HUMANISTIC PARADIGM OF GEOGRAPHY

Prof. Dr. Alexander V. GLADKEY, Acad.
Taras Shevchenko National University of Kyiv, Ukraine
E-mail: alexander.gladkey@gmail.com

Abstract: The peculiarities of formation and development of humanistic ideas in scientific investigation are explored. The main humanistic ideas in natural sciences are investigated. The role of geography in humanization of post-disciplinary knowledge is defined. The development of humanism in geographic sciences is historically analyzed. The main directions of further humanization of geographic as well as post-disciplinary knowledge’s are disclosed. There are the main direction of humanization in geography: from anthropocentrism – to humaneness, from systemness – to humanistic synergy, from quantitative methods – to its further qualitative analysis and humanistic interpretation as well as from territorial differentiation – to philosophic fundamentals of global geo-space. The necessity of current geographic paradigm alteration is substantiated. The imperative of humanistic thinking in geography and natural science as well is defined.

Key words: Scientific paradigm, humanization, post-disciplinary knowledge, quantitative and humanistic methods, humanistic values, imperative of humanistic thinking in geography.

********

INTRODUCTION

Scientific investigations of post-non-classical period of time are based on concept of transfer from disciplinary knowledge to post-disciplinary one that has humanistic significance and value. The main scientific goal of this new knowledge consists in not only ordinary anthropocentric researches in different scientific branches. First of all, it consist in integral, non-utilitarian scientific approach to problems of humaneness, investigation of essence and role of human persons in environment and also in development of common to all mankind knowledge and values in every scientific directions.

Thus, such above mentioned aspects of current scientific transformation influenced on development of humanistic paradigm in modern geography. Indeed, the necessity of humanization of geographic knowledge was substantiated as far back in 19 century in scientific works both of European and Russian scientists, such as: A. Humboldt, P. Smenov-Tyan-Shanskey, A. Synyavskey, S. Rudnitskey, K. Voblyi, etc. Moreover, the French scientific school of geographers made an important contribution to development of humanistic ideas in 20 century. But, unfortunately, after development of so called quantitative revolution in geography, the humanistic approach was forced out in the background, especially in Eastern European countries. Further humanization of geographic knowledge in post-soviet countries begins to develop nowadays in scientific works of S. Moroz, V. Maksakovskiy, V.
Preobrazhenskey, Yu. Golubchikov, etc. This process become to the brand-new level of the development with formation of post-disciplinary knowledge based on hermeneutics approach to scientific investigation. But, unfortunately, the humanistic paradigm in geography could not replace completely a systematic one and could not become a fundament of geographic investigation in post-non-classical period of time. The substantiation of this paradigm and its role in geographic science is the main scientific goal of this work.

**WHAT IS HUMANISM IN SCIENTIFIC INVESTIGATION?**

Philosophy and humanities define humanistic paradigm in different branches of science as somehow anthropocentric approach to scientific investigations that has a value of human person and humaneness as the main goal of perception. The main idea of humanism is harmonious development of human abilities, high level of human culture and also corresponding behavior toward other people or environment. According to Kant, humanism is the sense of welfare in every relation with other people. On the one hand, it’s a general sense of collaboration; on the other hand it’s a possibilities and properties of creation an adequate society using scientific efforts. For classical teaching of Herder, humaneness is the main goal of human development generally and also the main goal of different human activities particularly (including scientific activities).

Humanistic ideas had received a further development in hermeneutics teaching in post-non-classical period of time. According to Gadamer G.-G. (2000), humanism is a doctrine of “comprehension” (integral emotional and spiritual experience) of essence of different processes and phenomena both natural and social. It’s very different from traditional “explanation” of various phenomena that makes up the main topic of scientific investigations nowadays. This “explanation approach” led to dehumanization of natural scientific knowledge, rejection of common to all mankind values and, as a result, to formation of reductive conception of nature, its structuralistic, mechanistic interpretation without any synergetic characters.

Dehumanization eliminated unity of scientific perception and comprehension of nature that led to structural dissipation and decomposition of science into different branches. According to Ischuk S. et al: (2003), the process of scientific perception was direct “to the deep of the science”. This means that any scientific investigations were used for structural analysis, definition of regularities and principles of object of inquiry. But science lost its humanistic character and became aloof from human problems and values.

Therefore, humanistic ideas of modern science consist in views on existence and development of the world *sub specie aeternitatis*. Its categorical tools could be complete with human values known since earliest times that could become the basis of theoretic generalization and practical applied activities. This process of transformation of science and philosophy demand the development of new humanistic paradigm that would be the basis of scientific perception process. Thus, humanism will transfer from past abstract philosophic ideas to the brand-new practically active form that would be grounded on introducing of humanistic ideas and values in scientific investigations.

**HUMANISTIC IDEAS IN NATURAL SCIENCES**

Humanistic ideas more and more transfer from philosophy or humanities to natural sciences. Their usage is not limited with separated scientific branches. According to Zamyatin (2003), they will become the basis of a new post-disciplinary knowledge of global society in the nearest future. The main goal of humanistic ideas is not only small-type non-humanistic
process of “explanation” of different regularities and principles that lead to reductive view on the object of inquiry, but first of all, it is comprehension of any processes and phenomena as single historically concrete ones. This means that the main goal of scientific investigations is not consist in mechanical fixation of different knowledge and their enlargement to deep understanding of general laws of nature/society development. But it consists in understanding the essence and origin of nature or society, their process of formation and their inner properties. So, science would try to answer why any processes and phenomena are being as they are. Additionally, scientific investigation would be serving to problems of humaneness that are not the simple abstract anthropocentrism and also not utilitarian and personificated „satisfaction of human needs”, but, perfectly, there is a harmonic development of human nature, their intellectual, creative and cultural growth. According to Drabber (1875), humanistic ideas and common to all mankind values will return to European science after the century of so called “ages of rational oldness” that means as the time of decreasing of rational and formal thinking. Drabber said that the new growth of humanistic ideas will become over quantitative scientific progress and try to unite dissipated knowledge about the world into one conglomerated comprehension.

Therefore, there are two point of views on development of humanistic paradigm in scientific investigations: as on consolidation of common to all mankind values and humaneness through the process of scientific perception and also as on scientific comprehension of the essence of any processes and phenomena as integral emotional and spiritual experience that is different from traditional systematic concept because has a lot of additional unaccounted components.

THE DEVELOPMENT OF HUMANISTIC IDEAS IN GEOGRAPHY

Geography is one of the few in number of natural science that has old and rich humanistic traditions. According to Pistun M. (1996), geography would come one of the first places among different natural sciences with the development of humanistic post-disciplinary knowledge because it unite different social and natural sciences and determine close relations of this two polar systems. Geography is the unique science not only because it include different sciences but firstly because it provide deep comprehensive investigations of the Earth’s space and its components both material and non-material in their unity, integral appearance and interdependence. But, unfortunately, modern scientific-perceptual concept of geography develops perfectly in natural direction, non social or joint socio-natural. This is the cause of important decreasing of geographical scientific possibilities. Dehumanization of geographic investigations led to reductive concept of the nature and its space, the role of human persons in nature, their intellect, culture and values.

Humanistic ideas in modern geography were established by brothers Humboldt. After his brother Wilhelm, Alexander von Humboldt in his several fundamental works defined the world as natural whole that moves and revives by inner forces. He tried to unite classical idealism with natural sciences that rise to philosophy by their perceptual level. In two of his fundamental works „Entwurf einer physischen Weltbeschreibung” and “Ansichten der Natur” Alexander von Humboldt substantiate the integral scientific picture of the world based on humanistic values and wide scientific analysis. His ideas had received a wide development among Russian geographers and naturalists of 19 century, such as: P. Semenov-Tyan-Shanskey, M. Przhivalskey etc.

Humanistic ideas if geographic investigations were continued in chorological concept of Alfred Hettner. According to Hettner (1930), geography among its perceptual possibilities has a lot of esthetic properties and art directions of investigations. In his scientific work “Die Geographie, ihre geschichte, ihr wesen und ihre metoden”, Hettner substantiate esthetic and
practical value of natural landscapes, their role and significance in the development of geography and other natural sciences. According to Hettner (1930), aesthetics and art in geography don’t be directed against its scientific character. Firstly, they could be devoted to reduce the significance of practical (applied) aspects of investigation. Humanistic ideas in Ukrainian geography were supported by V. Antonovytch, S. Rudnitskey, A. Sinyavskey etc. They were the same with Hettner concept and were directed to wide studies of local lore and description of any territory in natural and socio-geographic aspect.

Geographic investigations mentioned above were founded on qualitative analysis that has permanently abstract and descriptive character. Their humanistic component was inactive, isolated from concrete problems of the development of nature and peoples in it. But, the origin of humanistic ideas in geographic investigations made the main fundament of further development of this science that becomes more actually in post-non-classical period of time.

**THE ROLE OF MODERN GEOGRAPHY IN HUMANISTIC POST-DISCIPLINARY KNOWLEDGE**

Modern geography is almost completely cleared from descriptive and speculative character of scientific investigation. It has various numbers of quantitative formalizing scientific methods based on mathematical and statistical analysis, modeling and logics. Their origin and development are corresponded with society demands for practical usage of scientific knowledge. Moving away from abstract-theoretical and descriptive methods, geography becomes more and more an exact and applied science with such theoretical fundamentals and practical activities that based on collection, systematization, analysis and interpretation of initial (both experimental and statistical) information. Essentially, the wide mathematization and of geographic sciences was increasing by all-time rising quantity of information. With removing of humanistic problems, geography lost its universal character and provides perfectly quantitative investigation of the space.

Such “quantitative revolution” in geography led to domination of mathematical and statistical methods in scientific research. According to Saushkin (2001), geography investigate dynamic and spatially (both territorial and aquatorial) dislocated systems that include nature, economy and society which are united with different straight and back relations. The systematic approach based on the same name paradigm and also structural analysis and synthesis have been permanent in geography to our time. Following of “quantitative revolution” insisted on that the development of complex geographic investigations based on wide massive of mathematical calculations would be possible with rapid development of computer’s systems and cybernetics founded at the centre of 20 century. In his opinion, exact science in the nearest future would make it possible to investigate all components of geographic reality as someone aggregate of formalizing data or matrix that would take into account most components of geographic systems (complex). But, such whole integral mathematization of geography and development of universal quantitative method of spatial investigation did not take place.

On the contrary, mathematization of geography broke integrity of this science and perception of its object of inquiry. Instead of hermeneutics “comprehension” of essence of different geographic processes and phenomena, our science came to partial formalizing “explanation” of their separate sides or properties. The expansion of quantitative methods led to mechanistic reductive conception of geographic reality that consists in any aggregate of quantitative data that received an abstract character and lost contact with the territory. Actually, geography lost his aggregate humanistic picture of nature sub specie aeternitatis
Humanistic paradigm of geography

that was founded before mass systematic quantitative investigations. Geography became to such situation that was characterized by Juvenal as *propter vitam vivendi perdere causam*.

The usage of systematic paradigm and also wide and different number of quantitative methods can answer on only partial questions of territorial development. More and more geographic facts could not been formalized generally. They can be involved into such investigation only partially without any essential inner properties. Geographic reality is wider then just formalized systems. Therefore, the effectiveness of quantitative geographic investigations is limited due to imperfection of mathematical tools. Interpretation of formalized data could not completely investigate the development of different integral natural and social processes. Using mathematical methods, geographers could not analyze and explain all aggregate components of territorial systems. Scientists explained this problem saying that territorial systems are very complicated. They depended on a lot of different factors. To investigate them using quantitative analysis, scientists need to simplify and schematize them. But the main problem of spatial investigation consists in dehumanization of geographic knowledge and also in disregard of humanistic elements in geographic systems. This problem was widely covered by Nobel prize laureate Ivan Bunin. According to him, geographers take quantitative methods as a cover in their work. Using such methods they investigate only several elements of geographic reality and make them simplify and schematize wittingly. They only define systemness of any territorial complex and devoted to support of this system. So, such methods are correct only within speculative quantitative system and separate from reality.

Some scientists had critical opinion about quantitative methods and dehumanization as early as the beginning of “quantitative revolution”. They make protest against over-indulgence of economics and sociology in human geography and also of physics, chemistry and biology in physical geography. This gave occasion to rising criticism against quantitative methods, simplifying of geographic reality and underestimation of qualitative methods of analyzing. The following of quantitative methods contended that classical direction of geography as science “with aggregate picture of the nature” is also very important but insisted on predominance of mathematical and formalizing analysis.

Nowadays, many scientists pay a great attention to description of different territories with socio-cultural, economical and landscape-esthetical points of view. According to Zamyatin (2003), such analysis devoted to informal humanistic-oriented investigations of the territory and called “analysis of geographic images”. This gives every reason to development of humanistic ideas in different pats of geography. As a result, according to Golubchikov (2003), geography is defined as the science about harmony and beauty of the terrestrial globe. According to Moroz S. et al: (1997), humanistic elements in geography defined also as new weltanschauung based on common to all mankind values that gives the first place in scientific investigation to human persons and humaneness. The great humanistic value of geographic investigation and description of different territories and nations have been confirmed more than once by such well-known Russian literary men as M. Gogol, K. Paustovskey, M. Voloshin, I. Bunin etc.

**THE DIRECTIONS OF FURTHER HUMANIZATION OF GEOGRAPHY**

We’d presented above only a few directions of geographic investigation with remains of humanistic knowledge. The wide process of humanization in our science on the level of transformation in conceptual fundamentals is a possession of future. For further development of humanistic ideas in geography we can provide a various number of such transformations. There are four main direction of humanization in geography:
1. **From anthropocentrism – to humaneness.** Traditional anthropocentric concept in geographic investigations based on practical orientation of our science for most complete satisfaction of human needs. But, such scientific approach is very utilitarian. Anthropocentrism means that the human needs are a center of scientific problems and their satisfaction is a main goal of any scientific investigation. But, geography as any other science could be involved into problems of humaneness and common to all mankind values, not individual persons. According to Voblyi (1947), geographic investigations could assist in any men perception of his role in the world, develop high esthetic, cultural, moral and living principles and also could assist in balanced natural resources usage and humanization of society.

2. **From systemness – to humanistic synergy.** Most of geographic objects are considered as complex and compound system of different components and relations. According to Preobrazhenskey (2001), it consists of ample quantity of heterogeneous elements when every one of them play its own role, has own inner relations, number of chain reactions, inner mechanism of stability and autoregulation. But most elements of geographic space are not corresponded with traditional comprehension of system, especially based on quantitative methods. Classical system in itself has no humanistic elements, so it cannot illustrate geographic reality in adequate manner. Therefore, according to Pistun (1996), geographic systems included not only material components of human activities but spiritual ones also. But, such spiritual components cannot be involved into formalizing and mechanistic concept of systemeness. Systematic paradigm that based on concepts of natural and exact sciences could be completed with new humanistic elements that will provide integral and informal approach to investigation of any object of inquiry. Every geographic landscape or complex has elements of humanistic synergy. Such elements were out of research due to imperfection of systematic approach. Therefore, according to Preobrazhenskey (2001), physical geographers could realize humanistic elements in natural investigations and also social geographers could study human geography firstly. According to Golubchikov (2003), geography would combine all elements from every science into one symphony, one landscape. To fell the soul of landscape, to study his music and harmonic elements is the main topics of geography.

3. **From quantitative methods – to its further qualitative analysis and humanistic interpretation.** The criticism of quantitative methods in geography had begun since the time of their introduction. Some scientists warned against wide usage of above mentioned methods because they lead to simplification of geographic reality, development of small-type applied investigations that cannot illustrate all processes and phenomena in geographic space in an adequate manner. These scientists insisted on further synthesis and qualitative analysis with creative interpretation of the received results that could complete quantitative investigations. According to American school of geographers, the strict scientific method not concludes the perception of geographic object of inquiry. Undoubtedly, the introduction of new humanitarian methods in modern geography could be possible only with wide usage of formalized methods and computer systems. But, scientific tools of geographers could not be limited only with them. Geographers would use both formalized and non-formalized methods in their investigations, both quantitative and qualitative ones with their further humanistic interpretation and predominance of universal, common to all mankind values.

4. **From territorial differentiation – to philosophic fundamentals of global geo-space.** This direction is devoted to definition of the main topics of geographic investigations and also to characteristics of geographical objects. According to Preobrazhenskey (2001), the main problem in definition of essence of geography consists in different points of view on its object of inquiry. Prof. V. Preobrazhenskey said:
“What is geography? Is it a science about complexes? Or, is it a science about territorial differentiation of any processes and phenomena on the Earth? But, if this is the case, is there is any difference from geography and geology or geophysics? May be, geography is a method of solution of different problems, e.g. for investigation of natural resources usage or economic division into districts? As for me, geography is a somehow complex + many-dimensional terrestrial = biota, peoples, space. But a lot of sciences thought that it is a question of simple processes and phenomena in three-dimensional physical space”. Therefore, geography cannot be limited by narrow bounds of perception of spatial system and relations. The bounds of geography are wider then above mentioned and extend to problems of universal comprehension of philosophic fundamentals of global geo-space with its different properties and development. These bounds provide close relations of geography with philosophy and humanities and also lay the foundation of new post-disciplinary knowledge.

Therefore, these four directions of humanization in geography described above would determine gradual transfer from systematic to humanistic paradigm in geography that would be based on common to all mankind values. This would allow investigating geographic reality from the position of hermeneutics.

CONCLUSIONS

Humanization of life in global society demand for development of new post-disciplinary knowledge based on humaneness and common to all mankind values in scientific investigations. Geography becomes one of the key sciences in this process because it has natural and social elements simultaneously. Its subject of inquiry includes both of above mentioned components. Geographic investigations transgress the bounds of formalized systematic methods of analysis of different landscapes or economic/social complexes. They could not be limited also by description of different territories, their similarities and varieties. Geographic science could develop both direction of scientific analysis (humanistic and systematic), based on common to all mankind values. Systematic paradigm could be supplement with unaccounted humanistic ideas and values that will occupy a fitting place with traditional systematic components. Humanistic elements would give to geography new characters of post-disciplinary knowledge. Humanization of geography could be possible only with wide usage of modern IT and computers systems. But it could not be limited only with quantitative methods of investigation. It could combine these methods with further humanistic investigation.

Therefore, modern geography could be based on imperative of humanistic thinking. Its great philosophic, cultural and world outlook potential occupies a fitting place among humanitarians as systematic spatial research occupies the same place among natural and exact sciences. The humanistic paradigm in geographic investigations will assist in reduction of systematic mechanistic approach and allow developing new conceptual fundamentals of our science that will keep elements of lost scientific unity and begin the basis of the development of new post-disciplinary knowledge.

REFERENCES


Hettner, A. (1930) *Geography, its History, Essence and Methods*. Gosizdat, Leningrad


Voblyi, K. (1947) *Organization of Scientist’s Work*. Ukrainian SSR Academy of Science publishing house, Kyiv


ACKNOWLEDGEMENTS

The author is grateful to senior lecturer Tatyana I. Shparaga and professor Stepan I. Ischuk for fruitful discussions and comments on the earlier drafts as well as to Dr. Vladyslav Kravchenko for invaluable assistance.