception perceives an organization as a space with particular features distinguished from the environment. On the other hand, the organization creates specific environment in which the changes influencing the space are made and consequences for managing space occur (cf. Wineman et al., 2014; Dale and Gibson, 2008). The problem is to establish which features distinguish an organization as space. It seems that approaches in the field of organization's boundaries might be adopted.

Extracting an organization from the context has been raising the questions about a way of setting the boundaries of an organizational system (according to the authors of the paper – boundaries of an organizational space) for a long time. Many researchers attempt to define organization's boundaries (i.e. Burns and Stalker, 1961; Coase, 1937; Penrose, 1959). Coase (1993) as well as Anand and Daft (2007) referring to boundaries' location regards that organization's boundaries ought to be set in the point that allows minimalizing costs (mainly transactional costs) of controlling activities, solving problems by making measures or diversifying knowledge. One of well-structured concepts of organization's boundaries is the concept of Santos and Eisenhardt (2005). They explain the boundaries of organization from the perspectives of effectiveness, power, competencies, and identity. As a result, in that way organizational space is limited.

Going back to the epistemology used in this paper, it is worth stressing that evolutionists are not convinced that it is possible to mark out explicitly organizational boundaries. Pentland and Feldman (2008) regard that

'routines are difficult to observe, distinguish, compare and count' and they have relatively not clear boundaries'.

The paper recalls that the referenced authors are just one of many proofs that can be found in the evolutionary stream of research. Taking all presented concepts, an evolutionary approach has been adopted in the paper to explain changes in organizational space determined by routines and competencies.

3. Organizational Space. Evolutionary and Facility Context

3.1 An Evolutionary Approach

As general, researchers have recognized that life can be organized into several different levels of function and complexity (Frost et al., 1995; Loreau et al., 2001). These functional levels are: species, populations, and ecosystems. The paper content is concentrated on the level of species aiming at specifying that construct and its role in terms of organizational space. In general, species is a class of individuals having some common characteristics or qualities; distinct sort or kind (Iwegbu, 2011). The definition of a species is a group of living things that all share common characteristics and that are all classified as alike in some manner.

In accordance with the evolutionary approach, the processes of variation, selection, and retention (VSR model) (Campbell, 1960, 1969) are the most important and they influence the mechanisms (dynamics) of evolving and/or emerging routines. The variation occurs mainly as a result of entrepreneurial innovations: creating new routines or adapting existing ones. The mechanism of variation is expressed by continuous renewal and innovations and new shared routines constitute the primary source of variation. Then, selecting routines is based on the degree of their adaptation to changes in environment that is an evolutionary agent in that case. The result of selection might be either retention or the death of routines.

In order to analyse organizational space the paper has adopted the definition of organizational species proposed by McKelvey (1982, p. 192) who states:

‘Organizational species are polytheist groups of competence-sharing populations isolated from each other because their dominant competencies are not easily learned or transmitted’.

It is a starting point, yet referring to evolutionists and concerns about the object of analysis, it appears to be justified to extend that concept with routines. However, the expression competence-sharing is limited and ought to be completed by the expression that competence-sharing is articulated in routines. Consequently, organizational species are conceptualized as a group of routines-sharing populations. The justification of such an approach is research done by Nelson and Winter (1982), Dosi, Nelson, and Winter (2000) as well as Teece and Pisano (1994). Regarding the current achievements in researching routines as well as assuming the multi-level evolution, the group level appears to be the appropriate one to be analysed. Hodgson and Knudsen (2004) state that routines constitute ‘organizational meta-habits’ that cannot be reduced to the individual level. According to that assumption, it is envisaged that the behaviour of group members is essential for organizational routines’ space what seems very salient for explaining the evolution, namely the process of routines’ migration. The reason for that is that the routines do not migrate themselves, they widespread by means of the individuals. If natural selection is determined

by individual activities, it ought to support mainly individual egoistic behaviour that enhances the chances for survival and becomes a hereditary feature. Nevertheless, egoistic behaviour is getting to be tempered by altruism. According to Wilson (1975, 1980), affinity understood as common genes in the group of individuals related amongst other increases the chance for reproducing other group members through altruistic activities what enhances the adaptation to the environment of the whole group. According to Hamilton (1964), natural selection is determined not only by the individual success, but also co-workers' one what results in so-called total adjustment (adaptation).

When it comes to the category of routines' space, it is associated with the transfer of routines in the scope of the group. Due to Williams (1966) and Trivers (1971), so-called reciprocal altruism towards not related individuals also reflects the adjustment since it is expressed in supporting individuals and in a lack of self-interest. It is very important from the perspective of explaining the movement in the routines' space, namely in the process of migrating routines. The movement in the routines' space has been conceptualized at the group (team) level (Pentland, 2012) where teams are treated as organizational species. In every single species the individuals equipped with particular routines function and the perspective of tasks or projects makes the individuals with routines transfer in the organizational space what creates quite new organizational routines' space and a new species.

It happens when gradual intra-specific events may take place while the members of a species try to adapt to environmental change and coevolve with other species. Kauffman (1993) regards that epistatic interactions are the crucial factor for the understanding the evolution and the co-evolution of the different species. The analogy with natural species may even help clarify routines' dynamics and emergence of new species (routines-sharing populations). The interest in the paper is related to the case of speciation: there is no the question whether behaviour can select the best routines of a given species, but whether it can help develop a new more efficient species characterized by different routines ('genotypes'). If the analogies with the origin of species might be pushed even further, it should be expected that while the selection of the best routines of a given organizational species is favoured - it might inhibit the formation of new species. In other words, it ought to be expected that the formation of new species does not happen in sympathy, but is more likely to occur under separate conditions or, in general under conditions where the members of the new species could somehow be protected from the members of the old ones. An individual in the group (team) reveals altruistic behaviour oriented towards co-workers (related individuals) while entering a new routines' space (a new team) reveals reciprocal altruism that might be called extended altruism as it is freed through the transfer into other groups. As a result, a new routines' space is created and the conversion of not only knowledge and competencies and routines as well occurs. It allows making the following assumptions in terms of cooperation in a group.

Firstly, decreasing egoistic behaviour (i.e. competition) enhances the cohesiveness of the group and the chances for winning with other groups due to maintaining routines. Secondly, decreasing altruistic behaviour (i.e. cooperation) decreases the cohesiveness of the group and the chances for changing and improving routines. It is worth being mentioned that those assumptions are coherent in a way with the Darwin's considerations:

‘a greater number of courageous, sympathetic and faithful members, who were always ready to warn each other of danger, to aid and defend each other...would spread and be victorious over other tribes’ (Darwin, 1871, p. 156).

Therefore, exploring (migrating) routines results in new routines and leads to egoistic behaviour, however, exploiting (cultivating) old routines leads to altruistic behaviour.

Hence, evolutionary mechanisms as indicated variation, selection, and retention due to competencies and routines might change the space occupied by the species and influence the space of other ones. Additionally, in accordance with the evolutionary theory, general space occupied by all species changes in a way very difficult to be predicted what develops further challenges for managing space, especially immaterial ones. The space analysed from the physical or material perspective (Barad, 2013) is not such challenging as in terms of immaterial space (Wineman et al., 2014; Fishman, 2014) that is materialized in a performative dimension. The paper constitutes the attempt to conceptualize the space using the analogy to species. It is also assumed that organizational space is distinguished by the space’s species possessing routines and sharing those routines.

Assuming such a perspective means that each species perceives space in a different way since it is determined by genetic characteristics, namely routines. Each group fills a particular organizational space, however, spaces of species change and, as a result, the change of space structure occurs. Moreover, the spaces of organizational species are located in an organization (Dale, Gibson, 2008; Van Marrewijk and Yanow, 2010).

Additionally, each space is characterized by unique, but homogeneous characteristics, similar features in the space determined by the species. Additionally, the space is characterized by the dynamics in and amongst species what consequently means that it can be used in diverse ways and for different purposes. Those settlements also pay attention to the relatedness amongst species. The relatedness amongst species due to common ancestry can reduce the amount of seemingly independent evidence one has for or against any evolutionary hypothesis. Species with a recent common ancestor may have inherited the same trait from the ancestor, as opposed to evolving it independently of one another. Comparative methods help one assess the extent to which a set of related species provides independent proof for or against a given evolutionary assumption (Harvey and Pagel, 1991).

The distinction having been mentioned results from natural human tendencies to separate units into groups consisting of similar individuals and to give them common interpretation – it is easier to understand the phenomenon through simple elements (Pentland, 2012).

3.2 Facility Management Approach

Space management is also analysed from the perspective of Facility Management (FM) that is variously defined and understood (Appel-Meulenbroek, 2010; Barad, 2013). A careful scrutiny of the Facility Management literature reveals that it can be considered as the function supporting the essential objectives of the organization. The exemplary definition of FM is proposed by Cotts and Lee (1992) and promoted by the International Facility Management Association (IFMA):

‘Facility Management is the practice of coordinating the physical workplace with the people and work of the organization; it integrates principles of business administration, architecture and the behavioural and engineering sciences’.

According to IFMA (2010), Facility Management is a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, process, and technology. Chotipanich (2004) regards that FM coordinates the physical resources and the workspace, provides supporting services to the people and the processes necessary for the organization core business. Pitt and Tucker (2008) envisage that Facility Management constitutes the integration and alignment of the noncore services, including those relating to premises, required to operate and maintain a business to fully support the core objectives of the organization. In a similar vein, RICS (2009) emphasize that FM is a discipline that improves and supports the productivity of an organization by delivering all needed appropriate services, infrastructures that are needed to achieve business objectives as well as BIFM (2010) and BSI (2007) (known as BS EN15221-1:2006) perceive Facilities Management as the integration of processes within an organization to maintain and develop the agreed services, which support and improve the effectiveness of its primary activities.

Additionally, Noor and Pitt (2009) highlight that FM supports creating an environment that is cohesive to carry out an organization’s primary operations, taking an integrated view of the infrastructure services and use it to give customer satisfaction and value for money through support for an enhancement of the core business. Concluding, Kamaruzzaman and Zawawi (2010) prove that FM is focused solely on a balance between technical, managerial and business acumen that may be related to operational, tactical and strategic decision-making processes. There are different definitions of FM, some that are the result of the activities of such professional organizations like IFMA and EuroFM. On the other hand, the definitions of FM *stricte* represent the approaches of organization theorists like Chotipanich, Pitt, Tucker, and Noor. FM, in general, exposes integrating and coordinating many elements of infrastructure as well as creating the environment fostering the usage of infrastructure in the way that supports realizing core organizational goals (Appel-Meulenbroek, 2010). Facility Management is commonly accepted by scholars as an integrated perspective. The model: People, Place, Processes is recognized as a universal FM approach as well as simultaneously as the base for examining that phenomenon. It is highlighted in the research presented on the European FM Conference in Glasgow 2015 [<http://www.eurofm.org/index.php/eurofm-research-papers-2015>]. Those three basic elements of FM reflect the most important issues in researching organizational species. Indeed, people constitute the basic element of species, processes exemplify specific shared – routines, and finally place is related to the occupied space. Consequently, FM becomes the inspiration to analyze the dynamics of organizational species in the context of space.

Taking into account all considerations in terms of the FM concept, the paper follows the European definition of FM indicating *Integration of processes within an organization to maintain and develop the agreed services which support and improve the effectiveness of its primary activities* [EN15221-1: 2006]. FM is defined as the meeting between ‘space and

infrastructure' with 'people and organization'. In this way, the field of FM was being grouped under two headings representing 'People, Place, and Process'.

When it comes to the architecture of FM, Grimshaw (2003) suggests separating the redundant concepts into the following functions: (1) technical (operational maintenance); (2) economic (financial control); (3) strategic (change management); (4) social (user interfacing); (5) service (support service); (6) professional (advocacy).

The paper is focused on social function and hypothesize that identifying changes in organizational space as a result of the evolution of organizational species requires following specific guidelines that limit aiming at facilities to the benefit of aiming at environmental balance and developing forces supporting the selection of species that results in the survival of the organization as the whole. Those guidelines have been adopted by in the paper from the concept of Integrated Facilities Management (*Integrated ...*, 2012) and they are as follows: (1) design is driven by the business strategy and the operating context, (2) design means holistic thinking about the organization - its systems, structures, people, performance measures, processes, and culture as well as the way the whole operates in the environment, (3) design for the future is a better bet than reacting at the moment, (4) design is not to be undertaken lightly - it is intensive in term of resources even when it is going well, and (5) design is a fundamental process - not a repair job.

Achieving those guidelines requires taking into consideration both many environmental factors and those resulting from the dynamics of developing elements located inside a particular space. It might be envisaged that the dynamics of internal and external changes are accurately described by evolutionary principles, particularly principles of organizational evolution. The elements of space can be identified and divided in a different way.

According to the evolutionary approach, the space occupied by species is taken into consideration as well as the forces causing the evolution of species might result in changing organization's space.

4. Educational System in Poland – Transition Context and Exemplifications

A research process does not take place in a vacuum, yet rather in the environment structured to facilitate research. Therefore, the aim of this section is to sketch the context of exemplifications presented below.

On the threshold of system transformation, the Polish system of education, similarly to educational systems in other socialistic countries of Central and East Europe, was an élite system, in which very few people was taught. A lack of academic freedom and a lack of universities and their organizational units' autonomy constitute the characteristics of that educational system. The system transformation involved also the change of an educational system. The huge development of Polish educational system is one of surprising phenomena.

During a socialistic period, education was regarded as a rare good available only for selected people. The market principles implemented in a year 1990 resulted in the change of the priorities on the Polish labour market. It occurred that education was valuable and the salary

system was dependent on qualification and skills – indirectly on education. It was mental revolution as higher education became to be more valuable not only in traditional intelligent families, but also amongst blue-collar workers and farmers. Simultaneously, during the nineties, young people representing the population explosion attended universities. Polish academic society responded to social demand on higher education in an unexpectedly entrepreneurial and active way. On one hand, national universities governance multiplied a number of free places to be attended at universities. On the other hand, private universities were launched. The effect of changes in Polish higher educational system has been impressive, namely nearly five-fold increase of a number of students and nearly four-fold increase of a number of universities (in comparison with the state in a year 1990).

Undoubtedly, the development of higher education system in Poland is a result of a very liberal act on higher education as at 1990 implementing a wide academic autonomy in public universities and enabling to create private universities. No one expected such a huge and untypical in Europe development of a higher education private sector.

Concluding, it ought to be said that the transformation of higher education in Poland after a year 1989 was a result of not only political-system changes, but also social-economic and civilization ones. It contributed to the development based widely understood pluralism in all fields of social-economic life. Hence, the most important hallmark of academic education was a rapid social demand on education at universities. The evolving higher education system resulted in an increasing number of universities. Nowadays, an educational system is still divided into public universities financed from the state budget and private universities very rarely obtaining financial support for statutory activities. It should be emphasized that in Poland after political system transformation (especially in the nineties due to high educational demand, population explosion) many non-public business schools have been launched and they constitute a real alternative to public business schools.

Taking into account all of those aspects regarded, two exemplifications very well emphasizing differ growth paths in public universities and non-public ones have been presented in the paper. In details, the paper shows two cases illustrating the change of space occupied by departments identified with species with various competencies and research routines as well as describes the difficulties of managing space of those schools embedded in the social context concerned with the physical infrastructure, which must meet the user needs within their organizational roles (user interfacing). Although higher education properties and faculties can contribute to high-quality education, it is the interrelationship within the organizational context that provides the catalyst for an improved performance.

The following settlements are very important for analysing data. Firstly, relative importance of primary activities ought to be stressed. The primary operation in business schools is connected with educational and research activities. However, in public business schools the balance between those areas is observed, while in non-public business schools the focus is mainly on educational activities. Secondly, as for space management and FM the infrastructure becomes more important. FM is the object of research in the high educational sector, however, it is the most frequently analyzed from the perspective of managing

educational space (May and Pinder, 2008; Ogbeifun, 2011; *UK Higher*, 2006; Christensen, Eyring, 2011; Fishman, 2014). The paper's interest is focused on research space, separated from educational one.

When it comes to the methodology, the retrospective case study including, amongst others, existing data, authors' own experience, reminiscence, and observation has been used since, due to that type of studies, descriptive analysis tools encompassed in the qualitative approach make the research results more reliable – as for the researchers' closeness to the object to be studied (avoiding interpretative errors).

4.1 Exemplification No. 1. Public (state) Business School

The public school analysed is one of the five most important public business schools located in Poland and originally established in 1947 as a private business university.

According to the general situation in educational sector in Poland, important changes in the structure of the school's employees began after a year 2003 (as a result of educational boom and legislation changes) and a number of professors and PhD – Assistant Professors as well as investment decisions concerning infrastructure (buildings) significantly increased. Previously, (before reforms), every professor was a head of department perceived here as routines – sharing population. The routines mentioned are referred to the routines of doing scientific research. The more professors the more new species around new professors are explicitly observed. The new species are the most frequently grouped around independent researchers having considerable research achievements and/or academic position, and the most frequently solve research problems from narrow research sub-disciplines. Every professor prefers a particular methodological standpoint and expects to institutionalize his/her research routines in the form of a new department (a new species). Basically, natural limitations of creating new departments hinder to develop new units, yet current mechanisms do not favour the limitation of uncontrolled population growth in terms of condensation by species. Nevertheless, new species are developed. Professors gather (frequently informally) scholars representing particular research routines round themselves. Express population condensation results in consequences for organizational space and FM. New species act and occupy more and more space (new offices, seminar rooms, etc.) and consequently, they appropriate more and more space for realizing their own research routines at the expense of educational space – what indeed does not constitute the problem due to decreasing number of students and population decline. What is interesting, any radical decisions concerning the space limitation are not made. Moreover, the forces of both natural selection and managerial one do not exist. As a result, appropriating research space and limiting educational one is observed. On the other hand, organizational space is limited what results in the unnatural process of making boundaries (i.e. deans' unwillingness to create new units, resistance to divide departments, meanness of the chancellor and vice-rectors, tendencies to consolidate departments).

4.2 Exemplification No. 2. Non-public Business School

The non-public business school was launched in a year 1994. In the beginning, dynamic

growth of the school was observed. It was revealed in large investments in infrastructure in many cities in Poland due to high demand for educational services – primary operations in that case (research activities are conducted very narrowly). Realizing educational services required also the staff and consequently new organizational species were created that were growing and constituted the base for developing new species. Nevertheless, the activities connected with FM were not focused on facilities. Those species were created in unnatural way using the supply from public business schools. As for management, the priority of the school was to secure the space for realizing primary operations in that case educational ones. At the beginning of the 21 century the market had been saturated what resulted in important changes focused on infrastructure – many properties were sold and many investment decisions were withdrawn. Such a case explicitly presents that changes in environments influence strongly space management. On the other hand, the change has also impact on the species in the organization – a number of faculties, fields, and departments is strongly limited (routines sharing populations). It happens in a natural way as a reaction to direct environmental influence. Consequently, the purpose of the school is to survive – not to retain species in an unnatural way.

5. Discussion and Conclusions

The key feature in the evolutionary perspective is the concept of routines. Routines are sequential interactions between organizational members to coordinate activities (Nelson and Winter, 1982) that reflect ‘stable patterns of behaviour that characterize organizational reactions to variegated, internal or external stimuli’ (Zollo and Winter, 2002, p. 340). Routines hold a key to understanding drivers of endogenous organizational change and their impact on the organization (Becker, Lazarick, Nelson, and Winter, 2005). The paper contributes to the development of routines stream of research by proposing the species concept, which is conceptualized here as routines-sharing population.

The review of research concerning evolutionary epistemology presented by Dollimore and Gomez (2014) unequivocally shows that the process VSR and population ecology have the dominant impact on developing the evolutionary approach. Taking into account organizational ecology (OE) environment is deterministic and its influence is manifested by the process of selection – not the adaptation process (Hannan and Freeman, 1989). The environment selects organizations and decides about their finalization based on the features that are typical at the launch stage what determines the adjustment to environmental conditions. In details, the environment selects the organizations that are reliable and accountable as permanence is very valuable. The evidence presented in the study has been concentrated on finding the space changes influenced by the changes of species in two Polish business schools.

The first is a public university where the forces of variation, selection, and retention have not encountered the impact of external environmental mechanisms reducing the growth of organizational space. Indeed, this case does not prove the evolutionary hypothesis.

Paradoxically, such organizations more frequently undergo structural inertia that results in the fact that the same factors that enable organizations to retain at a given time demolish the

chances for surviving at the next time (Barnett and McKendrick, 2004; Hannan, Pólos, and Carroll, 2007). Nevertheless, those organizations retain reproducing activities independently on changes in environment. Purdy and Gray (2009) emphasize that the evolution of organizational population is subject to different logics that are the result from four stages of diffusion mechanisms: transformation, transplantation, connection, and exit.

In many contemporary theories the assumption that environment is the driving force of organizational changes is dominant. The environment as the driving force of organizational adaptation is perceived by determinists as a sum of fully rational organizations whose strategic behaviour is mainly created by pressure and macroeconomic factors (Abatecola, 2014). This assumption fits the second case.

The second organization is a non-public business school and in that case, the changes in environment influence the space occupied. It allows to make some conclusions that in organizations not being directly influenced by environment the following phenomena will occur: growth of organizational space occupied, separating species in new spaces, creating barriers, large level of inhabitancy in an organization (high density of individuals from various species), yet not similarly like in population ecology – not the independent regulation of population size, but rather spatial growth of the organization will occur.

In case of the non-public business school the decline of species variety, decrease of occupied space up to minimum, and even the loss of the ability to survive (environmental forces/decrease of students) occur what results in the space change and several times the death of an organization.

The supporters of structural inertia theory regard that changes are made at the level of ‘populations’ of organizations – not in an organization (Hannan and Freeman, 1987). Population is a set of organizations having mutual features – indeed path dependence lock-in, consequently growth is dependent on the context. Additionally, the hypothesis that the organization embedded in the sector has the advantage due to first mover advantage over both the organizations that enter the sector later and potential new entries at the maturity sector stage. Regarding that perspective, experience in the sector is the most important for its evolution (Hannan and Freeman, 1984; Klepper, 2002; McKinley, 2011) what has been confirmed in Polish public universities.

Taking into account previous considerations and remarks, it is worth suggesting some directions in terms of managing space in an education sector. Hence, ‘Bounded Facility Management (BFM) in Organization’ concept is suggested, in which social context is the most salient (cf: Wineman et al., 2014; Pentland, 2012; Barad, 2013; Appel – Muelenbroek, 2010) as it is concerned with the physical infrastructure which must meet the users’ needs within their organizational roles (user interfacing). BFM should be attributed through: (1) the importance of vision, strategy, and the operating context, (2) holistic thinking about the organization, (3) anticipating and not reacting, (3) the perception of space and facilities as limited and valuable resources. Consequently, BFM should not facilitate expansion of species – routines, but bound it.

Some limitations of the study, mainly due to the methodology adopted and context have been recognized. Firstly, the study addresses a specific context. Secondly, the research is limited to two studies (institutions): the public business school focused on one of the four faculties and non-public one - both located in Poland. As a result, thirdly, the need for generalization of research findings to allow for further in depth research might be emphasized. On the other hand, the compelling reasons for choosing these single institutions as exemplifications include its representativeness according to general tendency in a higher education sector in Poland. Finally, the scope of the study did not extend to have collected empirical evidence to prove the contribution of FM to species dynamics - it was only focused on considering whether the FM approach is justified in those cases.

Hence, in accordance with the population of public universities the mechanism of exogenous selection does not operate, while in the population of non-public universities is empirically observed. Consequently, the size of the population of non-public universities changes, while the size of the population of public universities retains relatively at the same level. Taking into account the diverse side of selection – adaptation (Hannam and Freeman, 1977), the following conclusion could be made – in the population of non-public universities, adaptation constitutes the base for survival, while in the public universities adaptation is illusive.

The emphasis in the paper is put on the growing number of species in case of the public business school, and the consequences on species in the non-public business school considering influence of external limitations. Space management and consequently Facilities Management should deal with such changes and make conditions for the performance of the core functions of teaching and researching. The important contribution is related to the hypothesis that universities can be divided into different populations characterized by specific path dependence.

The research results are not by any means exhaustive, however, the paper provides a useful starting point in order to develop future research to prove the contribution of Bounded Facility Management to species number and quality. In details, the paper has extended both space management using facility approach and the evolutionary perspective in the public & non-public business school in Poland. Consequently, it complements evolutionary approach in terms of the relationships between natural processes of evolving species inside a particular space and space management field as well.

As for research directions, it is suggested examining the utility of Facilities Management as well as the commitment of the business school in supporting general development, and managing the necessary support facilities that will facilitate to achieve that goal.

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