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Organization, Autopoiesis and Human Potential as Paradigm of the Future Organization

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Background and purpose: Eternal challenge to researchers of organization theory is how to develop a suitable organization for increasingly more complex internal and external processes, and how to set a simple definition for it. Demanding environment of organization and civilization is under constant pressure of competition for profit. This dynamics of profit is blinding humans so that they are drawing away from themselves and from creativity in organizations. A human too often reacts automatically, meaning that they do not use all the potentials which is a paradox of organization. Therefore, the contribution of autopoiesis – as a complete intertwinement of processes of characteristic characteristiccontinuous movement in the area of creativity and holistic human culture – is important. When speaking about paradigm of tomorrow's organization, we are speaking about a person in organization, interpersonal self/co-dependence and self/co-dependence on micro and macro level. The purpose of our contribution is to research - inside this more and more virtual organization – the position and role of an individual, humanity and human potential as a creative potential of organic-humane organization.
Design/Methodology/Approach: Research is based on qualitative approach. For more comprehensive study of autopoiesis in organization we used mixed methods. When forming the concept, we used the natural law as life circle and compared it with organization.
Results: We developed a concept of autopoietic building blocks as life circle, presenting a concept of organization of future. The concept can be a comparative tool for perceiving processes in an organization. With results we substantiated that organization is losing processes of emotions and thinking of a human.
Conclusion: Accepting autopoiesis on all levels of human activity and consequently increasingly more conscious organizations and society as a whole, results in processes, when autopoises influences the cultural development of society in the sense of connecting science, art, high technologies and spirituality. Results can serve as a guideline and challenge to humane organizations.

Keywords: *organization; autopoiesis; human potential; concept of autopoietic building blocks*

1 Introduction

Technological progress is in a »spasm«, it spins in the absence of a human as a conscious creator of an organization and society. Here we see the future of human activity so that they by their thinking process create organization which will be able to produce high technology in concepts of 4.0 (r)evolution. The rolemodel of open and natural action is the great mind Tesla who equated physical work with mental work and devoted his alert life to thinking (Tesla, 2013). In-depth thinking is conditioned by "open heart" and mind, which can be connected with love and freedom of people towards themselves, compassion for others and with general culture.

We look at it through philosophical and biological frame, all with the intention to find the principles in the multifaceted phenomenon, named by Maturana and Varela (1980), the pioneers of this discovery, as »autopoie-

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sis«. They reveal it as a natural circular organization with self-organizational characteristics, and by this establish a theory about activity of living organism. We wish to present autopoiesis as a (co)evolution of life circle, which realises itself in self-organization. The process begins in a cell of autopoietic people and it somehow continues in an autopoietic organization, society and civilization.

Lauc (2000) establishes that through philosophy, thinking of freeing a human develops and that only then we can speak about free thinking, which is a whole in a circle of circles. In the research we are studying autopoiesis from its discovery to nowaday attempts of its use in the most complex environments. We found out that we cannot speak about the progress of society if it does not allow humans their natural activity. The existing organization does not have complete understanding of human potential, which starts in justice and trust in the comprehensive chain of a metabolic process as a (r)evolutionary process in the cosmic sense (Jantsch, 1980). In a modern individual we can detect the prevalence of unconscious activity and lack of reflection which, we suppose, is one of the central problems of research. We came across reflection as conscious thinking in the model »Sine curve« (Ovsenik, 1999). We can say that a human is able to control their activity by feedback, named reflection or thinking, and realize it up to concepts, which are in accordance with human and nature.

Current overloading of networks can be felt everywhere, the consequences are shown as unsuccessful organizations and bad health of individuals who create them, so it is necessary to change the base which is built from the building blocks. Since this is a living system, it is significant that such changes are carried out with feeling for self/co-person. A man is not a »machine« as treated by the mechanistic paradigm, however we can detect concepts of Industry 4.0 as concepts which in the future will be equalized with a robot or even more, the artificial intelligence will prevail. It is important that organization self/co-preserves in its autonomy and connection in the networks of action, thus our intention is to recognize and research the principles of autopoiesis, form them and set the building blocks of autopoiesis, as well as recognize developing 4.0 organization with them (Balažic Peček, Brcar and Bukovec 2017).

2 Theoretical background

2.1 What are the views on future organization?

Organization as human co-operation for achieving goals is defined by authors according to their understanding, perceiving and in-depth studying. Definitions are numerous and we have determined that despite the development, the exact definition of the phenomenon, called organization, has not been developed yet. Challenging is the definition about post-modern organization (Vila, 2000, p. 1): »Organization of 21st century has no fixed outlines and forms.«

Among various definitions we prefer simple and meaningful definition, stated by Ivanko (1982, p. 9): »Organization is a whole.« During his scientific resarches Ivanko critically determines (2002, p. 13): »It seems that a more unclear phenomenon than the phenomenon of organization does not exist in economic theory and practice...« Later he supplements his definition (Ivanko, 2004, p. 1): »Organization is a concious activity that is being carried out and maintained by the will of people, so that a whole would be created from multiplicity.«

A comprehensive and meaningful definition was written by Mayer (1994, p. 17): »It is a system in which people in the process of creative co-operation realise their ideas in the direction of higher spiritual prosperity.« Ovsenik has devoted his life to research of organizational thought and activity of a person in organization, and already at the beginning of his research set the thesis / equation (Ovsenik, 1999, p. 27): »Organization = relationships between people«. Later Bukovec (2009, p.17) upgrades the definition by adding direction of action: »Goal oriented relationships between people.« In conclusion of his studies Ovsenik presents differentiation between organization and »self-organization« as a natural phenomenon and »Organization« as social institutions (Ovsenik, 1999, p. 288).

Vila and Kovač (1997, p. 15) state that great emphasis is put on definitions and are aware of dimensions of the organization phenomenon. This enables the students to gradually enter into understanding of this field. However, they very rationally define organization with three attributes: »subject, structure and process«. Capra (2002, p. 80) recognises three different types of action: matter (from external world), form (from human relationships) and purpose (internal understanding).

Ovsenik (1999) introduces a comprehensive view on organizational science, with an outline of creation and development of organizational thought. He finds the origin of organization in the Greek word »organon«, meaning a tool, and the word »organizare«, which means forming something into a whole, so that it works in the same way as human organism. We prefer Ovsenik's definition (Ovsenik, 1999, pp. 123-125): »Organization is an analogue circular process that rotates again and again in circular-spiral process«.

Capra (2002, pp. 102-105) is convinced that: »Humane organization should be understood as a living system«. Vila and Kovač (1997, p. 307) state that business environment is becoming increasingly more complex due to new trends. As a consequence of changes in the environment new organizational concepts have been formed with components: dynamism and openness; at the same time also network organizations appear. Ambrož and Lotrič (2009, p. iv) state that flexible organization is required in dynam-

ic environment: »Modern organization opens to environment, it is adaptive, it stimulates risk and it is becoming less supported with rules and procedures, which inhibit quick adaptation to new circumsatnces.« The above definition is upgraded by Ovsenik and Ambrož with awareness of organization connection (2010, introduction): »In modern business world the image of organization that works as a system is becoming increasingly more present.«

Malić (1976, pp. 19-23), as a physicist, differs between: spontaneous and mental (conscious), potential, relative and absolute organization. He stresses that organization is like an organised form and it is necessary to understand all interrelationships correctly. He describes the mental organization as highly organised conscious system, which is highly creative and gives a person full life, both physically and mentaly. He defines formulas for all forms of organizations and unfortunately not for mental organization. We cannot put aside Kljajić's views on organization (Kljajić, 1994, p. 228): »Technology, mainly information science, and evolution of man's psyche will allow us to transcend classical forms of organising.« On this way he gives us excellent advice to consider (Kljajić, 1994, p. 230): »Minimal effort, maximal comfort.« We understand that we should follow simplicity, although we are studying the system, called »Life in organization«.

2.2 Autopoiesis as a phenomenon of biological organization

Theory about action of a living organism – »autopoiesis« Chilenian biologists Maturana and Varela (1980, p. x) define and reveal to scientific public in their pioneer work. They see the source of living in the cell as a basic unit which produces live matter. They realized that it is a generally closed structure of self-production and self-organization and that the order of connections between elements and processes is established, which are essential for their action on the ground of priority relations. This negation of negation points out Kordeš (2004, p. 176) as well, who says that the essence of autopoietic systems is not in relations between the system components but in the processes. The esssence of autopoietic system is continuous production of abilities of producing oneself and thus maintaining your own organization. Maturana and Varela (1980) present autopoiesis as a natural circular organization of living systems and its consequences. The authors have discovered a suitable term for this new phenomena, which unambiguously describes dynamics and autonomy of living systems. Luhmann (1995, pp. 1-2) deines living or autopoietic systems as a specific type of systems. He establishes that they are a depiction of a life's abstraction, in which the principle of self-referencing is built; this is important in materialisation of life and in circulation of self-reproduction. Whereas Capra and Luigi (2014, p. xi) determine that in last thirty years there is a tendency to introduce a new view on the concept of life as a new understanding of creating life.

Maturana and Varela (1980, p. 5) explain the autopoiesis theory by going into the cognitive process, which is of key importance so that a human knows and is aware that their ability to know depends on biologic integrity. Also Capra (1997, p. 44) points out that seeing is a basis of process of cognition which is founded on self-knowing, followed by real knowledge.

This is what Lauc emphasizes as a basis of autopoietic organization that a human is the one who alone sets themselves personal goals on the way of personal development. He stresses that they have to be rational, natural, efficient and humane (Lauc, 2000, p. 133). Ovsenik sees a man as an observer and actor which are natural roles of an individual as a subject and not as an object that is equalized and treated as a machine in mechanistic paradigm. He emphasizes that it is important that each of us qualifies themselves and develops into a full-blooded and all-around personality. In the new doctrine he develops and shows a new view of organization where the phenomena of social and natural organization are equally considered (Ovsenik, 1999, pp. 25-27). Social systems are not only observed but also paradoxical systems, says Luhmann (1995 pp. 7-9). In them self-referential activities are not carried out as a part of autopoietic process. Maturana and Varela (1998, pp. 205-206) speak about mutual harmony so that we see a co-person and live in co-existence as accepting fellow men which includes giving love. They add that without love, as accepting others, no social processes and humanity exist. Lauc (2000, p. 54) devoted himself to aspects of love and as a driving power of progress pointed out harmonisation of processes in free action, with presence of the highest aspect of love Agape; he adds that Eros is still an enigma for many people, in theory as well as in practice. Jantsch (1980, pp. 50-51) defines novelties and confirmation of information, explains that paradigm includes material as well as mental structures. He adds that this is information that creates new information and this is also the motive of conscious self-organization.

If biologists Maturana and Varela (1980) as pioneers defined autopoiesis as a natural circular process, Železnikar (2016, p. 10) uniquely defines it in cybernetic informational system as an including whole materiality and spirituality, with oscillation between growth and dying out. Kordeš (2004, pp. 91-92) is aware of his part in the creative circle, where there is constant exchange of creation and stability. He determined that living beings are affected by creative circle, named by Maturana and Varela (1980) as »autopoiesis«. Dalai Lama XIV (2000, p. 48) adds that inner peace is the way to genuine happiness, which includes a great deal of compassion and develops conscious care for co-people.

Lasan gives a short but meaningful definition (Lasan, 2005, p. 7): »Life is breathing, moving and thinking.« Pavuna (2017) self-confidently interprets his scientific

supposition: »Life is love in action.« Self-organization is about a certain mentally determined, planned self-lawfulness which does not endure exact observation (Hlebš, 2017, pp. 10-11). Disturbances are detected in a human which show themselves as blockades or as unworking programmes because a human simply does not allow certain programmes to be activated, notes Djurdica (2011, p. 98). Are we actually not prepared for modern thinking? Feyerabend (2008, p. 132) asks himself why a person does not allow and recognize the most important motives for peace, love, compassion, sense for the holiness of nature and natural life.

Capra (2002, p. 13) explains from his point of view that autopoiesis is a continuous production of oneself and that cells have two important characteristics: membrane as a limit and network/web of metabolism as a process. Quantum physicist Pavuna (2017) reveals his findings that a holistic coherence is an un-local method of energetic resonance which is a support to unique person. Jantsch (1980, pp. xiii- xv) observes self-organization from another point of view as continuous micro and macro natural dynamics of processes which in their continuous movement create co-evolution, where the absolute and ultimate goal is humane aspect. He adds that a new concept of ecosystem is needed as a non-reductionist perspective of evolution's self-organization.

2.3 Human potential as the key for future organization

By investing into human capital the organization achieves the largest self-efficiency with release of human potential. People with their motivation and knowledge contribute to self-learning interdisciplinary teams, which self-create and help organization to progress (Lauc, 2000). As mentioned by numerous authors, interdiscplinarity will be upgraded into transdisciplinarity (Detela, 2006; Cerovec, 2013; Kukić, 2015; and others). To understand the organizational self-learning, Capra (2002, pp. 116-119) suggests that we revise the lessons on understanding life in organization, and he adds that the most efficient way is release of organizational potential to learn, which is support and strengthening of active community. Such organizations are full of motive, not because of higher profitability of organization, but because of the fact that we feel more that our lives are worth the effort. Consequently, spontaneous appearance of new order is one of the characteristics of life.

Morgan (2004) confirms that it is necessary to use the mental process, when we recognize that a human is the one who creates our world. Anthropologist Trstenjak (1985) would agree with this - he suggests that we should not forget to create the world. We perceive this as a characteristic of autopoiesis that we are dependent on self-organization. Feyerabend (2007, pp. 196-197) says that experience is the one which directs a person and thinks that thinking in us is the base of human thinking and consequently activity. Basically, there are three important factors: we live, learn and follow (pp. 196-197). Lauc (2000) is convinced that the lack of humanity in organization lies in the decision for allopoietic and not autopoietic way. The author's thesis is that is autopoiesis includes humane work of an individual, which is in harmony with everything.

Dalai Lama (2000, pp. 53-55) adds that consequences are often hidden in the background of extreme actions, which cause pain to co-people. In organizations personal passions of the leading and profit level of companies are fulfilled, yet potentially negative effects for man and environment are not considered. Happiness originates in interpersonal relationships. Unselfishness brings us the greatest joy, as we have fewer worries for ourselves and resultantly less time when we are thinking of others. Already Tesla (2013) tried to stress this with unthinkable technological visions of the third millenium. As a connection of science, art, high technologies and spirituality, we see today a big scope of unexplored; we can say that these are unimagined possibilities of research in spiral as eternal research. Dalai Lama (2000, p. 9) says that there are sound reasons that imbalance of technical progress in comparison with social progress is ruining a human, who is due to this internally unhappy. He sees here the possibility to eliminate human problems by developing human potential.

Ideal organization identifies and supports its informal network of relations and integrates its innovations into its own structures. Informal active communities enable the organization to live flexibly, with creative potential and ability to learn. One of first steps towards such an organization is allowing the social space for informal communication, as the author points out (Capra, 2002, pp. 110-111). Schwab (2016) sees the new technological revolution as a challenge of humankind. It is a new understanding and directing, because transformation will include the entire humankind. He estimates that the fourth industrial revolution will include change in dimension, expansion and complexity as never before in human history. Roblek, Meško and Krapež (2015) introduce a question: How important is 4.0 industry and what are the influences for creating added value of organizations and society? Waibel et al. (2017) decisively predict that the next generation of production system will act as a self-organization, included in cyber-physical network.

3 Methods

3.1 Research question

Research question (RQ) of our study is: How - with the concept of autopoietic building blocks - to develop a model of organization of future, which will enable self/co-organization and self/co-production in life circle?

3.2 Qualitative methods with action research

Ambrož and Colarič Jakše (2015) say that post-modernism has balanced the relationship between qualitative and quantitative methods. Mesec (1998) points out that with holistic view on a human not only the entirety of human is studied but also practical problems of people from life, whereas with action research (AR) we reduce distances of involved levels. Železnikar (2011) emphasizes that the development of technology with exponent growth and entirely new concepts is inevitable. In the research we did a circular study and tried to close a circle of circles in the sense of AR spiral of planning, action and reflection. Mesec (2009, pp. 14-22) writes that by process of cognition and changing we add to personal and common growth. He describes the course of AR as a model of spiral of processes: observation, thinking, planning and activity. For the initial information tool of research we use »Informational Graph of Autopoiesis – IGA« (Železnikar, 2016) Figure 1.

The research of autopoiesis in organizations is based on interdisciplinarity of abstract phenomena and mutual intertwinement. From the researched literature of authors Mesec (1998), Mali (2006) and Ambrož and Colarič-Jakše (2015) we establish that for research of abstract phenomena it is necessary to follow ontologic process of research, whereas for scientific validation and confirmation it is necessary to use mainly qualitative research method. Mesec

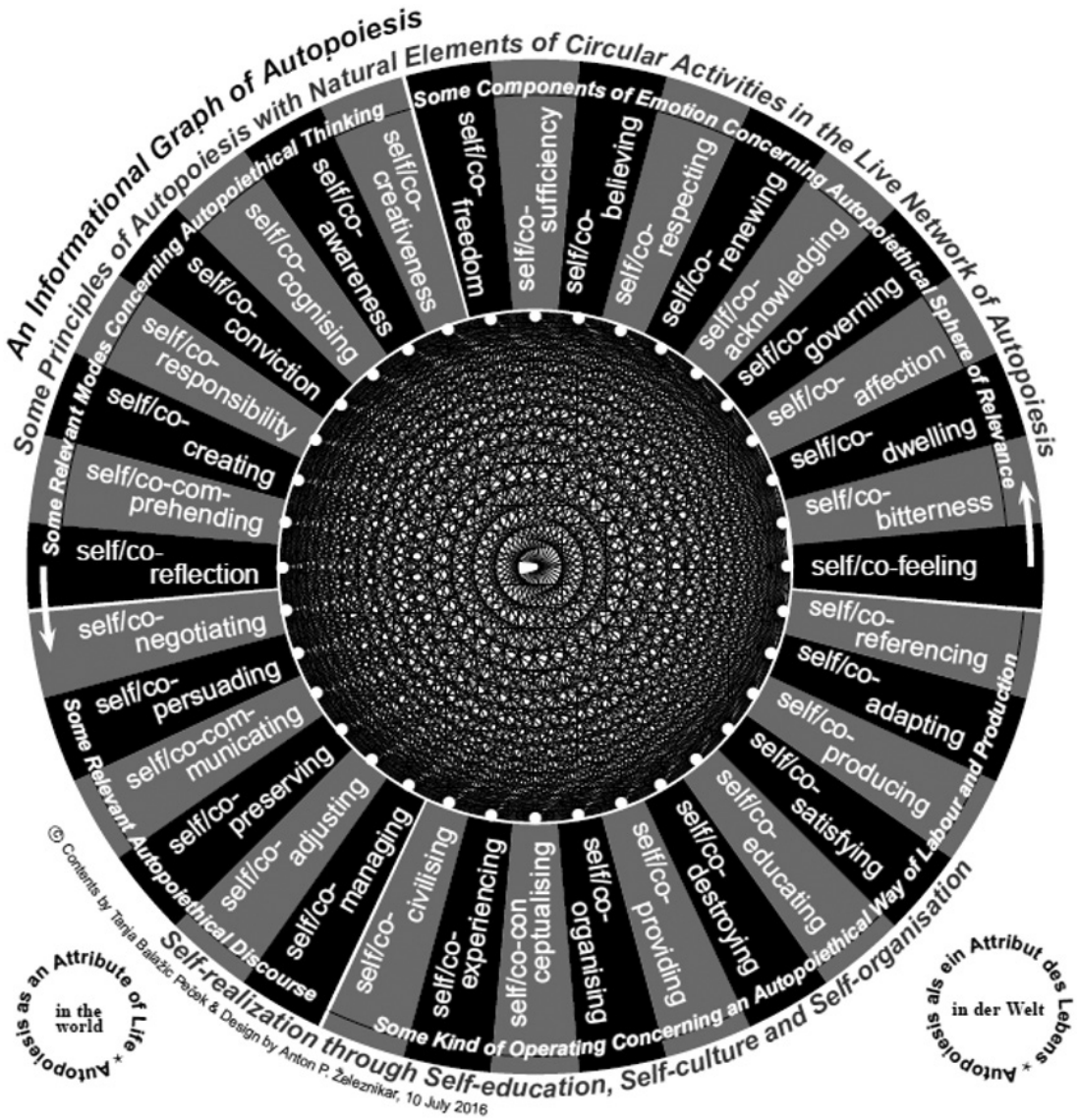


Figure 1: Informational graph of autopoiesis »IGA« (co-operation T. Balažic Peček and A. P. Železnikar)

(1998, pp. 27-35) says that we use qualitative research if we are interested in purpose, process and relation between research and theory. He points out that holistic perspective on human is not only studying organism as a whole but also practical problems of people in life.

For research process Mesec (1998, pp. 36-39) directs us into sequential analysis, which we repeat several times inside research, and by making circles we strengthen and broaden knowledge on phenomena we are researching. We see this method as an autopoietic method as it in abstract meaning illustrates a model of autopoietic organization, working according to the principle of re-processing and re-structuring of the given problem, and closing of circles (Lauc, 2000, p. 9). Ovsenik (1999, p. 14) stresses that a human is a self-recognizing, self-observing and self-aware observer with abstract thinking.

From similar point of view Mesec (1994, p. 133) explains that the roles of "researcher"and "user" can be in two holders, whereas if there is one holder, we talk about "self-research". The author says that self-research is a legitimate sort of AR, where as a limitation he sees self-reflection, which usually is not broad enough frame of research in an individual. The main approach and course of activities coincides with findings of Ambrož and Colarič-Jakše (2015, p. 65), who claim that this is a repetitive process of: observing, rationalization and validation.

3.3 Methodology of forming autopoietic building blocks as concept of life circle

The intention of studying natural principles is to learn and pass on the activity by the analogy method into an organization. Our supposition is that if a system works in nature, it also works in a human and organization, which are a part of it. We considered how to arrange the autopoiesis principles and again authors show us the way how to deal with sistematization. Maturana and Varela (1998) say that a human has the ability of: observing, thinking, recognizing and understanding. Mesec (2009, pp. 14-22) states that with the process of recognizing and changing we contribute to personal and group growth. He describes the course of AR as a model of spiral of processes: observing, thinking, planning and acting. Lauc (2000) presents as a transformation process of human decision: feeling, thinking, speaking and acting. This directs us to consideration how to set the strategy of autopoietic building blocks. If we follow the authors, we can summarize that if we observe something, we feel it, create emotions, think about it, consider it, recognize it, speak about it, try to understand it and thus act. When we self/co-operate, we can self/co-observe ourselves, become self/co-aware and we try to act more consciously in the spiral of actions. Kordeš (2004) describes creative circle, in which there is a circular exchange of creation and stability. Ivanko (2015) explains dialectic method as a base of organization theory with creation and changing. Železnikar (2017) says that inside cybernetic informational circle there is growth and dying. Lauc (2016) suggests that AR researcher should recognize, gain, develop and change. He mentions that this is a recognition circle, where a wave as well as particle is observed, and explains that these are quantum particles and their intertwinement. Lauc's suppositions correspond to our philosophy since we recognize with feelings, gain knowledge with self/co-thinking and self/co-considering, we develop in such a way that we self/co-observe, self/co-direct and self/co-change, so that we self/co-operate.

We studied theoretical background where authors use life circle as a supposition of part as a whole. We look for some models of life circles as examples from nature, already established terms in work processes and science, which serve as a base for forming the concept of autopoietic building blocks. On the ground of comparison of models and self/co-reflection we formed autopoietic building blocks as life circle. Each model was defined with four parts of one whole. Why is a human included in the circle? Lasan (2005, p. 7) answers this question: »Laws in a body are determined, but a human has to awaken himself/herself. Without their own activity nothing happens.« On the other side an individual who works over his ability for a longer time, does not have time for thinking (Ambrož and Lotrič, 2009, p. 64). Humans can react automatically due to external influences of environment forget that they are self-responsible for their dynamics. We are talking about dynamics that activates self/co-feelings and continues into thinking, speaking and activity. When forming autopoietic building blocks, sequence is important, as present in AR spiral.

4 Results

We are focused on our conceptual model, where we pointed out human as an observer and actor. After self/co-reflection of the observer, researcher and co-researchers, and based on the previous research and co-operation, we formed a conceptual group of four directional building blocks: BB1-Emotions, BB2-Thinking, BB3-Directing, BB4-Activity (Balažic Peček, Brcar and Bukovec 2018).

The research concept of autopoietic building blocks as life circle was developed as a deductive-inductive model, according to guidelines of Ambrož and Colarič-Jakše (2015), in which we inserted research with AR spiral (Mesec, 2009). Most attention in qualitative analysis was given to process building blocks; we can say that this is a demanding analysis which requires from a researcher a lot of experience and knowledge in the research area. Various authors point that out: Mesec (1998) stresses the courage of such research, Ambrož and Colarič-Jakše (2015) demanding systematics and depth, whereas Brcar (2016) emphasizes difficulty itself.

After studying theoretical background on self/co-principles in autopoiesis, as described by Maturana and Varela (1980, 1998), Capra (1986 and 2002), Jantsch (1980), Ovsenik (1999) and Lauc (2000), we designed »IGA« with A. P. Železnikar. The purpose of »IGA« is to present the comprehensive, systematic and informational view of autopoietic building blocks, as referred to in the continuation. »IGA« is the base and the research tool for research of autopoietic building blocks in 4.0 organization (Balažic Peček, Brcar and Bukovec 2017).

We developed methodology for a concept of autopoietic building blocks as life circle so that we refer to Maturana and Varela (1998), who say that a man has the ability of: observing, thinking, recognizing and understanding. Lauc (2000) included in the process of decision making the transformation process of: feeling, thinking, speaking and acting. With their findings and with findings of others (Mesec, 2009, Ambrož & Traudi Mihelič, 1998) we develop a concept. In the nature we look for models of natural laws in life circle and recognize in them that the activity of a whole is conditioned by four parts. Theoretical background is taken into account when making the concept of methodology of forming autopoietic building blocks and validation. Kordeš (2004) helps us conclude the development of the concept as creative life circle with findings of creative circle, and Mesec (2009) with AR spiral (Figure 2).

The concept of forming autopoietic building blocks as life circle was developed with four building blocks: BB1-Emotions, BB2-Thinking, BB3-Directing, BB4-Activity, with the AR spiral in the centre, as a characteristic of autopoiesis (continuous interaction). Researching according to the concept of forming autopoietic building blocks as life circle is connected with natural laws and in such a way some natural models are set, so that we can say that the research itself is autopoietic. The originality of the concept of autopoietic building blocks is shown as life circle, a circle of emerging and decay. AR spiral in the centre means that we are researching, acting and developing groups and thus an individual self/co-develops as an observer and actor in internal and external world. This duality of self/co-operation of human was put into the basic concept of the research and served as a starting point practically in all parts of the research. We can say that with continuous self/co-operation autopoietic activity is being implemented, which starts with self/co-relationship, thus triggering the processes of feeling, thinking, directing and activity, as presented with directional building blocks

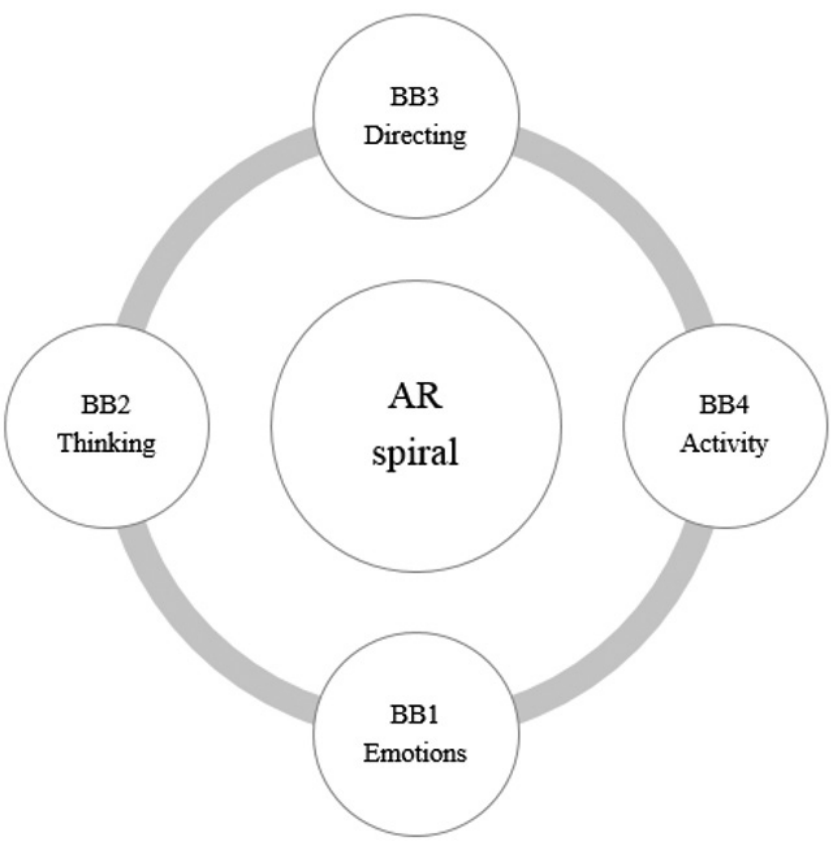


Figure 2: Concept of autopoietic building blocks as life circle

from BB1 to BB4. We suppose that in BB1-Emotions and BB2-Thinking, there is internal or vertical activity present, while in BB3 and BB4 there are mainly external processes or horizontal activity (Balažic Peček, Brcar and Bukovec 2018).

5 Discussion

When researching the organization of future there is a constant challenge of how to define it, so that all levels of awareness are included. When we speak about levels, we are looking into a human, who is multifaceted, but nevertheless holistic and studied in this way. Also Ivanko (1982) defines organization like this, and says that it is a whole, and later (Ivanko, 2002) includes conscious activity as well. On the level of Organization the research is directed from understanding the system as a sum of its own parts towards the system, understood as a web of connections between the system parts. By including cognitive processes into the study of living System, the research becomes more comprehensive, since it involves the entire life process: sensing, emotions and knowing (Ovsenik & Ambrož, 2010).

Conscious activity of a whole can be connected with the theory of autopoiesis, which says that processes start in a cell (Maturana and Varela, 1980). We are aware that here also the processes of self-organization and self-production in autonomously closed structure start. Ovsenik (1999) says: "organization = relationship between people" and at this point we can say that organization is opening or closing towards the other person, co-worker, which we assume is of key importance for co-operation. This is the point, where a person decides about their compassionate activity, on the basis of emotions, knowledge and other factors of engagement.

With autopoiesis we can also explain the claim of Vila and Kovač (1997) that organization is: subject, structure and process. Studying a person as an observer and creator (Maturana and Varela, 1980; Ovsenik, 1999) leads us to cognition that a person is a subject, in which the autopoietic processes start. With continuous activity processes re-process the structure (Lauc, 2000) and when speaking about organization, we can notice an inseparable connection between a person and organization. This can be also confirmed with the assertion of Capra (2002) that the shape is created from human relationships and that the purpose is in internal understanding of a person itself.

When discussing the activity of organization, Ovsenik (1999) mentions that we can compare it with the activity of human organism. Capra (2002) emphasises the meaning »of living organism«. We perceive the realisation of these cognitions as a complicated system, underlined by authors in the lifelong research of autopoiesis and its laws. Capra and Luisi (2014) answer the question »What is death?« by visually showing in the picture the organs of the human body (as an organism), which are in mutual interaction, which means that they are alive. On the other hand they present unconnected organs which do not live, and that can be transferred by analogy to the organization.

When studying organization we are increasingly deepening in the internal processes of a human, especially if we consider Malić (1976), who says that organization is spontaneous and mental, adding that organization is more conscious and thus gives a person full life. We can say that organization is more creative, if it allows the realease of human potential to express the freedom of existence. An important factor in creativity is reflection of consciousness, but this does not happen due to a lack of time, but the dehumanization of organizations happens (Capra, 2002). Consequently we can explain dehumanization as non-living relations between people, which is assumed by mechanistic paradigm. We suppose that only continuous liveliness and organic form of organizations leads to creative organization of future. This must be above all humane, otherwise a human will be in subordinate position to artificial intelligence, which is created in 4.0 information revolution.

We assume that a man was formed by evolution. This natural law must be followed also in the future, if we want to keep a Human as a holder of mental processes. Kljajić (1994) confirmed this when saying that evolution of human psyche will allow surpassing of classical organization. Maturana and Varela (1980 and 1998) connect through the cognitive science also the cognitive process and indicate that the transdisciplinary approach proves itself as necessary, especially when describing mental processes and body.

A person has the ability of perceiving another person and the environment with all their emotions, thus forming relations in the cognitive process. With this intention we formed the »concept of autopoietic building blocks as life circle«. We wanted to present the way of perception of a person from emotions, thinking, directing and activity, in the continuous cognitive circle, which we try to explain also from the perspective of autopoiesis to substantiate the connection of human potential and organization. The »Concept of autopoietic building blocks as life circle« is our attempt to present the release of human potential in an organization.

With such culture a human can be active self-/co-operating subject, who uses emotions and thinks, therefore he/she is an operator and potential of an organization. The organization of future should not allow the treatment of a human as a matter, as treated in the mechanistic paradigm. We learn that treatment of a human as an object hinders »flow of movement« and self/co-operation in an organization, pointed out by many authors (Jantsch, 1980, Lauc, 2000 and others). Autopoiesis is »alive« and gives vivacity to a human as well as organization. Organizations suppress originality of life and when a life is dying, organization is dying as well. It seems like a battle for survival of en-

trenched paradigm which does not realize that constant growth of the same building blocks eliminates and thus ruins building blocks that are important for harmony and complementarity of building blocks. We suppose that creative harmony of an organization can be "awakened" with autopoiesis on all levels.

That a base of organization is harmonic co-operation can be seen also with Ovsenik (1999), and competitiveness is a principle of allopoetic organizations, which are becoming more dependent on external world and do not develop self-organization. It is necessary to use mental process, as confirmed by Morgan (2004), when we see that a human is the one who creates our world. We recognize this as an autopoietic characteristic, we are dependent on self-organization. From the biological point of view we can assume that mental process is the base of creating and independance of a human in organization. **Our vision is a moral society so that we self-/co-motivate and co-create the needs of a free Human.** Schwab (2016) believes that a new technological revolution is a challenge for humanity. This is a new understanding and directing since a transformation will include the entire humankind.

Thus we can confirm the research question that by implementing vivacity in an organization, we create conditions for operation of self/co-organization. We can say that this is complex intertwinement of different principles, which need to be studied interdisciplinarily, whereas in the future transdisciplinary aspect of researching should be achieved.

6 Conclusion

We performed research mainly in qualitative way and we decided according to action research what good practice of studying autopoiesis is. We established that with AR method we can form a concept of autopoietic building blocks. The concept is given balance of activity by building blocks: BB1-Emotions, BB2-Thinking, BB3-Directing, BB4-Activity. These are cover autopoietic building blocks, whereas inside there is activity of process autopoietic building blocks, which continuously re-process and re-structure organization on all levels. The result is a concept of autopoietic building blocks in which AR spiral is inserted, which gives self/co-organizational abilities to organization of future organization. With this we can confirm the research question that with the establishment of vivacity in organizations we create the conditions for operation of self/co-organization. We assume that this comprehensive harmonic intertwinement of autopoietic building blocks in continuous movement ensures healthy, creative and complete activity of human and organizations. In future organization the emphasis must be put on the establishment of processes, based on moral values and healthy human activity on all levels.

We are aware - and the research has confirmed this - that the potential of organization is a Human and control of their emotional-mental ability. Important in a person are: heart, as love of self/co-existence, self/co-feeling, and mind, as freedom of self/co-operation, self/co-responsibility for active self/co-organizing. We live in organizations and civilization where constant competition of profit is present. And exactly this dynamics of profit is blinding a Human to react more and more automatically, we can say robotically. Battle for profit is deluding people so that they have forgotten how to forgive, love themselves and others. In this point we see danger that artificial intelligence overpowers the human, resulting in dying out of civilization. Let us try to find the optimal way for self/co-realization, as a contrast of a contemporary individual and organizations of the future, which are already alive today.

We can conclude that a human and organization are losing their vivacity of natural activity. The originality of life is being repressed in a human, and when life is dying, organization is dying as well. Humans have a chance to transform organization with autopoietic principles as: »Autopoietic 4.0 Human (R)Evolution« (Balažic Peček, 2018).

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