

Original article

Organizational boundaries – contribution to conceptualization

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ABSTRACT

The issue of organizational boundaries is a problem discussed from the beginning of the development of the theory of management sciences. Today, it seems that this issue should be subjected to a new conceptualization due to the growing importance of multidimensional spaces in which enterprises operate and the erosion of traditionally interpreted boundaries. At the same time, the notion of a boundary itself is an ambiguous concept that derived from and rooted mainly in non-management sciences. Therefore, research on organizational boundaries requires an interdisciplinary approach. In the Polish management science environment, the discussion on border issues is clearly visible, although this is not a question that dominates the mainstream. The aim of the article is to contribute to a scientific discussion in the field of conceptualization of organizational boundaries in the context of a changing reality. The article consists of an introduction, a part devoted to the analysis of organizational boundaries in the perspective of heterogeneous spaces and a part related to presenting the problem of the emergence of “new” boundaries. The whole is concluded with a summary. The article is a review based on interdisciplinary literature research.

KEYWORDS

boundaries, organization, conceptualization, heterogeneity



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Introduction

It should be noted that the issue of boundaries is not often the target research object; it is often analyzed “incidentally” or in conjunction with research directed to other categories [Pachura 2016; 2016a]. It seems that the analysis of organizational boundaries is inextricably linked to the classical interpretation of the organization's space rooted in the concept – the organization environment (Fig. 1). In this sense, boundaries are a natural barrier or a bridge between what an organization is and what finds itself outside the organization and does not belong to it. Such an approach, however, does not say much about boundaries themselves in the sense of their character and existence, it

focuses more on the relations of an organization – an environment [Sikorski and Bienkowska 2012] through not fully defined, frequently intuitively understood boundaries.

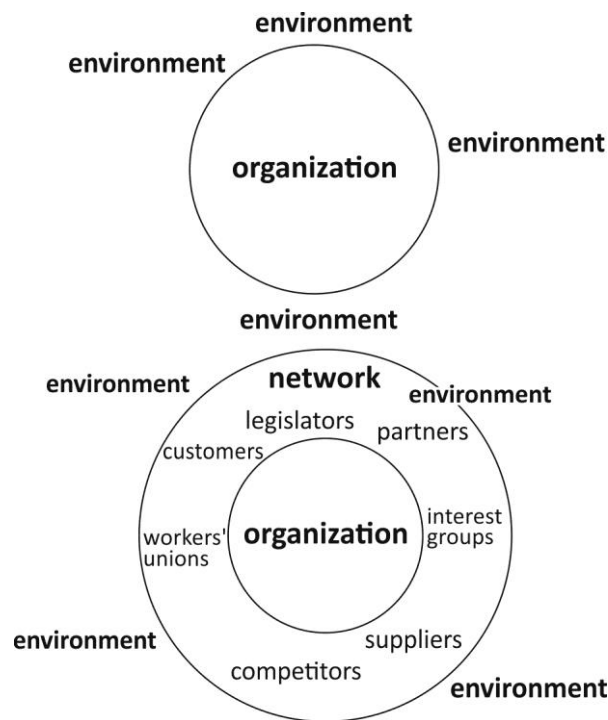


Fig. 1. A classical view of an organization – a boundary – an environment

Source: [own study partly inspired [Hatch 1997, p. 66]].

As Cyfert argues, the authority in the field of conceptualization of organizational boundaries “in the literature of the subject, on the wave of various” fashions and trends”, the conclusions are, in fact, drawn about blurring and seizing up boundaries [...], however, these conclusions are not reflected in the economic reality” [Cyfert and Krzakiewicz 2014, p. 17].

At the same time, Heracleous recognizes that the issue of organizational boundaries has been developing since the 1950s under the influence of the systems theory, which interprets social systems by supporting mechanistic and organic metaphors [Heracleous 2004]. Social systems were perceived as systems having boundaries in relation to the external environment. Simultaneously, it was assumed that social systems such as organizations could not be considered without reference to their borders. Thus, the distinction, the dichotomy that something is within the organization's system and something is beyond, was a necessity related to the perception and interpretation of an organization in the ontological sense.

It seems that there is a particular interest in boundary issues in broadly understood social sciences, Lamont and Molnar [Lamont and Molnar 2002] point out that the issue of borders is considered from the point of view of such disciplines as: anthropology, sociology, ethnography, demography, gender studies, etc. However, in the case of economic sciences, it is generally assumed in the literature that the issue of organizational boundaries is rooted in the concepts of transaction costs [Lakhani et al. 2013].

There are plenty of concepts for classifying organizational boundaries. It is necessary to recognize that “we can distinguish the following types of organization boundaries:

- vertical boundaries – occurring within an organization in the organizational structure and between the ranks of individual positions and people occupying these positions,
- horizontal boundaries – occurring within an enterprise, between functions and areas of activity,
- external boundaries – occurring between an organization and suppliers and customers,
- geographical boundaries – occurring between locations of businesses, between served markets and between different cultures” [Koniczna 2014, p. 47].

At the same time, as argued by Cyfert, “In striving to ensure a balance with the environment, organizations can use one of the three mechanisms to manage organizational boundaries and boundaries in the organization: expansion, shortening or buffering” [Cyfert and Krzakiewicz 2015, p. 18]. Expansion can be understood as a kind of expansion of an organization consisting in incorporating new and other entities into its boundaries and integrating them within the existing structure, which leads to the expansion of boundaries in the sense of physical boundaries. This process may take place in an evolutionary or stepwise manner [Cyfert 2012a]. Shortening borders is a process opposite to expanding, which means reducing the physical span of the organization's boundaries by cutting off or withdrawing from the previous areas of activity. As a result of this process, the physical boundaries are limited and the organization shrinks. Buffering, on the other hand, is the creation of zones separating the hard core of an organization from its environment, i.e. it is a “defensive” process aimed at preventing the negative impact of the organization's environment on its functioning.

It can be noticed that the issue of organizational boundaries seems to be a very simple matter requiring no deeper examination. However, with the ongoing changes in the socio-economic reality and related transformations of enterprises, for example based on new business models, it seems that the issue of organizational boundaries or “new” borders is becoming more and more significant.

1. Boundaries in the perspective of heterogeneous spaces

The issue of organizational boundaries can be associated with the conceptualization of heterogeneous spaces related to research on complexity and complex systems or ecosystems in general [Cadenasso et al. 2006]. Heterogeneous spaces as a concept relating to research on ecosystems may well reflect the specificity of organizations, which in this approach will be examples of heterogeneous systems, i.e. characterized by diversity within their own boundaries. At the same time, the concept of heterogeneous space is linked to the notion of space in general, that is, the conceptualization proposed in this text assumes the postulate that the space of an organization is a heterogeneous space in its essence. Consequently, boundaries of an organization or organizational space can be considered in the optics related to the analysis of heterogeneous

spaces. Moreover, as emphasized by Anselin [1995], spatial heterogeneity also, or even mainly, applies to the sphere of relations between particular components of space, in this case a space defined as a geographical (physical) space.

As Dumez points out, there are no natural boundaries, they are always the result of some decisions, some action, and once established boundaries tend to stabilize. At the same time, any change of the already stabilized boundaries may be the subject of their change as a result of strategic decisions [Dumez 2010]. In addition, when defining boundaries, Dumez states that this is “regulation of flows through heterogeneous space” [Dumez 2010, p. 153]. In other words, boundaries can be defined as a mechanism that regulates flows between two heterogeneous spaces. In the space within the boundaries, streams of flows are less visible, while flows across boundaries are clearer. Boundaries have a tendency to self-reproduction and strengthening.

Simultaneously, the concept of boundaries is too strongly emphasized in the sense of their static qualities. It seems that boundaries play a greater role than it appears from a simple descriptive approach. Cadenasso et al., for example, proposes an approach that takes into account the multidimensionality of the concept of boundaries [Cadenasso et al. 2003]:

- boundaries may have features common for areas and spaces that they separate or have completely different features,
- boundaries may be somewhat sharper or more stable from the side of one of the separated, neighboring spaces, i.e. they are not always isomorphic,
- from the point of view of a specific feature a boundary may be different in terms of location than in the case of another distinctive feature,
- the function of a boundary is determined by energy, information or processes occurring within and between the separated areas.

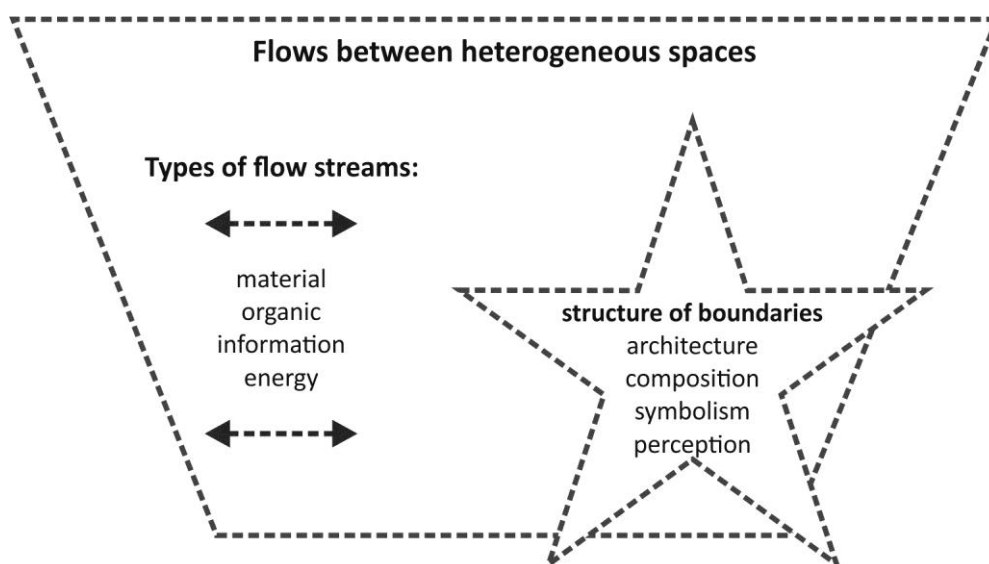


Fig. 2. Flows and boundaries of heterogeneous spaces
 Source: [own study partly inspired [Cadenasso et al. 2003, p. 753]].

The above figure (Fig. 2) metaphorically illustrates the types of flows between boundaries of heterogeneous spaces and the structure of boundaries. Material objects and organic ones, as a separate group, as well as flows of energy and information can be distinguished among the types of possible flows. The structure of boundaries is based on the distinction of their architecture, composition, the way they are perceived (perception) and symbolism.

2. Emergence of “new” boundaries

It should be noted that the boundaries in social sciences are first of all symbolic or metaphorical. Such an interpretation of boundaries is more and more frequently dealt with in conceptualizations related to management sciences. As Hirschhorn and Gilmore noticed, already at the beginning of the 1990s, together with the concentration of development of an organization on the basis of knowledge and innovation, there was a natural conviction of necessity to make organizations more flexible [Hirschhorn and Gilmore 1992]. This flexibility was associated with the presumption of absence of boundaries or erosion of organizational boundaries. At the same time, they noted that, indeed, some of the boundaries began to disappear, e.g. those related to hierarchy in an organization, geographical ones or boundaries related to the physicality of location in space. However, new borders began to appear. New boundaries that have not been saved in the organization chart, but are in the heads of managers and organization members. Due to the fact that these boundaries are completely new, they usually go unnoticed by managers. Hirschhorn and Gilmore defined on the basis of conceptualization the following types of new or slightly different interpreted boundaries in an organization [Hirschhorn and Gilmore 1992]:

- boundaries of power – related to changing conditions of teamwork and occurrence of a specific “team environment” and leadership,
- political boundaries – related to belonging to different interest groups,
- boundaries of identification – associated with the classic “we-they”, inside-outside dichotomy,
- boundaries of tasks – resulting from the changing nature of work related to the greater role of creativity and team collaboration, and at the same time the issue of task specialization.

Obviously, the above-presented approach greatly reduces the issue of boundaries to mental processes. As Struzyna and Okopska [2014, p. 19] pointed out “closing and opening organizational boundaries is associated with intellectual activity”, i.e. the issue of interpreting organizational boundaries may take place in the area of a cognitive approach. Struzyna and Okopska confirm such a view expressed in the perspective of cognitive sciences regarding the interpretation of organizational boundaries, when stating: “a manager defines the organization's boundaries and categorizes them, does not use an academic or formal (legal) type pattern, but rather draws attention to:

- a) some selected predominant characteristics that are important to him/her, allow for seeing these boundaries, does not use a full set of theoretical features that distinguish the environment from the organization;
- b) whether others perceive or even accept the boundary identified by him/her;
- c) whether others use the same type of divisions;
- d) how quickly a given distribution spreads” [Struzyna and Okopska 2014, p. 27].

It should be emphasized that the category of both an environment and organizational boundaries is most often associated with classic modernists, approaches derived from the systems theory [Lamont and Molnar 2002]. The analysis from the perspective of autopoietic systems (Greek *autopoiesis*) by N. Luhmann, successfully developed on Polish ground by J. Stachowicz [2006] is an interesting approach to the analysis of boundaries and environment of an organization. The perspective of autopoiesis constitutes an anti-evolutionary approach and assumes that systems, here organizations, are transformed in response to changes in the external environment [Pachura 2016a]. It also assumes that organizations are transformed mainly through reactions between their own states [Pachura 2016a]. An organization as a system does not enter into real relations with the external environment, but with the image (interpretation) of this environment created by it [Koch 2006, Pachura 2016a].

3. Organizational boundaries and virtualization

On the basis of previous considerations regarding the organization's ontology, the reference should be also made to the issues of virtualization of the organization's world. The organization and market virtualization is an issue considered since the 1990s, however, despite the relatively long period of research in this area there is no consensus on the very concept of “virtualization”. As Antczak observes, in the case of organization virtualization, there is no “commonly accepted conceptual basis. The conceptual ranges used depend largely on the context” [Antczak 2011, p. 25]. The issues of virtualization are most frequently related to the increasing dynamics of the environment and inter-organizational networks. “The dynamics of the environment causes that the concepts of durability, stability and long-termness pass into the category of dead concepts, while the notion of virtuality and network adopt new meanings [Hatch 1997, p. 49]. There are two perspectives in the case of virtualization of the organization world; firstly, the virtualization refers to the emergence of virtual organizations. Grudzewski and Hejduk [2002, p. 39] describe a virtual organization as “a set of organizational units, spatially dispersed (even on a global scale), representing a joint economic venture”. The second perspective concerns the virtualization of the market itself, “virtualization is primarily intended to broaden the availability of the organization's offer in a chaotic environment” [Perechuda and Chomiak-Orsa 2014, p. 42].

In the context of the organizational boundaries, the process of virtualization is one of the most important factors causing changes in the perception of what is inside an organization, and what is beyond its borders. As K. Perechuda, I. Chomiak-Orsa [2014, p. 45] points out: “the implementation of virtual solutions has serious consequences

related to the weakening of intra-organizational and inter-organizational ties". The consequence of organization virtualization may be "the disappearance of internal hierarchical boundaries, while maintaining external borders and organizational identity" [Antczak 2011, p. 25]. The issue of identity in relation to the functioning of an organization within its transforming borders seems to be important, as, as Ploszajski remarks, "the organization of the future will have boundaries only in the sense and to the extent that it is necessary to preserve identity" [Ploszajski 2000, p. 37].

At the same time, the issue of boundaries in virtual organizations may be limited to the analysis of the "transformation of the internal structure" consisting of a number of "geographically dispersed units acting on its behalf and using information technologies for this purpose" [Antczak 2011, p. 25].

Due to the dominant feature of a virtual organization, which is functioning "across boundaries" (variously understood), there is an unavoidable process of erosion of boundaries between an organization and its surroundings. At the same time, it can be assumed that "network and virtual organizations must have clearly defined boundaries, which does not mean that they must be permanent and unchangeable in time" [Cyfert and Krzakiewicz 2014, p. 57]. It seems, therefore, that not only do virtualization processes cause the total disappearance of organization boundaries but also they affect the process of their temporary transformations. "A virtual organization is a temporary configuration of organizational units cooperating to achieve occasional common goals" [Andrzejewski 2013, p. 226], other authors consider a virtual organization similarly – to be limited in time. Analyzes of boundaries of organizations in the context of virtualization may constitute an interesting research trend within management sciences. For example, Cyfert and Krzakiewicz [2014] suggest considering boundaries of virtual organizations through the perspective of boundaries of organizational power, competence boundaries and across boundaries of organizational culture. It seems that the scientific juxtaposition of the issues of organizational boundaries with processes of virtualization is inspiring, but at the same time these concepts as "unclear" prove difficult in the processes of conceptualization as well as in empirical research programs.

Conclusion

The issue of organizational boundaries appears a very interesting, however not a frequent object of interest for researchers. Therefore, Cyfert's conceptualization, pioneering in the Polish environment of the management science, deserves particular attention [Cyfert 2012]. Other authors raise the subject of boundaries of an organization, but it seems to be somehow on the margins of other considerations. Perechuda [2014], for example, recognizes that "continuous overlapping of impulses and processes causes blurring of boundaries between an organization and an environment. Furthermore, an organization acting as a multidimensional object, somehow "blends" into a higher-order holistic being, which is a global system..." [Perechuda 1998].

In addition, along with the development of technology and virtualization, and in the context of expanding and deepening globalization, it can be assumed that new organi-

zations or new interpretations of an organization and its boundaries need a new conceptualization related to, for example, embedding in a physical space, i.e. related to location, as well as a new approach to the management of the internal organizational space related to, for example, network structures [Cyfert 2012a, p. 12]. Thus, it seems that nowadays the issue of interpreting boundaries of organizational networks is an important cognitive problem [Barczak 2015]. The question can be asked whether such delineations between the network and non-network are necessary at all, since networks have become the obvious dimension of modernity. Czakon [2012], when proposing a distinction between the classical and network paradigms, notes that in the case of network economics a new look at the issues of among others organizational boundaries is indispensable. Summing up, it should be stated that the issue of organizational boundaries is an example of an interdisciplinary issue that remains a current and interesting research question. This article constitutes a small contribution to the conceptualization of the organization work as part of the discussion in the field of management science.

Conflict of interests

The author declared no conflict of interests.

Author contributions

Author contributed to the interpretation of results and writing of the paper. Author read and approved the final manuscript.

Ethical statement

The research complies with all national and international ethical requirements.

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