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SOCIAL IDENTITY MODELS OF BORDERLAND INHABITANTS IN REFERENCE TO COMPLEX SYSTEMS AND CULTURE EVOLUTION THEORIES

Abstract

The important changes in the way people build their identity and create their acting strategies. In case of borderland inhabitants the situation is even more complex because of a culturally shaped order based on systematic intercultural contacts. In that situation there is a need to adjust hitherto a scientific knowledge how the borderland inhabitants can shape their identity in such a complex and dynamically changing social reality. The main aim of this article is to show on an example of the borderland inhabitants how their identity models can be created in reference to system analyses, complex systems and culture revolution theories. In this article there will be presented a method of perception of the borderland inhabitants identity not as static constructs who undergo simple linear transformations but as open forms of complex networks composed of related elements.

Keywords: *identity; borderland; complex systems; complex networks; culture evolution theory; complex identity model*

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Introduction

The problem of a complexity of local identity is a contemporary dilema typical for dynamic postmodern societies. The growth of individualism and subjectivity and the influence of modern communication technologies contributed to the situation in which people themselves began to create their social identities. On the other hand individuals are still involved in complex interactions of social structures. As a result contemporary people feel tension between the necessity of individual shaping their flexible identities and subordinating to surrounding them structural requirements. Relations among individuals, groups, other elements and surrounding them reality create a dynamic and self-organizing complex system.

In the area of the borderland the situation becomes even more complicated. The borderland is the area with a cultural diversity and long-term contacts of individuals from numerous ethnic, national and religious groups. The borderland people functioning shapes their specific type of identity, based on a social individualism of this area and its symbolically defined "periphery". The today's growth of importance of the modern and communication technologies and the influence of globalization led to even more complicated shaping of local identities on the borderland. The elements of this identity undergo both rapid and unplanned changes and still have relatively solid elements. They constitute a specific complex system being a subject of learning processes and self-organization[2].

Culture evolution theories explain how a cultural change and its component elements vary in different populations. Additionally they have different selecting mechanisms of specified cultural features transferred to next generations. As a result in each population there are different selection, replication and network transmission mechanisms or rules changes being a basis for social relations and human identity building. The culture evolution theory explains well mechanisms causing that some rules are relatively constant in a given population, and others may undergo rapid changes. People functioning in complex social contexts as the borderland area follow the so-called "intuitive morality" in their mutual relations which have their roots in biological survival strategies. In contrast to animals, the characteristic feature of the human culture is the so-called accumulation influence[3]. It means that only people have an ability to modify it rationally

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2 Cliff Hooker, "Re-modelling scientific change: complex systems frames innovative problem solving", *Lato Sensu: Revue De La Société De Philosophie Des Sciences*,Vol. 5 (1), 4-12., 2018, p. 5
3 Alex Mesoudi, Cultural Evolution: How Darwinian Theory Can Explain Human Culture and Synthesize the Social Sciences (Chicago: University of Chicago Press, 2011), p. 12

from generation to generation. The culture is a dynamic product of social interactions among them, which are being consolidated with time into models, standards and acting strategies. In effect their complex reality is simplified. Such acting significantly limits an applicability of the assumption about an entirely rational human behaviour especially in terms of confrontation with biological aspects of our behaviour. The formation of a flexible identity in a complex context is largely based on fast achieving an individual satisfaction, not on searching fully rational models of profit maximizing. In that case we can talk about the rationality limited to a defined resource level and knowledge available at a given time and place[4]. A question arises how the borderland inhabitants identity defining may transform due to the so-called "founder effect"[5].

Theoretical framing: Borderland definition – Formation of complex borderland inhabitants identities

The borderland definition differentiation arises from the fact that it is a subject of many scientific disciplines, among them economy, political science, history and sociology. Different scientific disciplines representatives focus on its various aspects. The basic element of all borderland definitions is its three-dimensional aspect. It is related to describing the borderland as a peripheral area, in the neighborhood of a country border. The borderland refers to a separate territory inhabited by two or more communities with individual cultures and often different ideas of social order[6]. The cultural differentiation of the borderland areas is an effect of historical changes of political belonging of a given territory and population mixing due to settlement processes. The element integrating different communities living in the borderland area is a specific for them territory bond, associated with particular moral habits directed at the defined territory. According to Gabriele Pollini (2005) the territory bond consists of four important components: the ecological complex of territorial location and ecological interaction; the mental complex of the identity of the personality; the social complex of the solidary of the place collectivity; and the cultural complex of expressive symbolism[7].

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4 Tomasz Szapiro, *Co decyduje o decyzji* (Warsaw: Wydawnictwo Naukowe PWN.,1993), p.39

5 Alex Mesoudi & Peter Danielson, "Ethics, evolution and culture", *Theory Biosci*, Vol. 127(3), 2008, 229-40., p. 236

6   Krystyna Romaniszyn, "Czynniki potencjalnej dekonstrukcji pogranicza etnicznego", *Pogranicza Studia Społeczne*, Vol. XXVII, 2016, 93-107., p. 94

7 Gabriele Pollini, "Elements of a Theory of Place Attachment and Socio-Territorial Belonging". *International Review of Sociology*. Vol. 15(3), 2005, 497-515., p. 501

The territory bonds are the factor which strongly influences formation of the collective borderland inhabitants identities. They decide the borderland inhabitants identify themselves and they are identified by others as representatives of given social communities. Building one's collective identity by an individual is based on playing specified social roles compatible with values and expectations of community members which he or she belongs to. The collective reference of all members to a particular symbolic complex defining their community is an integrating factor of that community. In the situation when in the borderland area different communities are functioning parallel one can assume there is a need among their members to strengthen a symbolic meaning of territorial bonds through systematically performed rituals. Different national and ethnic communities living on the borderland begin, through symbolic actions and rituals repeated in defined time intervals, to mark the identity borderlines of their community members. Such actions are treated as a systematically occuring demonstration of different community membership in the borderland area. Territory bonds, rituals, defined collective values and standards combined with a symbolic aspect is to build in peoples' awareness a sense of security and life stability within the community which require a systematic demonstration. This demonstration of belonging to defined communities in the borderland areas strengthens as a result of a threat of an "identity blurring" due to systematic intercultural contacts of its members. Another factor strengthening a need to develop moral and symbolic bonds with a given territory in the aspect of different communities is the globalization process and modern information technologies influence.

In the social aspect in the awareness of its inhabitants the borderland is related mainly to a sense of multiplicity, different borderlines and a necessity to cross them continuously[8]. The social categorization of the borders is expressed by many binary distinctions (We-They), which underline the borders' sharp edge and clear line of distinction between two separate communities[9]. In the aspect of a dynamic building of the borderland inhabitants identity there is a need to create such a method of identification which on the one hand enables to combine the components of the closed community membership and the openness to establish relationship with representatives from different groups. Both these elements despite mutual contradiction must synthetically integrate in the aspect of building by particular individuals rational acting strategies.

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8 Andrzej Sadowski, "Pogranicze- Pograniczność-Tożsamość Pogranicza", *Pogranicza Studia Społeczne*, Vol. XIV, 2008, 17-30., p.20

9 David Newman, "Borders and Bordering Towards an Interdisciplinary Dialogue", *European Journal of Social Theory*, Vol. 9(2), 2006, 171–186., p. 176

These actions perfectly explain the theories which show that in the contemporary world the globalization processes based on breaking relations with time and space are not identical with the rejection of the local community bonds with a specific territory.

The territoriality primarily meaning is a social space differentiation and creating defined borders. On the other hand the contemporary globalization and information society theories base on deterritorialisation processes a significant repercussion of which is a mutual dependence on a global scale caused by transnational processes and relations. The modern information technologies development and social groups mobility changes and modifies local cultures which is a realization of commonly claimed today's idea of deterritorialisation. The contemporary borderland areas experience simultaneous deterritorialisation and territorialisation processes creating at the same time a specific for its inhabitants complex social context[10]. The borderland area is a complex and dynamic construct. It is shaped both externally through a macrosystem policy influence of a given country and a wider influence of the globalization process and internally through permanent reproduction and crossing social borders by their inhabitants.

The borderland inhabitants identity is a reflection of the complex structural context and also an effect of an entirety of intercultural contacts among them. The intercultural contacts in the borderland area have a differential intensity, different targets and a course. Their main function is establishing a defined social order which should be acceptable by different communities inhabiting the borderland and guarantee a social safety. The awareness of a necessity of elaborating a defined social order among different borderland communities representatives increases in the situation of overlaping of the two processes. On the one hand the increasing the power of influence of democratization processes, connected with a public sphere formation, and on the other hand the intensification of the globalization influence and information society development[11]. One can make a thesis that it is paradoxically combined with the borderland inhabitants' individuality increase. This process is connected with a civil subjectivity attitude development of the borderland inhabitants[12] and their access to vast information networks typical for the contemporary information society. Overlapping of the above processes results in a complexity

10 Basia Nikiforova, "Transforming Borders Functions in the Lithuanian-Polish-Belarusian Borderland", *Limes, Cultural Regionalistics*, Vol. 3 (2), 2010, 124-132., p. 127

11 Frank Webster, *Theories of the Information Society* (New York: Routledge, 2006), p. 163

12 Małgorzata Bieńkowska-Ptasznik, "Od wielokulturowości do postkolonializmu-czy etniczność ma płeć?" *Pogranicze, Studia Społeczne*, Vol. XVI, 2010, 41-61, p. 42

increase and fragmentariness of the surrounding social reality sensed by an individual's perception. The individual's confusion in the today's world complexity results in the increase of an attractiveness of community thinking[13], focused on the territory bonds. This is not however identical with rejecting by the borderland inhabitants their individualism or exceeding the area of influence of the complex social networks. All the factors mentioned above are treated as equivalent but activating in the borderland inhabitants' minds in an asynchronous manner, creating the complex and dynamic identity. The above assumptions are aligned with a multi-faceted and constantly building the borderland inhabitants' identity concept created by Jerzy Nikitorowicz. This concept assumes that such understood the dynamic identity undergoes permanent transformations in the following aspects: inherited identity, unit-person identity and constantly shaped identity[14]. This identity is established and stopped by an active subject functioning in a defined social context. The borderland area constitutes a social space of a high level of differentiation which evokes in the perception of the subjects a necessity to create more complicated forms of their own identity. Such a person undergoes a permanent pressure of flexible and creative combining the inherited elements, connected with a defined social group, with a necessity of adjusting to complex structural conditions[15]. It does not mean however that the pressure increase of the more and more complex social context determines inner conflicts in the individuals identity paralyzing their ability to action. New stimuli coming from the more and more differential, network and complex social context cause temporary internal conflicts in the borderland inhabitants' minds but they also influence in a positive way the growth of their adaptive skills.

The above assumptions are perfectly explained by a theory of a "social identity complexity"[16]. The social identity complexity refers to the way in which individuals subjectively represent relations among functioning in different social groups. To be more specific people with a low social identity complexity perceive their groups as highly overlapping and convergent while people with a high complexity perceive their member groups as distinct and profiled. The research results show that people with the higher level of complexity of their

13 Michel Maffesoli, *Czas plemion* (Warsaw: Wydawnictwo Naukowe PWN, 2008), p. 220

14 Jerzy Nikitorowicz, "Tożsamość wobec dylematów generowania dziedzictwa kulturowego", *Psychologia Rozwojowa*, Vol. 10 (2), 2005, 35-47, p. 36

15 Ben Goertzel, From Complexity to Creativity. Explorations in Evolutionary, Autopoietic, and Cognitive Dynamics (New York: Publisher Plenum Press, 1997), p. 196

16   Marilynn Brewer & Kathleen Pierce, "Social identity complexity and outgroup tolerance", *Personality and Social Psychology Bulletin*, Vol. 31(3), 2005, 428–437.

identity at the same time are much more tolerant towards different groups in their social environment. Specifically, because individuals with low social identity complexity regard their ingroups as highly overlapping and convergent, they believe that an individual who is an outgroup member on one identity dimension is an outgroup member also on all the others[17] .

People with the high identity complexity are characterized by profiled thinking. They assume that people they have specified social interactions with only fragmentarily function in a group in which a given person presently stays. It is related to perceiving people, groups and communities not as static constructs but elements related to the complex social networks.

The borderland inhabitants' identity games in the aspect of the complex systems theory: The borderland inhabitants' complex identity models

The system concept itself was invented and described by Ludwig von Bertalanffy (1984). Its most simple definition describes the system as an organization of mutually dependent variables[18]. Among respective elements of the system particular series of mutual relations happen within certain frames which form a structure as a whole. All the elements are not only related to one another but also to the outside environment of the object. The system is an integrity which has a relatively stable inner structure of related elements being in mutual relations and influencing it as a whole. All the systems have particular common features: morphology, different combinations of mutual relations among system elements, specific configuration of functions and positions realized by particular elements and subsystems, hierarchy of a given system, adaptive ability[19]. The system as a whole never functions in void[20]. The system environment on the one hand constantly influences it but at the same time it is effected by the system. As a result both the internal system structure and its entire form undergo constant, progressive or leap changes. The source of these changes are on the one hand external environment requirements and on the other hand specific relation configurations among particular elements of the system.

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17 Sufei Xin, Ziqiang Xin & Chongde Lin, "Effects of trustor's social identity complexity on interpersonal and intergroup trust", *European Journal of Social Psychology,* Vol. 46(4), 2016, 428–440, p. 429

18 Ludwig Bertalanffy, *Ogólna teoria systemów* (Warsaw: Państwowe Wydawnictwo Naukowe, 1984), p. 47

19 Janusz Sztumski, *Systemowa analiza społeczeństwa* (Katowice: Wydawnictwo Naukowe Śląsk, 2013), p. 23

20 Czesław Mesjasz, "Complexity of Social Systems", *Acta Physica Polonica*, Vol. 117(4), 2010,706-715, p. 706

A complexity concept in education has its source in science. In biological sciences the complexity is described as a natural effect of an evolution process. According to Peter Jedlicka (2007) the main trend in the natural environment evolution is the complexity growth[21]. The researchers from different branches of science endeavour to explain acting procedures of different systems through appealing to specific relations among their elements.

The so-called reductionism means explaining phenomena through something simpler (...) it takes a particularly expressive form in elementary particle physics where dominates an aspiration to discover "a theory of everything". Such a theory by means of a few equations would express basic reactions of all matter forms[22].

Such an assumption is not identical with an opinion that the complexity means a simple contradiction to an idea of simplicity. The complexity system is not a complication or overlapping of simple systems. The complexity systems are configurations in which there are not clear connections between cause and effect because they undergo changes in time[23] (Olmedo, 2010: 74). The idea of simplicity itself is not a reductionism of the whole system to characteristic features of its elements. John Collier (2009) claims that: In some respects this is a bottom-up approach, since the simpler systems coincide with components of more complex systems, but really the same principles are applied across levels in a common context of the dynamical openness of interacting systems, with its inherent holism and possibilities for emergence[24].

The complex systems occur in the situation when developing in time the simple system crosses a certain border of the structural emergence. Then such a hitherto clearly defined system begins to behave unexpectedly.

Both the complexity and simplicity are related by a specifics of particular objects functioning as a whole. Christoph Adami (2002) underlines that: In the theory of dynamic systems we are interested in a general complexity of processes. For example periodic and random processes are perceived as simple

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21 Peter Jedlicka, *Physical complexiti and cognitive evolution*. In: C. Gershenson, D. Aerts, B. Edmonds (Eds.), Worldviews, Sience and us, Philosophy and Complexity (pp.221-231). (London: World Scientific Publishing Co. Pte., 2007). p. 221

22 Peter Coveney & Roger Highfield, *Granice złożoności, Poszukiwania porządku w chaotycznym świecie*, (Warsaw: Prószyński i S-ka, 1997), p. 33

23 Elena Olmedo, "Complexity and chaos in organisations: complex management", International Journal of Complexity in Leadership and Management, Vol. 1 (1), 2010, 72-82, p.74

24 John Collier, *Organized Complexity: Properties, Models and the Limits of Understanding*, 2009, Retrieved from: https://pdfs.semanticscholar.org/c670/78a7636e2f4ad7c2483c1d494e766c8bc11f.pdf

(...) despite the scale they can function[25].

The complex systems always include a certain level of chaos and are characterized by a lack of clear borders. This is not however identical with a lack of inner structure or lack of order of its elements. The complex systems are dynamic, non-linear and open but at the same time their characteristic feature is a specific inner order. The complexity assumes a certain emergence, having a particular inner structure in which the elements are related with a complicated network of mutual relations. According to Andrzej Nowak (2009): It comes from the fact that in a set consisting of simple interacting elements the complexity appears only on the level of total system - one can observe the emergence effect. The emergence means specific features occuring at the system level which are not present at the level of elements and which should not be expected on the basis of the features of the elements themselves[26].

Creating analytical models of different borderland inhabitants identities one should take into consideration complicated connections among different elements in that area (Figure1). On the one hand it is necessary to describe relations among elements being at a disposal of an individual (socialized standards and values, assets and social knowledge resources), and on the other hand to consider such determinants as certain meso factors influence (functioning in specified institutions and organizations) and macrostructural factors (eg. applicable law, specified character of economic or political relations in a country) and global (eg. fashion, new life styles, information flow via media and social media). This entails the borderland inhabitants' identity idea begins to resemble not a solid construct but a complex network in which different component elements are activated in different combinations depending on external stimuli. The borderland itself should be treated as the complex system in which particular elements interact in complicated relations based on reciprocal (feedback) connections[27].Those relations should be recognized dynamically as representatives of two or more groups inhabit a particular structural reality. The borderland inhabitants' identities are the dynamic and complex constructs which constantly undergo adaptive redefinitions but at the same time maintain a stable form in individual's awareness. It is needed to be underlined that they are sensitive to the way strategic games are realized among different groups in complex mutual relations networks in a specified structural environment in

25 Christoph Adami, "What is Complexiti?", *BioEssay*s, Vol. 24 (12), 2002, 1085-1094, p.1085

26 Andrzej Nowak, Wojciech Borkowski & Katarzyna Wnikowska-Nowak, Układy złożone w naukach społecznych. (Warsaw: Scholar,2009), p. 12

27 James Ladyman, James Lambert & Karoline Wiesner, "What is a complex system?", *European Journal for Philosophy of Science*, Vol. 3, 2013, 33–67 (2013), p. 35

the borderland area, being inherited in cultural patterns after the ancestors. On that model a specific unique tendency to individual learning and verifying so far used identity elements, updated, removed, or corrected, depending on a kind of acting strategy accepted, is imposed.

In that context the complex borderland inhabitants' identity model despite its stability in individuals' perception in fact is a culturally programmed construct to adaptation to a highly complicated and dynamically changing social environment. A high flexibility of the complex borderland inhabitants' identity enables them to create such acting strategies which on the one hand are strongly built-in the cultural transmission of the particular community and other macrostructural forms (eg. a given nation, supranational institutions), and on the other hand are directed to interact with different groups or communities members. Such actions, despite the fact they are based on internal contradiction, build a rational acting strategy for the borderland inhabitants. This is possible due to their complex identity which particular elements interact in various combinations depending on what social context a given person is functioning. In effect the borderland people behaviour, resulting from different structural stimuli (eg. new government policy towards national minorities, economic crisis, liberal or conservative parties coming to power), or being a result of particular events happening in a specified place and time may produce often unpredictable forms of collective actions frequently based on mutual imitation. Within this complex borderland system people who live in it have their acting strategies based on equally complex identities. The social understanding of the borderland as the complex system in which particular intercultural contacts take place is based on a social dynamic games description within a specific structural context which result in a defined social order. People living in such a dynamically changing social reality in order to be able to function effectively in it must adjust their identities and strategies to gain a high adaptation level.

In systematic analyses a state of social order is understood as a stable balance. The complex social system stability is connected with its ability to inner automatic adjustment and finally adaptation of the whole system in case of any stimuli which disrupt the balance[28].The power of the system is an inner regulator enabling fast identification and solution of system problems which disrupt system balance. In that context it is assumed that the complex system, once it is deprived of a stimulus, returns to the balance [29]. In case of the open

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28   Joe Tranquillo J., *An Introduction to Complex Systems* (Switzerland: Springer Springer International, 2019), p. 301

29   Manuela R. Contini, "The Paradigm of the Complex Dynamic Systems and Sociological. Analysis", *Procedia - Social and Behavioral Sciences*, Vol. 92 (10), 2013, 207 – 214. p. 209

complex systems characterized by non-linearity the system can have a few balance states. One cannot assume that as a result of such dynamic actions which take place on the borderland there will be one commonly accepted social order idea, acting strategy or social identity form being a consequence of the games among individuals, groups or communities. Such a situation may happen but it will be only an alternative to other states. Balance points in the complex and non-linear systems are connected with system initial conditions. Therefore the cultural background is important and how it is transferred from generation to generation in respective borderland communities. Those cultural transfers in different borderland communities do not have to be compatible with one another. In particular structural conditions or situations they can cause conflicts among different communities representatives or actions aimed at domination of one form over the other. A scenario of an intended assimilation of a given community by another is also possible and creating on that base a new stable balance state. A state of pluralist multiculture based on mutual trust and tolerance is in that sense one of many possible stable balance state forms.

A stability of the whole complex system is a consequence of stability of the borderland inhabitants' acting strategies existing within its frames and their identity state. However there is a possibility that an idea of a stable system as a whole from individuals' point of view will not be compatible with a stability logic, dominating at a given time in the system. In that situation we can talk about a clear threat of dynamic balance in the complex system. The social system stability is never absolute because the absolute excludes any changes. In the situation of an ideal stability interaction in the system all the stimuli disrupting the balance state would be offset to the system origin state though they could introduce positive changes increasing its level of adaptability. In case of individuals in the dynamic complex systems the stable balance is perceived by them as a guarantee of ability to build individual acting strategies. It does not function in an ideal way but is rather regarded as a state the open system aims at. The entire achievement of that state is receding by a constant flow of stimuli to which one has to adapt. John Collier (2010) claims that: This balance is not absolute, but is probabilistic over the dimensions and boundaries of the cohesiventity. Just as there are intensities of forces and flows that must be balanced, there are, due to fluctuations, propensities of forces and flows that show some statistical distribution in space and time[30].

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30 John Collier, *A Dynamical Approach to Identity and Diversity in Complex Systems*, In: P. Cilliers, Rika Preiser (Eds), Complexity, Difference and Identity: An Ethical Perspective (pp.83-97), (Dordrecht: Springer, 2010), p. 90

This entails that game of identity, collective memory or group business in the borderland area are a natural and permanent state, and their effects will shape new forms of a stability social order. The new states of the social order established at a given time would be reflected in dominating identities and strategies of its inhabitants.
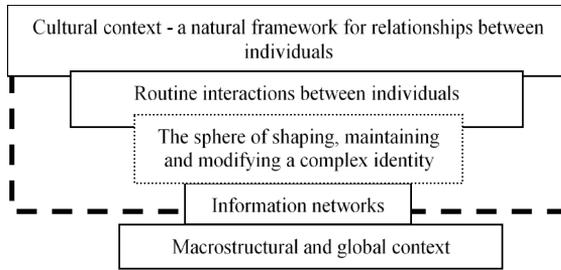

Figure 1. The borderland inhabitants' complex identity model

The complex borderland inhabitants' identity and individual and social learning in the aspect of the cultural evolution theory

In the cultural evolution theories the social system change is understood as a by-product of numerous individual interactions among people and their social environment. The main aim of the cultural evolution is the highest possible adaptive level of a particular community. It is assumed that people are a cultural species which is a distinctive feature from an animal society. Through their whole life people acquire values, standards or rules from other members of a given society. This is done through social learning processes and mutual imitation, which highly determine their further actions. People growing up in different societies show unlike ways of thinking and behaving because they acquire different cultural standards, which are to increase their ability to adapt to actual conditions. The complexity and networking growth of contemporary societies causes a higher level of differentiation within communities themselves.

In each population there are distinct selection, replication and network transmission or change mechanisms. Additionally each person is equipped in ability of individual learning which enables him/her fast and actual adaptation to changing environmental conditions. The individual learning is however expensive and long-lasting because of that the culture limits its application significantly. The culture enables us to use things, abilities and knowledge invented

by other people which were transferred to us within our cultural heritage[31]. The cultural heritage is defined in that sense as an intergeneration transfer of attitudes, values and acting strategies allowing to perceive the cultural evolution parallel to a biological evolution in which random elements are crucial. In each population however there are different mechanisms, selecting or modifying certain cultural elements, which is connected with a requirement of adaptation to specific conditions. The statement that only those acting strategies which increase an optimality of actions in a specific environment have the biggest chance to replicate to the next generations is an important assumption of the cultural evolution theory. The growth of complexity, fragmentariness and networking of the contemporary social reality of the borderland inhabitants must be reflected in their identities and acting strategies. Establishing a specified attitude towards other borderland communities' representatives is therefore an effect of individual and group interactions among people which as a consequence of the selection in specific structural conditions have been consolidated. This does not mean however the representatives of a given community, due to new and powerful stimuli, will not start verifying both their previous acting strategies and identities. In that sense people particular identity states and their acting strategies would be a dynamic system adjusting to a specified cultural environment.

Richerson and Boyd (2005) underline additionally that the cultural evolution theory is based primarily on a power and competition idea. According to them the cultural system can be divided into two parts. On the one hand we deal with an inertia which means in the social system there are such processes that, through imposing a defined social order, maintain a particular direction in the population development. The power of these processes lies in a tendency to a mutual imitation of certain standards or acting strategies by individuals, commonly occuring within societies. On the other hand in each system there are opposed processes which generate new processes and unpredictable changes. As a result: These processes overcome the inertia and generate evolutionary change[32].

Alex Mesoudi (2016) draws our attention to the fact that many experiments have shown people have a tendency to two kinds of cultural learning. The first one is based on the so-called "payment error", imitating people who represent an attractive success level as far as high or higher payment.

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31 Alex Mesoudi, Cultural Evolution: How Darwinian Theory Can Explain Human Culture and Synthesize the Social Sciences (Chicago: University of Chicago Press, 2011), p. 17

32 Peter Richerson & Robert Boyd, Not by genes alone: how culture transformed human evolution (Chicago: The University of Chicago Press, 2005), p. 68

The second, alternative to the first one, applies to the so-called "conformist prejudices" which means that there is a disproportionately greater possibility people would copy the most common behaviour in population regardless the payment obtained[33]. The population thinking relies on the assumption we can collectively transfer decisions made on a small individual scale to big scale patterns at the level of the population. Learning is here a key component of the cumulative cultural evolution where certain acting strategies defined at the micro level as beneficial are preserved and transferred to the next generations. The social learning allows certain communities react quickly to environmental changes but this comes only through using the whole adaptive knowledge which is stored in a learned acting repertoire of the population. This does not mean however the social learning domination in a given population increases in a simple way its adaptability. The situation is more complicated. The individual learning despite its costs often has innovative effects showing new possibilities of acting and thinking. To increase adaptive abilities and adaptation of the population the social learning must also somehow increase the individual learning usefulness through cost lowering[34]. This is important especially in case of the complexity of the contemporary social reality growth. In case of contemporary people the ability of social learning contributes to maintaining and accumulation of culture, being a base for more innovative forms of acting. Creating the complex identity of individuals and adjusted to them acting strategies in the environments of a high level of complexity, which nowadays undoubtedly the contemporary borderland is, is connected with specific overlapping of forms of the social and individual learning. People living in such a dynamic and complex social environment which significantly relies on cultural learning may acquire much more optimal strategies when only such appear in their population. Those strategies are then improved to a small extent through individual learning of specific people. This process will be repeated in each generation. As a result nowadays in the areas of a high diversity and intercultural contacts the most optimal strategy is the complex identity building, enabling to combine the cumulated social knowledge with a possibility of limited individual testing of actions through entering into different social relations networks.

A phenomenon of a founding effect influence on borderland minorities acting strategies changes is an interesting phenomenon in the aspect of the

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33 Alex Mesoudi, "Cultural Evolution: A Review Of Theory, Findings and Controversies", *Evolutionary Biology*. Vol. 43 (4), 2016, 481–497. p. 494

34 Joseph Henrich & Richard McElreath, "The Evolution of Cultural Evolution", *Evolutionary Anthropology,* 12Vol. (3), 2003, 123–135, p. 127

borderland identity transformation. Taking into consideration various migrations in the mankind history the founding effects are quite common in different time and place. The founding effect takes place when a new population of people is found by a small number of individuals from a bigger population. The smaller population in new social conditions may take totally different features than those of the parent population. Migrating to a specific country a particular class or a social group of a given society may induce the so-called "sampling error" which can occur in a further evolution of that population, e.g. the working class migration will cause their values system and acting rules spreading exclusively. That is why during the examination of particular national or ethnic borderland minorities it is necessary to examine their history of arrival to this particular area. Their culture may, as a consequence of the "sampling error", assume a totally different way of cultural evolution than that of their parent society, heading towards entirely different routes of further development[35]. Such actions may be a reason for social conflicts or new game forms of identity in case of a particular minority in the borderland area who may experience a lack of compatibility of their cultural patterns as a result of contacts with their parent population.

The culture is a dynamic product of specific social games taking place in a certain context which are consolidated into particular patterns and rules and acting strategies within time (Figure 2). Culturally acquired features in a given population show however highly different forms. As a consequence there is always a certain competition among those cultural variants towards particular resources such as a place in collective memory or an approach economic or political resources. The assumption that not all cultural variants have equal chances to survive and spread is very important. The winners are those which are perceived by the majority of people as attractive and popular. The mentioned patterns undergo the selection in next generations and within their frames random mutations occur, according to the necessity of the constant adaptation to the environment, and processes of a cultural difusion, intensified nowadays by the globalization and information society development, begin to influence. The important factor which changes a natural and cultural drift of certain forms transmission is the growth of the cultural difusion and related with it recombinant and transformation powers in contemporary societies. In effect in case of the borderland inhabitants the complex identity manifested in simultaneous being in the cultural area of their own community and constant

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35 Alex Mesoudi & Peter Danielson, "Ethics, evolution and culture", *Theory Biosci*, Vol. 127(3), 2008, 229-40, p. 235

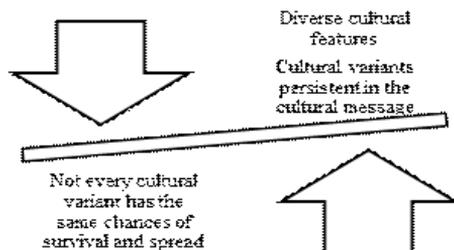entering dynamic relations with various groups representatives seems to be the most effective adaptive strategy.

Figure 2. The borderland inhabitants identity model in reference to culture evolution theories

Conclusions

The borderland inhabitants' identity models presented here refer to their methods of dealing with the complex and dynamic social reality. People living in the area of the borderland are culturally adapted to functioning in a more diversified environment than other regions' representatives. This fundamentally influences the fact that they have better predispositions to a hybrid combining in their identity the complicated forms of group and community belonging. In the borderland inhabitants' perception the reality which surrounds them on the one hand constantly creates many opportunities to undertake innovative actions and on the other hand it is based on the necessity to cultural demonstration of their belonging to a certain group or community. Additionally as a result of the globalization processes power growing and information technologies development the social reality existing around them begins to be perceived as even more dynamic, complex and chaotic. As a result the individuals are constantly forced to arrange the rules of the game surrounding them into a rational acting strategy based on the properly shaped creative identity. From the point of view of the complex systems theory it is not possible to create a solid social identity and related to it acting strategy. The dynamic, emergence and disturbed by non-linear leaps changes in the social system force individuals to continuous redefining of their identities and at the same time do not interfere their continuity in time. This does not mean however a constant innovative creating of new social constructs by the borderland inhabitants. Such actions would be highly expensive and hazardous. In order to gain the awareness of the social settlement the individuals often use in their adaptive strategies the elements already existing in the system which are combined with new game

rules. Considering the methods of the borderland inhabitants' identity building one can say that their basic feature are dynamism and form recurrence in time. The individuals' identity, similar to the social system itself, undergoes transformations in a liner or non-linear way, producing new forms requiring updating the already existing identification forms.

The complex system logic prefers those forms of individuals' adaptation which are able to balance the important and variable structural factors multiplicity most. This criteria is fulfilled by the complex identity model which is built with an organized but open for new stimuli construct. On the one hand it enables the individuals to settle in a secure and familiar world of traditional values, and on the other hand its elements are open to intensive searching, reading and adapting to new system requirements. Its form combining both a passive and active element of identity simultaneously considering the subjective acting rules enables the individuals to balance both actions. Firstly, preserving a sense of continuity in the rapidly changing social reality and secondly, actively incorporating new system elements into its network construct. The borderland inhabitants' identity of low complexity is ineffective as far as the complex social system consolidation and growth. This does not mean however that the identity mentioned above may not suddenly return in the borderland area. The impact of certain system stimuli or spreading of particular interpretations of a specific event in the complex social borderland networks (e.g. a protest description, reasons of a crisis descriptions) may lead to a situation of a return to the identity model of the lower complexity. In that sense one cannot assume that the borderland inhabitants' identity transformations would be developing always in a linear way, according to a visible cause-effect connections pattern. Such a situation is possible but remains one of many available alternatives of the development. The complex systems and cultural evolution theories assume a particular social order state is a derivative of spontaneous interactions among people at the microscale level in a situation of the complex social environment influence. The specifics of people's cultural assets is the ability to learn both individually and socially which is connected with a necessity of preserving certain cultural continuity and a high level of adaptation. The today's high dynamics, complexity and fragmentariness of the surrounding social reality, being originally in the borderland area at naturally high level, begins to create new forms of people's identification. Those new forms of identification are not however a simple negation of previous highly traditional identities but they are a creative construct ingrown in the contemporary society requirements. Actually they are not a construct at all but rather an open network of complex identification connections which constitute a unity through their implementation into selected elements of the cultural tradition.

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