

beings. Likewise, the oil and gas fields have to increase the accuracy with new advancements and innovations that will, help the oil and gas fields to maintain the accuracy and these oil and gas fields will be converted to digital oil fields to AI oil and gas filed.

Reference

- [1] Wang XL (2017) Application of artificial intelligence in oil and gas industry. *Mod Inf Technol* 3(1):117–119 Gilman H, Nordtvedt J E (2014) Intelligent energy: the past, the present, and the future. In: SPE intelligent energy conference & exhibition, 1–3 April. Society of Petroleum Engineers, Utrecht, pp 185–190
- [2] Yu WJ (2016) On the development trend and necessity of intelligent oilfield. *Sci Wealth* 10:500 Shi YJ (2016) Analysis of the research status of intelligent oilfield in China. *Straits Technol Ind* 12:81–8
- [3] Wang XL (2017) Application of artificial intelligence in oil and gas industry. *Mod Inf Technol* 3(1):117–119 2.
- [4] Gilman H, Nordtvedt J E (2014) Intelligent energy: the past, the present, and the future. In: SPE intelligent energy conference & exhibition, 1–3 April. Society of Petroleum Engineers, Utrecht, pp 185–190 3.
- [5] Yu WJ (2016) On the development trend and necessity of intel-ligent oilfield. *Sci Wealth* 10:500 4. Shi YJ (2016) Analysis of the research status of intelligent oilfield in China. *Straits Technol Ind* 12:81–8
- [6] Liu W, Yan N (2018) Application and influence of artificial integence in petroleum engineering area. *Pet Technol Forum* 4:32–40
- [7] Li DW, Shi GR (2018) Optimization of common data mining algorithms for petroleum exploration and development. *Acta Pet Sin* 39(2):240–246 Giuliani M, Cadei L, Montini M et al (2018) Hybrid artificial intelligence techniques for automatic simulation models matching with field data. In: Abu Dhabi international petroleum exhibition & conference, 12–15 November. Society of Petroleum Engineers, Abu Dhabi, pp 1–11 Hojageldiyev D (2018) Artificial intelligence in HSE. In: Abu Dhabi international petroleum exhibition & conference, 12–15
- [8] Liu W, Yan N (2018) Application and influence of artificial intelli-gence in petroleum engineering area. *Pet Technol Forum* 4:32–40
- [9] Li DW, Shi GR (2018) Optimization of common data mining algo-rithms for petroleum exploration and development. *Acta Pet Sin* 39(2):240–246
- [10] Giuliani M, Cadei L, Montini M et al (2018) Hybrid artificial intelligence techniques for automatic simulation models matching with field data. In: Abu Dhabi international petroleum exhibition & conference, 12–15 November. Society of Petroleum Engineers, Abu Dhabi, pp 1–11
- [11]Hojageldiyev D (2018) Artificial intelligence in HSE. In: Abu Dhabi international petroleum exhibition & conference, 12–15

THE ROLE OF THE BRAIN IN COGNITION OF THE SURROUNDING WORLD AND SYNERGETIC ANALYSIS OF INTELLECTUAL FORECASTING OF EVENTS

**Hasanova A. M.,
Azerbaijan State Pedagogical University**

Abstract

The concept of "natural-scientific picture of the world" as a category in science appeared in the middle of the XX century. Scientific abstraction was expressed as a pictorial analogy of the world with its

totality. The main feature of this picture in its entirety reflected the objective universe, on our planet originated life, the universe, megalaxies and other unusual objects.

The phenomenon of man in the universe is a phenomenon of the biosphere, a manifestation of the dialectics of part and whole. They are a necessary factor in the emergence of synergetics, the carrier of the tendency of synergetics as an interdisciplinary synthesis. Complex perceptions of a complex world must come from human thinking in the face of global natural disasters. Forecasts, risks, scenarios must be established for each location.

Keywords: environment, role of brain, intellectual forecasting, synergetic analysis

Introduction

The word attractor in English means "to attract to oneself" and in synergetics it is the set of states that attract a dynamical system to itself. There are different types of attractors. We also think it is important to explain the term "singularity". The term was coined by Werner in 1993, from the singular word "singularis" in Latin, denoting the unity of essence, phenomenon and manifestation. The term refers to the explosion of nanotechnology, biotechnology, and computer technology. The Singularity can also be noted as an unprecedented event in human history, opening the way to virtual infinite possibilities for this life. At the end of this path stands artificial intelligence. The result of our reasoning is that the singularity is the path of all levels of organization of matter in the Universe, that is, physical, chemical and biological levels leading to intelligence [1].

Biology lessons should provide a scientific-synergetic explanation of understanding the world around us. This direction contributes to the formation of students' scientific worldview, the correct approach to the direction of the flow of life. Worldview is a kind of guide to human life, a kind of compass that directs the life position of the individual. Worldview is a set of generalized socio-moral, scientific, political principles, norms and views that reflect the human attitude to reality and regulate its functioning [3].

The essence of worldview, its structural components, types, etc. Despite the fact that in philosophical science about it is expressed a lot of opinions, some contradictory, controversial positions in this area remain even now.

Worldview is a system of generalized views, ideals, attitudes, beliefs and principles about the world around man, man's attitude to himself, nature and society, the place and position of himself in the world. Worldview is the views, ideas and norms that determine the attitude of an individual, social group, class, society as a whole to reality and the direction of activity. In other words, worldview is a view of the objective world, as well as the place and role of man in it. These are such views that justify and guide a person's life position, his beliefs, ideas, cognitions and activities, and inclination to wealth [2].

Worldview is a generalized scientific, philosophical, political, religious, atheistic, moral, aesthetic, etc. view of phenomena and processes, development and driving forces of nature, society and thinking. it is an expression of views. The subject of worldview is a person.

Synergetics is the science of complexity. Synergetics helps to solve global problems that have arisen as a result of human activity in the modern era, to find a way out in a crisis. In the information multitude of modernity, philosophical methodological scientific contradictions have naturally grown into linguistic and terminological contradictions. In the hypothesis put forward by the English scientist-mathematician Roger Penrose, an attempt was made to give human consciousness a quantum character, to compare the processes of spirit, idea, consciousness, understanding with physical processes [5].

It is necessary to create a synergetic model of a teacher with the formation of evolutionary-synergetic worldview of the young generation of modernity and matrix-level view of the world.

Synergetic approach studies the results of sciences about nature, society and man, linking different branches of science, integrative models in a system-functional way, i.e. holistic (holistic) approach to the universe. The problems of vital importance for the existence of mankind in the modern era and on which social progress depends are called global problems.

The criterion of global problems is analyzed in different ways. According to the first position, "global problems" are defined by the following criteria:

- a) the broadest in scale and significance, very important, covering all countries of the world;
- b) bearing a synthetic essence, covering all spheres;
- c) having a universal, planetary, international character.

According to the second position, when defining "global problems" the following four characteristics should be taken as a basis:

- a) those events that are "global" are so contradictory that they hinder social progress and threaten the destruction of civilization;
- b) they affect the interests of all peoples and states, the whole of humanity;
- c) they carry a socio-natural and biosocial essence, combining social and natural processes;
- d) their solution requires collective control, international cooperation.

Global problems in the modern era can be grouped as follows:

- a) socio-economic, socio-political global problems that threaten planetary humanity: the problem of war and peace, militarization, economic disasters, etc.
- b) global problems of planetary natural threat: nature protection and its rational use;
- c) emerging demographic-spiritual global problems related to population growth and moral decay: rapid population growth and poor livelihood development.

A certain part of modern global problems has arisen as a result of violation of regularities of equilibrium in the interaction of nature-society, nature-human. They can be called "ecological crisis", which arose in the conditions of modern social and scientific-technical progress: nature, water, soil, air are being polluted at an increasing rate, and man is jeopardizing his existence.

At present, in natural-human relations there is a need to form a new ecological thinking, ecological worldview. F.Engels in his work "Dialectics of Nature" repeatedly noted that the greatness of man is that he studies the regularities of nature, makes nature obey its goals.

At all times, the existence and development of society occurs in inseparable connection with nature, in unity. In this sense, nature is a permanent and necessary condition for the existence of society, without nature, society does not exist. In our time, the tension in the nature-society-human relations is steadily growing. The ecological crisis seriously threatens the future existence of civilization. Therefore, its solution is devastating and necessary.

Russian naturalist Ivan Pavlov is the founder of the objective, experimental method of studying conditional and unconditional reflexes in the nervous activity of animals and humans. Studying the basic regularities and mechanisms of brain activity by the method of conditioned and unconditional reflexes, he proved the existence of a second signal system peculiar to man (higher nervous activity belongs to man).

Pavlov's doctrine is one of the most important foundations of materialistic modern psychology and dialectical-materialistic theory of inikas. Research works of Pavlov and his school also have theoretical significance in the development and creation of cybernetic devices [4, 6].

Man is a biosociological, psychological being, he comprehends this world with the help of intellect. From the point of view of objective and subjective image, intellect is a being that controls everything.

Conclusion

From a quantum point of view, when a person thinks something, he radiates his energy into the environment, whatever the brain adapts to, most of the energy is also directed there and radiates corresponding waves. Whichever of these waves is stronger, that is, carrying more energy, this wave merges faster with the total energy of the universe, and it becomes more possible to revive (realize) the event that the person realizes. The person himself should try his best and embody it in his head in the most beautiful form, a kind of visualization

References

- [1] A.M.Hasanova, R.A.Rustamli, social-synergetic concepts of modern natural science., Baku, publishing house of AGPU, 2021.
- [2] Banzhaf W., Beslon, S. Christensen, J.A. Foster, F. Kepes, V. Lefort, J.F. Miller, M. Radman and J.J. Ramsden. 2006. From artificial evolution to computational evolution: a research agenda. Nature Reviews Genetics 7 (9): 729–35.
- [3] Hazen, Robert M. 2006. Genesis: The Scientific Quest for Life’s Origins. Washington, DC: Joseph Henry Press.
- [4] Cela-Conde, Camilo J. and Francisco J. Ayala. 2007. Human Evolution: Trails from the Past. New York: Oxford University Press.
- [5] Tyson, Neil D. 2007. Death by Black Hole: And Other Cosmic Quandaries. New York: W. W. Norton.
- [6] Boden M.A. AI: Its Nature and Future. Oxford: Oxford University Press; 2016. 64.Collins H. Artificial Intelligence: Against Humanity’s Surrender to Computers. Cambridge: Polity Press; 2018.

SƏNAYE ROBOTLARININ TƏDQIQINDƏ QEYRI-SƏLİS MƏNTİQİN TƏTBİQİ

Məmmədova Bilqeyis

Azərbaycan Dövlət Neft və Sənaye Universiteti

Abstract

Bu məqalədə real vaxt rejimində faktiki sənaye robotunu idarə etmək üçün qeyri-səlis məntiqin tətbiqi təsvir edilmişdir. Həmçinin nəzarət alqoritminin real vaxt rejimində həyata keçirilməsi zamanı yaranan müvafiq məsələlər və çətinliklər müzakirə olunur. Yaranmış problemlərin praktiki həlli üçün təkliflər verilir. Məqalədə qeyri-səlis nəzarətçilərin dizaynı, giriş və çıxış dəyişənlərinin müəyyən edilməsi, qeyri-səlis çoxluqların sayını təyin etmək üçün mütənasib xəritələşmə haqqında ətraflı məlumat verilir. Qeyri-səlis qaydalar bazası sistemi və qeyri-səlis nəticəçıxarma mexanizmi haqqında məljumat verilir, qeyri-səlisləşdirmə təqdim olunur. Sənaye robotları üçün qeyri-səlis idarəetmə sisteminin təkmilləşdirilməsi və inkişaf etdirilməsi üsullarından istifadənin perspektivləri də müzakirə olunur. Bu məqalədəki məlumatlar sənaye robotlarına, eləcə də ümumi robot idarəetməsinə tətbiq üçün qeyri-səlis məntiqə əsaslanan nəzarətçi dizaynlarının həyata keçirilməsinə rəhbərlik etmək üçün nəzərdə tutulmuşdur. Yekun olaraq, bu məqalə faktiki sənaye robotunu idarə etmək üçün qeyri-səlis məntiqin tətbiqi metodologiyasını təqdim edir.

Açar sözlər: qeyri-səlis məntiq, robot, mexaniki emal, idarəetmə, linqvistik dəyişən, qeyri-səlis çoxluq.

Giriş

Məlum olduğu kimi, mürəkkəb quruluşa görə robotun dinamik modelini çox vaxt tam və dəqiq müəyyən etmək mürəkkəb olur. Mexanik emal robotları ilə, zamanla manipulyasiyaya görə, kəsici qüvvə, sürtünmə qüvvəsi, vibrasiya və s. kimi bəzi dinamik parametrlər tez-tez qeyri-müəyyən şəkildə dəyişir. İdarəetmə üsullarına qeyri-səlis məntiqin tətbiqi geniş şəkildə öyrənilmişdir[1]. Qeyri-səlis məntiqə əsaslanan idarəetmənin üstünlüyü sadəlik və icra asanlığıdır. Dinamik modellərin müəyyən edilməsində və hesablanmasında yaranan çətinlikləri aradan qaldırmaq məqsədilə nəzarətçilərin qurulmasının bir sıra metodları öyrənilmiş və tətbiq edilmişdir.

Qeyri-səlis məntiqin idarəetmə üsullarına tətbiqi geniş şəkildə öyrənilmiş və tətbiq edilmişdir. Qeyri-səlis məntiqə əsaslanan idarəetmənin üstünlüyü sadəlik və icra asanlığıdır. İnsan fəaliyyətində dünyanı təmsil etmək, məlumat ötürmək və emal etmək, qərar qəbul etmək və ya tapşırıqları yerinə yetirmək və s. üçün dildən istifadə etmək olar, məntiqi mülahizə qaydaları, həmçinin obyektlər toplusu linqvistik formada təqdim olunur.