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Creative ecology in academic environment

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The paper deals with the issue of creative ecology in academic environment. The theses have been developed as follows. 1. Certain environmental disorder is a way towards better order, the agents of which are the individuals. 2. Socrates, Plato, Aristotle, Epicurus, and Seneca have influenced certain academic environment developed for ages. 3. We can speak about the niches of academic ecology since science should be developed in respect of life to be created and vice versa an important factor of life is scientific truth to be reached even if it is a utopian one. 4. Human fears and aspirations could be treated as the engines of science that is oriented beyond them. 5. The creative niches change the cultural environment that is as much sustainable as changeable. 6. Creativity in education means rich enough environment for mutual communication between the students and the teachers who learn from each other. 7. The result of scientific specialization is not only the loss of the united academic body at a university but also the stratification of academic society in general. 8. The creative activity is possible not thanks to the specialization of the sciences but despite it. 9. We can speak neither about academic ecology nor about academic virtues without having any continuum of the academic relief.

Key words: academic ecology, academic environment, creative ecology, scientific specialization, history of universities, philosophical approach

INTRODUCTION

What relationship is between ecology and academic creativity? First of all, we can speak about a branch of science, ecology, developed in the academic institutions, such as the universities or the scientific institutes. The very structure of the term "ecology" refers to a scientific approach. Ecology appeals both to *oikos*, home, and to *logos*, scientific discourse, that could be treated as certain academic meta-environment. An environment is a necessary element of the ecological discourse. In the case of the basic ecological discourse we face the natural environment of the

human being. It seems that only harmonious and sustainable environment is a condition of surviving within it. Usually, the environmental protection inseparable from ecology is based on this Platonic idea (Plato 1992). The other idea basic for ecology is conviction that the human being can change both the environmental balance and the relationship with natural environment in positive or negative ways. This conviction presupposes the superiority (a kind of masculinity) of the human being towards his (her) natural environment.

Nevertheless, the superiority can conceal a weakness like roughness of a man towards a woman conceals the timidity. Similarly, illusion of omnipotence towards nature can cause a natural catastrophe that ruins the very human being. Additionally, the stronger the organisms are, the more hostile the natural environment is towards them in a paradoxical way. In other words, the organisms have been tested in their environment that should be enough hostile, disharmonious and unsustainable in order to play this role. Speaking about human history and social environment, Toynbee (1995) calls this phenomenon the law challenge and response. In other words, the biggest challenge is, the stronger organism should be in order to survive. As a result, certain disharmony and unsustainability of the environment is necessary for an organism. Darwin's theory of evolution is based on two inseparable ideas, namely, on the idea of fighting for being in a hostile environment and on the idea that only the strongest and the best organisms should survive and ensure the development towards higher organisms. As a result, *certain environmental disorder is a way towards better order, the agents of which are the individuals*. The same could be said about both social and natural environment.

Like all people, the academicians are the agents of both natural and social environments. By suggesting certain ecological policy, the academicians have certain impact on the behaviour within natural environment, the relationship with which should be also formed. In this respect, we can speak about academic creativity towards the natural environment or at least towards the ecologic relationship with it. Nevertheless, we appeal first of all to social environment while speaking about academic ecology that we interpret as a kind of creative ecology. According to R. Florida (2012), the academicians are the core of creative class beside other less creative classes in more or less creative society. Leaving aside the problem of creativity's social background, we can raise the question what about creative ecology in academic environment. If we treat academic activity as creative and if we regard the academicians as the important agents of creative class, academic ecology is a kind of creative ecology.

J. Howkins (2009) presents the creative ecologies as a kind of thinking, as certain niches in the knowledge structure, and as certain relationship with the social environment. Additionally, creative ecology could be reconstructed in different ecological discourses including ecological cosmology (Cranwell 2010), systemic ecology (Cohen-Rosenthal 2004), ecology of learning (Martinez-Maldonado et al. 2014) and teaching (Cokadar, Yilmaz 2010), ecology of language (Fowler et al. 2011) and logic (Gabora et al. 2008), ecology of invention (Fitzhugh 2001) and innovations (Adkins et al. 2007; Ruef 2002), psychological ecology (Gibson 1979), political and legal ecology (Tschakert 2012), ecology in creative and cultural industries (Lange et al. 2008; Sunley et al. 2008; Eckersall et al. 2013; Pratt 2012), ecology of the media (Cottle 2004). All these ecological discourses are meta-discourses, since they deal with social or logical instead of natural environment. Additionally, they appeal to certain creative eco-systems that change under the influence of their agents' activity. The eco-systems are creative in twofold ways: 1) they form the individuals within them, and 2) they have been constantly formed by their most creative individuals.

Academic ecology could be treated as a part of ecology in teaching and learning. However, the academicians are not only the teachers in a narrow sense. Research as looking for new ways both in science and in society is not less important and not less creative activity of them. In addition to that, they are the teachers both of the students and of the society by thinking in other (more creative) way. As a result, *academic ecology should be treated in a broader context of creative ecology in respect of its different issues*. In general, variety of the forms is a peculiarity of creative ecology including academic ecology.

Creative and academic ecologies could be treated as the parts of the creativity discourse developed by the philosophers (Cranwell 2010), sociologists (Florida 2002), psychologists (Runco 2004), economists (Caves 2002), etc. In Lithuania, the issues of creativity have been similarly developed by the phenomenologists (Juzefovič 2013; 2015), sociologists (Černevičiūtė, Strazdas 2014a), urban theorists (Bajarkevičius 2014; Lavrinec 2014a; Lavrinec 2014b; Štuopytė 2013; Urbonaitė-Barkauskienė 2014), communication theorists (Pečiulis 2015), economists (Černevičiūtė, Strazdas 2014b), media theorists (Skorupa 2014; Valivonytė 2013), etc. It is true that some of these discourses are incommensurable because of the tendencies in the sciences to be demarcated from each other. However, *the niches of interdisciplinary approach could be one of the issues of academic ecology*.

Education and the ability to grant it are of the great importance in the present world, in which the amount of knowledge increases exponentially and the use of knowledge for a society's needs becomes a critical factor of the social, economic and political "health" of an individual, state and the whole world. Universities should be the leaders and help the society to adapt new characteristics of learning and to become a learning society (Zavadskas, Valiulis 1998; 2002).

Besides the above-mentioned aims of the universities, the stimulation of creativeness is the main aim because contemporary students as future specialists are inclined to question earlier knowledge and traditional skills. Education and science are drawn nearer to the roots of social and economic growth. Every person and especially a specialist making decisions becomes responsible to other people and history.

However, recent inventions and technical achievements do not solve all the problems of mankind raised by humane traditions.

In his book "Fides et retro" the Pope John Paul II wrote that the first drawback is the crisis of the sense that a human soul is often occupied by the way of thinking, fostering greater shrinking into oneself limited by stability of oneself, leaving no place for something higher. It is also written there that the world wide spread of science and technologies did not become the indicator of children's health, duration of life, literacy, equal possibilities, labour productivity and thrift use of means. It did not change the system of education and did not stop the ruin of towns and the pollution of environment. It did not make care of public health more accessible and did not decrease the largest in history national debt.

Thus, the main aim of universities is to become centers of humanism, training not only good creative specialists but real humanists as well. Universities must unite scientists of different fields, summarize and spread knowledge of various branches and investigate the problems of mankind.

As a result, we analyse, first of all, different creative ecologies by searching for common features of them (1. The creative ecologies and their philosophical background), later we examine the academic creativity in a historical context (2. Academic creativity and its limits). As a result, our aim is to define the relationship between creative ecology and academic activity.

Speaking about methodology, we appeal to different discourses including history of philosophy, social ecology, and creativity studies. We hope, this diversity corresponds to both the continuum of academic environment and possible creative niches in the junctions of different academic regions.

THE CREATIVE ECOLOGIES AND THEIR PHILOSOPHICAL BACKGROUND

By defining creative ecology, J. Howkins (2009) speaks about a certain way of thinking. According to him, "You cannot start a small-scale steel mill, but you can think for yourself. Thinking is a proper job" (Howkins 2009: 129). Additionally, creative thinking is inseparable from learning since we should first of all know that learning is an endless process and the core of our life art. This Socratic idea is the beginning of academic ecology that appeals both to teaching of the students, as well of the society and to permanent learning of the very academicians. J. Howkins also speaks about double "freedom *from* and freedom *to*", i. e. "freedom from constraints such as physical want, hunger, prejudice, censorship and unhelpful education systems" and "freedom to in the sense of freedom of expression and freedom of communication" (2009: 130). The first aspect of freedom should be related with life-art developed by such philosophers as Socrates, Plato, Aristoteles, Epicurus, Seneca. Not by accidence, all of them were the founders of the philosophical schools in a broad (Socrates) or narrow (Plato, Aristoteles, Epicurus, Seneca) sense. As a result, *all of them had been the creators of certain academic environment*.

By asking what is a human being, Socrates had raised the questions how to know ourselves, what is truth and knowing, whether the human values could be defined. For him, the truth and the values are inseparable from human existence with the modest physical needs and communication in public places by searching for the ideas. Although Socrates declares the independent truth to be discovered, in his dialectics, *he demonstrates that truth appears in scientific communication*. Similarly, Plato states that the very idea of the goodness as a source is beyond the material things that are just the imitations, images and analogies. That is why Plato believes that the political ideas could be and should be realized. Actually, the realization is an aspect of truth since we test the idea in our life, on the one hand, and refine it, on the other hand. As a result, we create our life in the face of our intellectual ideas that follow from our life attitudes. Plato had realized this hermeneutic circle in his Academy that could be treated as the first Western university. The Academy was a paradigmatic example in some aspects. First, it was a school for everybody, i. e. for the young people who wanted to enrich both their knowledge and the life. Second, it was a place for development of all known sciences in that time. The political ideas played a central role because of their double (theoretical and practical) nature and dialectics (or hermeneutic circle) between them. Last but not least in the perspective of academic ecology, the Academy was a place for formation of life[1], not only of science. Here, *we can speak once again about the niches of academic ecology since science should be developed in respect of life to be created and vice versa an important factor of life is scientific truth to be reached even if it is a utopian one*. As mentioned, the possibility to be realized is an aspect of truth.

Although Aristotle had grounded his own school, Lyceum, he is important here in other respect. Aristotle (2008) speaks about happiness, the components of which are satisfaction

[1] In this sense, the precedent of Platonic Academy was the Pythagorean school by paying attention both to the life-art including diet and to the science including political ideas.

of necessary (but not more) life needs, intellectual life way, and the virtue to be nourished. It seems that the second component is most important for academic ecology. However, all these components are inseparable from each other if we want to be happy. Differently as short-term pleasure, happiness has a long term. Academic (or intellectual) activity and virtue are, namely, the components that ensure this long term. On the other hand, academic activity without virtue does not lead to happiness, and, as a result, is not intellectual enough. In other words, a niche of academic ecology is ethics. Here, we can also speak about the limits of academic creativity and academic freedom. On the one hand, academic life is an aspect of "freedom from" since it directs to life beyond physical needs. On the other hand, academic ecology appeals to the limits of "freedom for" in respect of the virtue to be nourished. As a result, *academic (intellectual) life, virtues and creativity are inseparable since we nourish virtue by creating scientific ideas that should be realized both in the social life and in the individual life of an academician*.

Despite the vulgar interpretations of Epicurus as a philosopher of pleasures, the founder of Epicurean Garden speaks about freedom as a fruit of temperance (1993). Although he states that pleasure is the beginning and the aim of happy life, the content of the biggest pleasure is, namely, virtue, intellectual activity and justice. By speaking about the short-term pleasures, he stresses that they raise the problems bigger than the very pleasures. For Epicurus, wisdom, virtue and happiness are inseparable. In addition to that, the immortal virtue is a prophylaxis of mortality. The science oriented to cognition of universe is both a remedy for human fear and a pretension to immortality since it deals with eternal laws in nature. In general, it is not wise to have fear of death since there is no death until we live and we are not here anymore after our death. On the one hand, Epicurus appeals to friendship inseparable from the share of the intellectual fruits within a community, for example, an academic one. On the other hand, he speaks about secure and peaceful life far from the crowd outside intellectual (in our context, academic) environment. As a result, Epicurus appeals to certain social environment, the niche of which is, namely, intellectual (or academic) environment. However, *the intellectual life is inseparable from human existential attitudes, first of all, towards happiness*. Like in Aristotelian thinking, the virtue as well as wisdom is a component of happiness. *The human fears and aspirations could be treated as the engines of science that is oriented beyond them*.

Seneca was not the founder but the most prominent representative of the dominant school, Stoicism, in the Roman time. It seems that Seneca was not original in respect of his predecessors, such as Zeno of Citium, Chrysippus, and Cicero in Stoicism. However, Seneca is important here in some respects. First, his writings and especially letters represent Stoicism important for a certain way of thinking. Second, his teaching is inseparable from his life, especially the end of his life. Finally, he was a teacher in narrow (of young people including the emperor Nero) and broad senses (of a certain philosophical attitude). The appealing to the harmonic universe governed by the rational providence is crucial not only for the Christian thought developed later but also for the very idea of ecology. On the one hand, we cannot harm the rational order without ruining us within the universe as our home (*oikos*). On the other hand, we should be rational enough to sustain a natural order both outside and inside us. Contentment and happiness in general is impossible if we disturb this nature inside us. However, suffering has been treated as having the beneficial effect since it leads back home, i. e. to the harmonious soul. The study is important since it leads to better understanding both of the macro- (universe) and micro-order (soul). As a result, *we can speak about an ecologic-academic niche between the universe of the virtues inside us and the rational order outside us*.

The learning should help to approach death that is necessary for dynamism[2] of nature. Seneca also pays attention to prophylaxis of the destructive emotions that result purportedly from vicious judgement, i. e. from incoherent thinking. It is one more reason to learn the whole life. Consequently, academic environment of teaching and learning is a home (*oikos*) for every human being who sustains the universal rational order to be co-created.

ACADEMIC CREATIVITY AND ITS LIMITS

After this excursus to the Antique roots of ecological thinking in academic environment we should return to the issue of academic creativity and its limits. The context of our considerations here is the Tuning project that supplements the guidelines of the Bologna process. Beside this, we appeal here to the history of universities. The reflection of European universities' history enables to form the academic identity, consequently to create the future field for academic activity inseparable from ecological and ethical attitudes. Before it, we consider other aspects of creative ecology in *Creative Ecologies* by Howkins.

Howkins (2009) stresses that variety and diversity are also very important aspects of creative ecology. According to him, our "cultural diversity <…> stimulates us to imagine possible and even impossible future" (2009: 47). Cultural mixing and changes result from diversity of attitudes and approaches. However, the diversity of thinking and methods used in different scientific fields also cause the incommensurable discourses if not the clashes or academic wars. What about sustainable academic development that is inseparable from ecological idea?[3] Sustainability refers to the harmonic order both outside us and inside us, in the natural and social environment. Nevertheless, creativity including an academic one appeals to destroying of certain order and radical changes without any precedents in history, as well as a brave entry into the future. It can also cause intolerance towards old and usual academic forms.

Howkins also speaks about the circles and cores of creativity. First, this idea presupposes a discourse of creative environment, for example, a mediated, technological or academic one. Second, it appeals to dynamism as an important feature of creativity. Third, it refers to certain return to the (historical) roots as an alternative for permanent change. Finally, it is a case of a hermeneutic circle when the parts have been understood in the perspective of the wholeness that has been understood with help of the parts. A case of the relationship between the parts and the wholeness is adaptation of an organism in its environment that is also changeable. Additionally, the circles and cores of creativity refer to the holistic approach necessary in creative education.

One more idea important for creative ecology is one of creative niches. "A niche is domain in the eco-system which an idea is born and will live or die" (Howkins 2009: 92). On the one hand, a creative niche presupposes creative enough environment of intensive cultural climate with big diversity. The niches are possible only in an unequal surface of the cultural relief. On the other hand, new niches show that a cultural environment is not rich enough and it needs more opportunities for realization of creative ideas. Anyway, *the creative niches change the cultural environment that is as much sustainable as changeable*.

Finally, the idea of education and learning necessary for creativity is crucial speaking about academic ecology. Already for Plato (1992), creativity (poetry and music) is a very

[2] Dynamism is an aspect of creativity. Comp. the considerations on thanatos (death) as a principle of change in a cosmological order that should be not only sustainable but also changeable in order to survive (Cranwell 2010).

important means for educating a wise, temperate, brave and just individual who regards the social needs in an ideal state. However, we face here a paradox. On the one hand, creativity could be used successfully by transferring the knowledge and competences. On the other hand, it is impossible to transfer the very creativity that appeals to the principle of novelty. However, *creativity in education means rich enough environment for mutual communication between the students and the teachers who learn from each other*.

The European Tuning project (2015) refers both to different cycles in the university's education and to the wholeness (holism) of a study programme. Every study programme includes teachers from different academic fields. Nevertheless, it should stay united by appealing to the same study aims and competences to be provided. This model is a kind of return to the classical model of university education. Until the Enlightenment, every European university had two cycles of the studies: in the basic philosophical faculty and later in one of the upper (specialized) faculties, such as theological, legal, etc. Philosophy had covered many scientific disciplines including mathematics, physics, astronomy, and chemistry. The studies in a philosophical faculty were not as much more abstract or general compared with the correspondent contemporary faculty as oriented to life-wholeness. As mentioned, this life-wholeness was important for all analysed antique thinkers and their schools, the tradition of which had been continued in the Middle Age. The paradox is as follows: the ideologists of the New Age and later of the Enlightenment had criticized the speculative, i. e. not applied character of sciences in the universities. However, the reforms of the Enlightenment had been oriented towards the specialized, consequently incommensurable sciences at the same university.

The case of the reforms[3] at Vilnius University of 18th century is even more radical because of the fact that the faculty of philosophy had been closed at all. *The result of such specialization is not only the loss of the united academic body at a university but also the stratification of academic society in general*. It seems that the result of such stratification is a lot of niches or gaps for creative activities. However, on the contrary, *the creative activity is possible not thanks to the specialization of the sciences but despite it*. We speak about communication between different sciences, as well as about the inter-disciplinary and multi-disciplinary character of contemporary science. However, specialization results, namely, in disturbance for communication between the faculties. Speaking about academic ecology, we do not have any more united academic environment, the base of which would be the philosophical (including ethical) attitudes, no matter which – Platonic, Aristotelian, Epicurean or Stoic. As we have seen, they all are oriented to human happiness instead of such details as economic welfare or knowledge. Despite its importance for identity of certain scientific disciplines, specialization is concentration on the details without wholeness. *Without having any continuum of the academic relief*[4], *we can speak neither about academic ecology nor about academic virtues*. The following questions are open. Does the academic relief with the creative niches within it result from the human virtue? Does the absence of human virtue result from the deficit of academic wholeness after division of the sciences? Does the lack of scientific limits presuppose the absence of academic ecology?

We suppose that these and other similar questions caused the reforms of W. von Humboldt who spoke about the wholeness of the sciences and the studies, as well as of the technologies and the social environment. We face a certain return to the classical idea of a university

[3] Initiated by the Education Commission (1773–1794) of Lithuania–Poland.

[4] The notion of relief includes difference, variety, and roughness.

in the Tuning project and in the Bologna process in general. The Tuning project appeals to the circles at a university and tuning of the aims within a study programme. Additionally, we can speak about a major hermeneutic cycle while we appeal to certain historical models of the university. However, this meta-cycle requires not only the historical consciousness but also understanding of academic history as a cultural continuum despite its diversity and variety. The academic continuum is based on the idea of virtues to be educated at a university although there are different concepts of the virtues important for academic identity. The result of both the historical academic wholeness and diversity of university's historical forms is the creative niches, as well as academic ecology.

CONCLUSIONS

The issues of academic ecology are the idea of academic environment and an academician who tries to survive within it. On the one hand, academic identity is inseparable from specialization and demarcation of one science from other ones. On the other – academic environment as a continuum to be created by the academicians is impossible without certain principles common for all scholars. These common principles could be critical thinking, a general philosophical view or academic ethics. Only by having such academic horizon, we can speak about the creative niches that contribute to the development of common intellectual environment despite different universities. The aspect of academic ecology is also a historical approach by considering the development of university's role within a scientific community and the society in general.

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Kūrybinė ekologija akademinėje aplinkoje

Santrauka

Straipsnyje nagrinėjamas kūrybinės ekologijos akademinėje aplinkoje klausimas. Plėtojamos šios tezės: 1. Tam tikra aplinkos netvarka yra kelias link geresnės tvarkos, kurios agentai – individai. 2. Sokratas, Platonas, Aristotelis, Epikūras, Seneka padarė įtaką tam tikrai akademinei aplinkai, kuri plėtojosi tūkstantmečius. 3. Galima kalbėti apie akademinės ekologijos nišas tiek, kiek mokslas plėtotinas atsižvelgiant į sukurtiną gyvenimą, ir atvirkščiai – svarbus gyvenimo veiksnys yra pasiektina mokslinė tiesa, net jei ji – utopinė. 4. Žmogaus baimės ir siekiai gali būti traktuojami kaip mokslo veiksniai. 5. Kūrybinės nišos keičia kultūrinę aplinką, kuri yra tiek tvari, kiek kintanti. 6. Kūrybingumas ugdant reiškia pakankamai turtingą aplinką abipusei komunikacijai tarp studentų ir mokytojų, kurie mokosi vieni iš kitų. 7. Mokslo specializacijos išdava yra ne tik vieningo akademinio kūno universitete praradimas, bet ir akademinės visuomenės susisluoksniavimas. 8. Kūrybinė veikla galima ne dėl mokslų specializacijos, bet nepaisant jos. 9. Negalima kalbėti nei apie akademinę ekologiją, nei apie akademinę dorybę neturint vientiso akademinio reljefo.

Raktažodžiai: akademinė ekologija, akademinė aplinka, kūrybinė ekologija, mokslinė specializacija, universitetų istorija, filosofinė žiūra