

Artículo de investigación

Magic and Power (Technological Foundations)

Магия и власть (технологические основы)

Magia y poder (base tecnológica)

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https://elibrary.ru/author_items.asp?authorid=617154**Abstract**

The authors of the article examine historical regularities in the evolution of power technologies in the context of non-positivistic philosophical ideas of the 20th century. These philosophical beliefs imply an intuitive understanding of power, deal with the formation of psychological mechanisms of the domination-subordination relations and describe their development. The authors pay special attention to magical and sacred aspects at the early stages of political development, as well as the subsequent formation of power structures and organization of administrative functions. At the present stage of social development, the digitalization of state and political activity is of great importance. The forming order of domination and subordination, as well as power relations, initially comprise magical elements allowing a person or a group of individuals to manipulate others' behavior. Modern digital technologies find their origins in centuries-long traditions either consciously or unconsciously. The need for managerial influence overcoming social chaos is objective. As a result, the state rationalizes the management of society, organizes its administrative functions and develops a more advanced technology of

Аннотация

Исследуются исторические закономерности эволюции властных технологий в традиции непозитивистских философских направлений XX в., которые предполагают интуитивное осмысление сущности власти, обращают внимание на формирование психологических механизмов отношений власти и подчинения, на эволюцию этих отношений. Здесь имеют значение аспекты магического и сакрального на ранних этапах политического развития, последующее формирование структур власти и организационное оформление управленческих функций. На современном этапе развития общества принципиальны процессы цифровизации государства и политической деятельности. Складывающемуся порядку господства и подчинения, властеотношениям изначально присущи элементы магического, позволяющие одному или немногим манипулировать поведением всех. Современные цифровые технологии сознательно или неосознанно черпают свою уверенность в традиции, теряющейся в далеком прошлом. Необходимость управленческого воздействия,

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political power. However, people's dependence on technology is connected with decreasing interpersonal cooperation, growing individual dependence on power and other negative experiences. The modern humanities aim to determine regularities in the evolution of political power technologies and overcome the negative consequences of modern power technologization.

Keywords: power, state, magic and power, ruling machine, power technologies, power digitalization.

преодолевающего социальный хаос, является объективной. Впоследствии государство рационализирует управление обществом, организационно оформляет управленческие функции, создает более совершенную технологию политической власти. Но зависимость людей от техники и технологии сопровождается уменьшением межличностной солидарности, увеличением зависимости человека от власти, негативными переживаниями по этому поводу. Задача современной гуманитарной науки видится в выявлении закономерностей эволюции технологий политической власти, в преодолении негативных последствий современной технологизации власти.

Ключевые слова: власть, государство, магия и власть, машина власти, технология власти, цифровизация власти.

Resumen

El autor estudia las leyes históricas de la evolución de las tecnologías de poder en la tradición de las tendencias filosóficas no positivistas del siglo XX, que presuponen una comprensión intuitiva de la esencia del poder, prestan atención a la formación de mecanismos psicológicos de relaciones de poder y subordinación, la evolución de estas relaciones. Aquí son importantes los aspectos de lo mágico y lo sagrado en las primeras etapas del desarrollo político, la posterior formación de estructuras de poder y el diseño organizativo de las funciones administrativas. En la etapa actual del desarrollo de la sociedad, los procesos de digitalización del estado y la actividad política son fundamentales. El orden emergente de dominación y subordinación, las relaciones de poder son inherentemente inherentes a los elementos de la magia, permitiendo que uno o unos pocos manipulen el comportamiento de todos. Las tecnologías digitales modernas sacan consciente o inconscientemente su confianza en la tradición, perdida en el pasado distante. La necesidad de influencia gerencial para superar el caos social es objetiva. Posteriormente, el estado racionaliza la gestión de la sociedad, organiza funciones administrativas, crea una tecnología más avanzada de poder político. Pero la dependencia de la gente de la tecnología y la tecnología está acompañada por una disminución en la solidaridad interpersonal, un aumento en la dependencia de la persona del poder y experiencias negativas sobre esto. La tarea de las humanidades modernas se ve en la identificación de las leyes de la evolución de las tecnologías de poder político, en la superación de las consecuencias negativas de la moderna tecnologización del poder.

Palabras clave: poder, estado, magia y poder, máquina de poder, tecnología de poder, digitalización de poder.

Introduction

The 20th century is characterized by new approaches to the study of power and political institutions. Traditionally, a purely institutional approach had been dominating in science and mainly aimed at studying the organization and functioning of power. The issues under study are as follows: different forms of government, the exercise of power in monarchical and republican states, the separation of powers and the organization of legislative, executive and judicial power, the classification of political regimes, the activity of political parties and other subjects of

political activity, etc. Non-positivistic philosophical ideas of the 20th century imply an intuitive understanding of power, deal with the formation of psychological mechanisms of the domination-subordination relations and describe their development. In this regard, we should pay special attention to magical and sacred aspects at the early stages of political development, as well as the subsequent formation of power structures and organization of administrative functions. At the present stage of social development, the digitalization of state (Kirillova, Bogdan, 2018)

and political activity is of great importance. Many of the above-mentioned issues were covered in the works of G. Becker ("The Modern Theory of the Spiritual and Secular, and Its Development"), J. Baudrillard ("Fatal Strategies"), A. Weber ("Farewell to European History"), R. Guénon ("The Reign of Quantity and the Signs of the Times"), G. Gurvich ("Magic and Law"), R. Debray ("Introduction to Medialogy") (2010), L. Mumford ("The Myth of the Machine"), G. Marseille ("People Against Humane"), M. Moss ("Social Functions of the Sacred"), B. Russell ("Wisdom of the West"), M. Heidegger ("Being and Time"), F.G. Jünger ("Language and Thinking"), etc. Based on the above-mentioned scientific works, this study contributes to the further phenomenological understanding of political power.

Methods

Political and legal research concerned with the study of the state, domination and subordination traditionally uses positivistic methods, which examine specific facts and regularities of objective reality. In general, we also utilized many specific scientific methods, including sociological, comparative-legal, historical, logical, systemic, structural-functional, etc. Furthermore, the methodological basis of the arguments presented in this article is formed by non-positivistic philosophical ideas of the 20th century (phenomenology, structuralism, etc.) that do not really explain cause-and-effect relations but rather offer intuitive insight into the phenomenon under study.

Results

Introduction: power and mathematics

A "digit" is the very magical word from the so-called technocratic "newspeak", around which all modern cultural and political discourses are built. In the 18th century, this word was associated with the idea of almighty statistics as a way of overcoming chaos and irregularity. Nowadays, all spheres and relations of social life are being "digitized". Scientists mention "digital economy" and even "e-government" (Kankanhalli et al., 2019; Gaspareniene et al., 2016).

"A digit having a metaphysical meaning is not just a figure". It is more like a symbol or a magical technique of perception and control. While the magic of numbers supported by Pythagoras and Plato filled digits with qualitative content and turned them into substance or a "thing", numbers are better to be analyzed from the quantitative perspective.

Quantities can be both discrete (numbers) and continuous (expressed by spatial and temporal variables). Measures literally refer to the sphere of a continuous quantity, i.e. to things having a spatial meaning. "The idea of measure is closely connected with the idea of order [...] it is the creation of order from chaos", something opposite to the cosmos that is indefinite, identified with "darkness" and the substantial aspect of the world. It is the exact place where a typical product of the modern world (the machine) demonstrating the predominance of quantity over quality is located (Guénon, 1994).

In this case, numbers are signified and digits are signifying. Being a symbol, a digit expresses not only the quantity of some number but also its significance and value. Therefore, digitization is not only the process of ciphering some content but also the designation of ranks, degrees, levels, i.e. the hierarchy of structure. Calculation identifies real relations and entities in nature and then forms their numerical analogues, while "digitization" imposes its quantitative order on the qualitative reality of the existing relations and links (Oppenheimer, 2014). "A digit becomes the defining symbol and mantra of modern science that strives to overcome the natural disorder through the formation of digital order born out of chaos".

F. Bacon's equation "knowledge is power" is a manifest of winners conquering nature.

Magical technologies, including all creative processes without any exception ("every action comprises some magical elements"), ambitiously tried to transform inorganic natural elements into organic, non-living things into living ones. People sought to obtain all the things they did not receive from nature at their birth through the use of technologies. The first of these technologies was "sympathetic magic".

A "digit" is a concept from the technocratic vocabulary. Modern digital technologies find their origins in centuries-long traditions either consciously or unconsciously. For example, Kabbalistic studies and procedures regarded digits as a real force capable of transforming reality. R. Llull's medieval logic machines opened new horizons for digitizing. Using the method of calculation, pragmatic astrology suggested changing an optional future of kings and entire states. Harmonistic sciences based on calculation and digitization were most widely used during the Renaissance when they started using mechanical equipment as their instrument.

The creation of machines was directly connected with the mathematization of life and science.

Except for disclosure and detection, calculation means the creation (in fact, artificial creation) of a new reality. This process follows certain rules and launches new processes in all spheres of life, both organic and inorganic. However, it plays a key role in the technical field, where calculation and digits form the very spirit and essence of technology: technology is formed with the help of numbers to produce numbers. (Robert Musil in "The Man without Qualities" remarked, "Mathematics has taken possession, like a demon, of every aspect of our lives... Mathematics is the source of an evil intelligence that while making man the lord of the earth has also made him the slave of his machines. Their inner drought, the dreadful blend of acuity in matters of detail and indifference toward the whole..., his restlessness, malice..., money-grabbing, coldness, and violence, all so characteristic of our times, are by these accounts solely the consequence of damage done to the soul by keen logical thinking! Mathematics, the mother of natural science and grandmother of technology, was also the primordial mother of the spirit that eventually gave rise to poison gas and warplanes" (Musil, 1984).

There was an antique trend to record both infinitely small and infinitely huge quantities in digits. In this regard, digits acquire another value, i.e. they become related to metaphysics. E. Jünger asked, "Should the physics itself change in this case? Should it acquire a magical character?" Consequently, accidents also acquire a different meaning: it was previously associated with some unpredictable factors and the idea of doom, today it is closely connected with the counted world of digits (Evola, 2005).

Mathematics conducts the exact recalculation of probabilities, i.e. it focuses on foresight, manifests itself as a "process" and deals not with traditions but rather the stability of any given system. Such a system begins functioning for itself and its future.

In fact, the mechanization and mathematization of life gave long-standing "ruling machines" a truly machine-like character. Within their structure, technical elements were increasingly replacing human components. The former humanitarian and organic ties were replaced with technical and ethical-neutral methods (Howes, 2001). Any ruling machine tries to look impartial and objective. In the course of making actions

and decisions, such a machine is not prone to predestination but cannot avoid accidents.

On the contrary, many objects develop according to their destiny, which "interconnects all things, including numbers, without any exception". This fundamental rule of "the secretly conjugated world, ... and all of its forms, according to their fate, helps us accept arbitrary conditions of the game (its specific rules) with ceremonial (rather than contractual like in the exchange regulated by law) goals as a completely conventional ritual, where absolute need is considered the basis of game expectations – not without a hint of irony, but still" (Baudrillard, 2017).

There is an old sociological aphorism that says, "Knowledge for the sake of prediction, prediction is for the sake of control". Magic-oriented thinking assumes the prediction and control manifested in natural laws are the result of human activity: "man creates his own "laws of nature" rather than reveals formulas of the Divine Mathematician. This conclusion is valid not only for science but also for mathematics regardless of a mysterious correspondence between mathematical symbols and the events they represent" (Bekker, Boskov, 1961).

In the epoch of the Renaissance, people started to understand the digital structure of things and decided they a new power over those around them: it made a person God-like or the "Higher Mathematician", according to the Pythagoreans. If a person can use or improve their mathematical abilities to some extent, they become closer to the divine order.

During the Renaissance, representatives of Neo-Pythagoreanism and Neo-Platonism realized that numerical models could be noticed by anyone who paid them enough attention. However, violations of measure gave rise to mathematical mysticism that relied on the understanding of numbers as magical symbols. Bertrand Russell predicted, "This romantic revolt against rules and criteria can equally well happen today, but return to some principles described by the Renaissance is also possible. This is a real opportunity for the near future" (Russel, 1998). The magic of numbers attracts human interest and convinces people in the undeniable accuracy of numbers and the aesthetics of digital laconism. It seems that digits have a larger semantic capacity than a word. Being signs, digits are more laconic in text and, as it turned out, in time.

This is the laconism of orders in contrast to the laconism of descriptions and explanations. The

government chooses a language common to machines working on the principle of saving forces and energy.

In the past, creators of the first megamachine drew their strength and power from a transcendent celestial source. The cosmic order became the basis of this human order: "Accurate measurements, the abstract system of mechanics and the compulsory orderliness of the actions of this megamachine originated in astronomical observation and scientific calculation". Collective security and collectively attained abundance certainly served as incentives. While bringing nature under control, ruling machines also bend people to submission and turn them into the basic element of a machine or some substance borrowed from nature. Thus, people entered the rationalized area of calculation.

With the advent of megatechnics, a dominant minority creates a kind of cyclic, all-encompassing and out-of-earth structure for automatic operation. "According to modern technocratic interpretations of people and their role, many inherent functions will be either absorbed by machines or severely limited and controlled in favor of anonymous collective organizations. To a large extent, this interpretation was associated with the erroneous combination of the mechanical process typical of a given society and the unjustified feeling of growing moral superiority (Mumford, 2001). "Ruling machines" that gradually became more complicated needed appropriate sacralization (Çaksu, 2012; Carpi, 2015; Joas, 2016) and formed more and more complex ideological justifications for this purpose (Ibneyeva, 2017).

The esoteric tradition of Kabbalah connected numbers with some kind of spiritual or cosmic power. The creation of the alphabet and the representation of numbers equated with the creation of the world. Based on the law of analogy and correspondences between various plans of the Universe, the Kabbalists viewed the form, number and value of letters and digits not as an algorithm but as real forces.

Considering this concept, Pythagoras said that everything in the world existed through a number and that numbers determine the pure and simple virtue of different beings. Boethius was convinced that the arrangement was based on the connection of numbers: the numbers themselves contain sublime virtues. "The forces associated with numbers are so glorious and effective that these numbers are the closest ... to heavenly things" and divine ideas. Plato also gave numbers

a high epic meaning. However, Plato and Augustine believed that numbers had some hidden virtue, whose reality was significant both for good and for evil (Papus, 1998).

Science in its pure form and various application can contain estimates related to prediction and control. "The science itself can be angelic or devilish" (G. Bekker).

However, the so-called "Homo Faber" turned out to be "a superficial person, with the mind confined to few known objects and crude geometrical forms: even such a divine form as a sphere had no center for them and was regarded as a leaf connecting two rounded palms" (G. Butler). Homo Faber might fall into the area of dark forces and fit there with their technologies.

The human component in megamachines simultaneously filled them with irrational qualities and insistently demanded rational decisions. The introduction of technical principles only aggravated this discrepancy since these principles later formed the basis for science and specific knowledge. At the same time, the increasing complexity of megamachines required centralized management when rational technical justifications are accompanied by the irrational sacralization of the control center, whose role was being claimed by the government machine and its leader. As the symbolic concentration of consistent rationality, science was considered valuable because it promised to society the easy achievement of non-rational and even irrational goals (G. Bekker). "Nowadays the prenatal has completely superseded the supernatural but it is surprising to observe how often their differences are erased throughout the leader's life". The leader is endowed with supernatural power, while securitization launches new sacralization and brings to life ideology that makes class-consciousness, nationalism or democracy closer to religion (Bekker, Boskov, 1961; Davidson, 1899; Grigoriadis, 2016).

To count means to demonstrate one's power over elements of digital reality. While selecting the objects to be counted, the subject reveals their liberal will and evaluates these objects as homogeneous. The real power of statistics as the dominant technology of the 17th century was enclosed in selectivity that somehow influenced the result. People do not check statistics – they trust it. Therefore, the state power that tries hold to the monopoly of statistics does not encourage independent statistical studies. The one who counts controls all the processes. Since ancient times all political technologies have been

revolving around the counting procedure. In this sense, management technologies are manipulations with digits.

In the 17th century, the scientific mathematical thinking fostered by the state broke other interconnections. As a result, the former theological worldview shattered and faded, as well as the inner vision of the world because its constancy "was built over the basic axioms of this geometrical-mathematical vision of the world moving between some particular point and infinity".

This new dogmatization of political power, depth-related problems and the emergence of the mathematical worldview undermined conventions of the newly formed classical and baroque society, which was "consciously filled with randomized Christianity". Pascal remarked, "All societies, as well as states, are nothing but a custom, a bad compromise to avoid chaos". Justice comprises everything that is meaningful; the order of the day determines both pleasure and justice. "Since justice could not be forced upon, violence was made just, and justice and violence went side by side". Therefore, justice is a distinguishing feature, i.e. all changes, including temporal ones. This concept was proposed by the great mathematician and inventor of the adding machine (Weber, 1998).

The Pythagoreans believed that the "great monad" (unit) influenced the creative "diad": as soon as it is manifested, the initial principle becomes double – the indivisible essence, inexhaustible infinity and earthly, manifested substance. "One is the allegory of activity; two is the object influenced by some action of mother, nature or the world. The product of this active and passive dialectical unity, which introduces a gap into the fullness of being, is a phenomenon of the world creation. The number "3" is the key to the analogy between the macrocosmos and the microcosmos. Arithmology is represented as the ideological source of the modern computer binary system. Machines consist of several switching devices, where the activation of the subsequent switch depends on certain combinations of the preceding switches connected to it and turned on at the same time. These "all-or-nothing" devices are called digital machines (N. Wiener "Cybernetics and Society").

The magic of numbers made social sciences believe in the possibility of knowing the world, which can be controlled through these sciences. Numbers became the rational basis of political

activity. The power of the "ruling machines" increased proportionately with the quantitative accumulation of state power (territory expansion, growing population, capital growth, etc.). Therefore, modern science was based on the mathematical principle and this belief in numbers had been maintained for too long. Mathematical knowledge became associated with general knowledge. If knowledge grew to be "power", it was primarily the merit of mathematics.

Magic as the first power technology

René Guénon's "reign of quantity" and "information society" seem to have the same origin. To count something means to establish one's cognitive power over it: "numbers partially become matter" (Thomas Aquinas).

According to Mircea Eliade, "to do" something means to cognize a logical formula which helps to depict this something or spontaneously make it real. Thus, an artisan becomes a connoisseur of the secret, i.e. a magician. People living during the Renaissance and technological renovation of Europe saw magic as something incompatible with technology. For instance, Tommaso Campanella considered technology and magic to be sisters – magic served as a real incentive for the technological conquest of the world (Dimitriev, 1999).

Magical actions had been the center of different human activities for a long time. Marsilio Ficino and Giovanni Pico della Mirandola shared this opinion. Based on the magical-alchemical instructions of his predecessors, Francis Bacon defined science as the force and activity aimed at conquering nature. G. Leibniz followed in the footsteps of scholars from Lullius to Bruno and used the Kabbalistic sacraments to find a logical key that would unlock all secrets. Even Descartes turned to Lullius' calculations to discover finally a "wonderful basis" for the art of solving all problems (Weber, 1999).

According to T. Campanella, all sciences exploring the structure of reality used magic as a practical activity. They transformed nature by following its inner laws through technical ingenuity capable of influencing nature in the first place.

All levels of human society represent nothing more but magic in action: after all, every creature involved in magical relationships participates in a certain magical process. After comprehending this mechanism, materializers understood that "the world was nothing but a mould of the

automatic line". It observes the current developments to gain some benefit.

In this new reality, the process itself developed for the sake of the process. Economy, purpose and meaning existed only in one's imagination as formless and utopian phenomena, while "the flora and fauna of producing monads came to the forefront, everything hid behind functions and formulas. It was the end of nature and the end of history. The former realities (space and time) turned into functions of formulas... Even the most precise forces (state and society) became a mechanism unintelligible by this process" (Benn, 2011).

There are always some magical forces behind the laws of similarity and analogy, these magical forces are backed by a magical environment and supernatural forces lay the foundations of demonology. In this case, we are talking about power, magical potential and the intensity of supernatural forces, i.e. mana that partially precedes magical rituals, is being created in its course and constantly updated by magicians (Moss, Hubert, 2000). Mana can be both collective and individual penetrating things and people like the hypothetical "aether" that was crucial for physicists of the 19th century. (Thus, acts of exchange refresh the sense of ownership of alienable things since the right of ownership is formed by the penetration of things by the subject's mana and its relations with others, which consist in the alienation and redistribution of these things (Gurvich, 2004). Thanks to ubiquitous presence, mana as a power-related environment became universal energy for management technologies. Magicians worked with objects purposefully and rationally and relied on the "sympathetic" interaction of things and people: to understand and subjugate another person or object, one needs to "enter it".

According to Giordano Bruno, the process of influencing people and society directly or through appealing to "powerful invisible beings" (demons or heroes) was described as "binding". G. Bruno was the first to develop the concept of magic and consider it as a science and psychological tool for manipulating masses and individuals: "The knowledge of corresponding bonds allows magicians to fulfill their dream and become the lord of the world; then they become capable of commanding nature and human society however and whenever they want".

N. Machiavelli's "Prince" was the ancestor of a political adventurer, while the magician from Bruno's "General Account of Bonding" became

the prototype of anonymous media, global manipulation and "brainwashing mechanisms" exercising occult control over masses. He took into account all expectations to create a total illusion of "to each his own". G. Bruno himself did not really care about the protection of human dignity and recognized the only right that belongs neither to God nor to people, but to the manipulator (Culianu, 2017).

A real magician had to be able to put in order, correct and guide fantasies, as well as manage to their will. The master of memory creates their own fantasies and guides their emotions not to turn from "the master into the slave", i.e. they must distinguish between the data obtained from a fantastic source and the information transmitted by sensory organs, distinguish between the imaginary and the tangible since all the objects of the surrounding world are manipulable. The performer has means at their disposal to forge all the chains they want: hope, compassion, fear, love, hate, indignation, anger, disdain for life and death. G. Bruno determined the main sources of communication, the "bond of bonds": eros, imagination and faith. The magician uses natural inclinations and cravings to create lasting bonds and bend a person or a group to their will (Culianu, 2017). (On the eve of World War II, in June 1939, the leading authors of the mysterious "College of Sociology" gave affirmative answers to the question from a respected journal: "Have there always been leaders of consciousness in the West?" However, the aspect of political magic could vary (College of Sociology, 2004).

"It is all the easier to enchain people who have less knowledge. In them, the soul opens in such a way that it makes room for the passage of impressions aroused by the performer's techniques". The manipulator puts much less effort in manipulating masses than individuals. (The relevance of these problems is obvious. I.P. Culianu noted, "Nowadays the magician busies himself with public relations, propaganda, market research, sociological surveys, information and counterinformation... In vain the historians have made a conclusion about the disappearance of magic with the development of exact sciences".) Science only slowed down some part of the magic as a continuation of its dreams and aspirations, using its technical means... Planes and computers only fulfilled the promises once made by magic... It can be said that technology is democratic magic allowing everyone to enjoy "extraordinary opportunities once available only to magicians" (Culianu, 2017).

I. Newton's law of gravity is consistent with the principle of "mutual sympathy" among things, which is fundamental to magical technologies. Many scientific studies emphasized the interconnectedness and interaction of objects taking the following principle as an axiom: "The current state of bodies is determined by external bodies. If the latter are eliminated, other bodies cease to be what they seem to us" (John Locke). There is no empty space. Both R. Descartes and I. Newton stated, "It is impossible to imagine that rough and inanimate matter could act and influence other matter without mutual contact or the help of something material" (I. Newton). Thus, the idea of "subtle matter" was formed having its origin in the aether of the Stoics. This connection between the celestial and terrestrial spheres could be discovered with the help of mathematics, which was understood as the universal science of order, relations and structures (Dimitriev, 1999).

Although power always comes from the outside, as the power of the whole, it is revealed in deeds and actions of those who exercise it and those to whom it is directed. Gradually power is concentrated in the hands of a few or even one individual. Then power can simply become one's desire as it happens in case of tyranny. Power is separated between dreams and rulers. This result was predetermined the very magical technologies of power and control. J. Frazer wrote that magicians who became kings gradually turned into royal priests and living gods. Once magic was pushed into the background, professional magicians began to supply society with scientists.

The victory of functions

Eugenio Garin believed that "scientific rationality belonged to the sphere of theology rather than impulses caused by the unreality of evil, pressing on the "pillars of order" and emitted by the magic that produced them, explored, tested and used. Rational structures of the theologized worldview and extreme rationalism destroyed reality and opposed logical, conceptual and clear aspects to the mobile fragility of life: "the monotony and severity of laws against the absurdness of miracles". Magic as autological gradation stated the connection and unity of everything in such a way that the radiance of some particular star is reflected even the most hidden place of the universe". T. Campanella and G. Bruno described the unity of vital impulses that are simultaneously the form and matter of the world as the outflow of energy creating its own orders and changing them. When knowledge and action

coincide, science serves for the endless magical preformation of everything (Garin, 1986).

"The worldview as an essential concept means not just a picture depicting the world but rather the world understood in the sense of such a picture". Things in existence become existent when they are set up by the person who represents and establishes them. "The world that has formed a worldview is typically new" (M. Heidegger), therefore the main process of the modern history is the conquest of the world as a global picture. As soon as the rationalistic "giant of planning, calculation and organization" is transformed from quantity to quality, then everything that is to be calculated becomes incalculable. "Irresponsibility as an invisible shadow hangs over all things in an era when man became a subject and the world turned into a worldview" (Heidegger, 1993).

Even if the whole world is rebuilt to its very foundations by technology characterized by unrestrained specialization, it does not mean that at least one of the important problems of human civilization will be solved. Technical development can and should have borders. Under the weight of technology, a movement can start towards a new world of stability and boundaries, new classicism of action and domination where "meanings of a higher order will be transmitted through a new integrated mechanical language".

Now people are looking for cheap solutions, which bear illusions of preventing a catastrophe through negotiations and discussions. Within the categories of "contract and society", there is an idea of a naturally good person developed by rationalistic and educational anthropology.

If a person who is "good by nature" suddenly became evil, this change was considered the guilt of environment and society. As a result, a type of ordinary person emerged who had no great or outstanding qualities. "People are kind but there is nothing heroic in them, they have certain responsibility to be practically useful, expedient... Everything that is tragic, fateful and irrational is depreciated, while accessible and understandable concepts are recognized". "A person does not need to fight for anything. Society, parties and masses take this responsibility. Any suffering can be overcome by environmental psychology and social methods". However, all creations are subject to science.

These two ideas destroyed all previous relationships, the substance itself and all values, i.e. this was the real nihilism of the 19th century.

"Specific subject matter tends to express itself and skip intermediate ideology, as well as masters technology directly and blatantly, while civilization [...] reverses to myth" (Benn, 2011).

M. Heidegger called aspirations that encourage people to resist nature through modern technology "enframing". In his opinion, modern physics is a forerunner of "enframing": objectivity is determined but it does not necessarily mean that nature "is still capable of being delivered as an information system". The thoughtless use of technology or its ineffective perception leads to the disappearance of the truth in certain "right" phenomena: enframing "hides not only the previous forms of openness" but also distorts the truth itself.

Modern physics became a manifestation of will that aspired to dominate the world: O. Spengler remarked that the European natural science exists within the Baroque philosophy as if by itself. From the very beginning, natural sciences had not been servants of theology but "servants of a technical will to power which is mathematically and experimentally oriented and based on practical mechanics" (Spengler, 1998).

According to M. Heidegger who extended the borders of the former man, the new European "mechanical economy", the continuous machine-like calculation of any action and planning in its unconditional form requires new humanity.

It is not enough to own military equipment and people for its maintenance. Furthermore, it is not enough to master technology as if it is something indifferent, having no use and causing no harm, incapable of construction and destruction. "We need a new type of humanity which corresponds to the unique essence of the modern European technology and its metaphysical truth", which gives technology a full control over itself. Only F. Nietzsche's "Übermensch" is capable of that since such a person needs a machine to gain unconditional control over the Earth (Heidegger, 2007).

Friedrich Jünger analyzed the concept of "enframing" used by M. Heidegger to designate not some apparatus or enterprise but a certain precondition, which enables any technical arrangement and equipment. In this regard, F. Jünger emphasized the distinction between "thingness" and "objectness": "from the legal perspective, an object is something that presupposes a person, while the materiality of that person implies that the latter is opposed to a certain world of objects. Property law is a

mandatory correlate of individual rights: objects arise from a dispute and such a dispute (regardless of causal connections) is the reason behind objects. An object is revealed as the intensification of the information said since the data said in a dispute is the cause of objects and objectness. Thus, there is something based on what was said about any given objects (Jünger, 2005).

Substantial components disappear or become invisible in ruling machines. Any difference between technology and people are lost. Functions acquire the primary value. Power technologies exclude moral and speculative (metaphysical) elements from their activity. Power "covers its face with a mask" (E. Canetti).

"When things become objects they part with their fragile and fleeting life, as well as their peculiarity because the concept of "object" is characterized by impersonality". Objects are opposed to everything personal, while things are still free from any distinction between a person and some object, someone's secret and life. "According to one legal definition, objects are separate bodily fragments of nature surrounding people". Lawyers use the concept of "object" to designate the whole group of typical objects summarized in the form of a concept and prioritize it over a subject". Turning into objects, things lose their nature and materiality (Jünger, 2005). Moreover, things, subjects and objects disappear with the emergence of functions.

Functions and enterprise indexing these functions possess great power. The enterprise invades more and more spheres and "its control points manage ever larger areas", therefore a universal working plan is implemented on a planetary scale. "The whole field of cybernetics can be regarded as functionally ordered, therefore functionaries should manage it" (Jünger, 2005).

Discussion

Introduction: power and mathematics

During the period from the Middle Ages to Modern History, numerical combinatorics had been established as a full-fledged tool that provided the first Industrial Revolution with abstract language forms. However, these forms retained some kind of substantial and concrete magicism originated in the times of totalism. The anthem of Plato's political life and manifesto of the Modern History was T. Campanella's call addressed to G. Pico della Mirandola: "Leave libraries and direct the thirst for action to the

world". Bounds exist everywhere but only insofar as the human scale is persistent (Alberti). Human cities correspond to the natural rhythm and maintain a uniform scale inherent in the universal connection between people and the surrounding world. However, this humanistic appeal of Leonardo was conditioned by his desire to reduce all phenomena to their simplest structure, i.e. a mathematics-mechanics-machine structure. There were a person-machine, animal-machine or world-machine. The driving force of these machines were still spirits and spiritual abilities, i.e. force is understood as something non-bodily but physical. Spirits cannot control anything since they are non-bodily qualities and represent emptiness that cannot exist in nature (Leonardo).

The Renaissance offered its own version of arithmology: divine chronokrators as divine foundations give orders to the forces controlling natural elements. Celestial mechanics was replaced with mythology; mathematical calculations and quantitative relations were neglected in the favor of orders and spells, assault and defense, liturgy and rhetoric (Garin, 1986).

Giambattista Vico believed that mathematics having no connection with reality was still quite knowable. In his opinion, nature was completely incognizable, although it was directly associated with reality: he found a coincidence between scientific validity and a real person in the so-called "new science", but it was a part of history. B. Russell claimed that the idea of a more knowable society in comparison to nature was revived by W. Dilthey, M. Weber and V. Sombart: a public organization seems to be a natural and evolutionary order of things in which human beings participate. While accumulating traditions, people can develop different forms of social life. Alfred Weber stated, "The main failure of the 18th century is probably its inability to overcome the deepest gap between ideal tendencies of transforming life based on purely human nature and brutal idealism of the state power of that time. This ideological striving for power was almost never limited. These state aspirations were not covered and were positioned within the borders determined by a random mechanism of the European power balance" (Weber, 1998). The disadvantage of this approach was the fact that the direct vision of good and evil transcendental forces already hidden by the mathematical thinking of the 18th century was scattered in its ideal comprehension and made mental formations "empty and elusive."

Magic as the first power technology

While establishing royal power (Loar, 2014), magic "acquired the new role of a benefactor because it destroyed "too formal and homogeneous gerontocracy bringing pitiable results and made changes at the initiative of king-magicians". According to the "fantasies of tyrannous magicians, these changes could liberate humanity from its slave service to traditions".

However, the magician's power did not overstep the limits of controlling immanent supernatural forces, which magicians could recreate and therefore were identified with. On the contrary, kings as "living gods" were translators of sacral and higher forces. Even if royal power turned into a priestly function based on religious beliefs, magic continued to penetrate its foundations with its rites (Frazer, 2018). Paul Huvelin believed that magic transformed into a legal technique of private law recognized even by social law since magic ensured the self-functioning of contracts and obligations. "The name of procedure and proceeding is mostly understood as sacrificial rituals: this technique implies the will of gods. Gods can directly reveal their will in law through oracles and ordeals, otherwise they can express it indirectly using elders, wise men, judges, priests and kings as their intermediary. Legal prophecy, divine command and taboo are not limited to the confirmation of rights to the past time, they tend to record the future legal provisions as a universally valid norm" (P. Huvelin).

If one's right of ownership or contract was violated, a powerful magical curse was put on the disputed or stolen thing rather than on those who broke the law. Magical sanctions were further developed in justice and reparation procedures. Nexum in the Roman law was simultaneously a magical and legal connection, which meant binding through ceremonies or magical formulas. Any magical-legal connection at the time of its termination marked the establishment of magical equilibrium. People used magic to bind contract parties: under certain conditions, each party beforehand allowed the possibility of being subjected to a curse. The magical influence was also manifested in oaths and "given words" expressed in different symbolic forms and in written contracts where "letters prescribed real magical power to words". P. Huvelin even claimed that religious and magical elements could be manifested through the analysis of the sources of such public concepts as sovereignty, public authority and state laying the foundations of law" (Frazer, 2018).

The effect of power on another person always manifests itself in the form of determination. Authorities base it on either direct motives "conditioned by the self-experienced power of utility, truth, beauty and holiness or indirect motives due to the fact that the actual context of motivation [...] is used as a lever for the purposes representing the value of having power because of technical inclusion into spiritual interaction". A person endowed with power uses public technology to their benefits (Gurvich, 2004).

The magician's power is put into action with the help of rituals and spells: words cease to be just words and begin to physically express the essence of things they name. Magic is basically the science of words and symbols made to collect physical and cosmic energy. Magicians should become the whole with their actions, and their merge was not symbolic, it was intended to become real and effective. Cornelius Agrippa explained, "Sacred rites and the ritual that surrounds them are so powerful that even if they are unfinished and are not observed, they do not become less effective provided that they are performed with faith. Magic needs mathematics and is connected with it in many aspects to such an extent that the one who studies one without relying on the other follows the path of hopelessness" ("The Philosophy of Natural Magic") (Spranger, 2014). In other words, any political action regardless of its rational nature is always filled with some elements of magic (Nataf, 2002).

The victory of functions

Technical achievements are viewed as the main confirmation of the highest position of humankind in a meaningless and chaotic world. Technical progress at the level of consumption encourages the individual's passiveness and the development of resentment. At the time of G. Marseille's living, it became obvious that as soon as technics laying the foundations of a civilized life recedes, humankind return to barbarism based on reasoning at amazing speed.

Technics and functionalism are two interconnected parts of the same evil. The liberation of technical principle turned the initially defined means into independent goals. The abuse of technics can lead to a real ochlocracy (Stocchetti, 2014; Schall et al., 2004). The dependence of technics on technology is accompanied by decreasing interpersonal solidarity among people and "more among subhumans", i.e. human beings who are increasingly being reduced to functions, within the framework of which one entertains with

exiled imagination. Growing dependent on technics, individuals can no longer free themselves from warnings that come as temptations (Bastick, 2017).

Numbering and "digitization" indicate that the independence of subjects was lost and it was no longer things, subjects or objects indexed but relations. "Enterprise is an indexing system which is formed when objects ceased to be independent. Numbering is an integral part of methods called regulation or standardization". Starting this transformation, things, subjects and objects disappear. It happens because they are indexed in conformity with their relation to a certain enterprise. The essence of machines is revealed when they lose the force of substantive independence when they are fully subordinate to planning, standardization and automation.

"We are surrounded by mechanisms and when we turn them on we represent an indexing system, while enterprises index ourselves. We establish certain relationships with objects by turning on and off their mechanisms. These relationships are functional but the whole process is characterized by something alien to us and even sinister. Furthermore, no one knows its true scale. It is especially ominous that the disappearance of objects entails the disappearance of one's personality" (Jünger, 2005).

F. Jünger wondered, "Does every conceivable calculation contain instructions for its exploitation? Propaganda and advertising are nothing more than the voice of an enterprise indexing relationships. Language is like a tool, a method of consuming and spending. However, only a few can realize the heinous power of spending... Old and reliable orders are being destroyed. The order of property, the order of relations between people and objects are also demolished. As a result, the legal order based on these person-subject relations and the state order as a whole stagger... All the existing communities reeled. Can state be understood as the central point of some enterprise or a system indexing relations? How does an automatically functioning mechanism work that implies the existence of only functions and functionaries? A person is indexed by an enterprise, considered through the functioning of the apparatus and organization of labor".

This automatism is characterized by the disappearance of boundaries. Where boundaries disappear, there fear is born which is the loss of boundaries and distance (Jünger, 2005).

"Nowadays only one area of technology shows no signs of decline, which proves its belonging to a different and more significant system of reference... We are dealing with one of those "material revolutions" that coincides with the emergence of new races successfully mastering the magic of new means" (E. Jünger).

Technics as a set of acquired (opposed to inborn) qualities differs from mechanics (complex manufactured object) by the fact that technical devices are neither physical systems nor mechanisms. "Thus, even writing can be called a technics" (Marseille, 2018).

Conclusion

Therefore, the study of historical regularities in the evolution of power technologies (in the context of non-positivistic philosophical ideas of the 20th century) implies an intuitive understanding of power, psychological mechanisms of domination and subordination and the development of their relations. The need for managerial influence overcoming social chaos is objective. In this regard, we should pay special attention to magical and sacred aspects at the early stages of political development, as well as the subsequent formation of power structures and organization of administrative functions. The historically forming order of domination and subordination initially comprises magical elements allowing a person or a group of individuals to manipulate others' behavior. At the present stage of social development, the digitalization of state and political activity is of great importance. In some way or another, modern digital technologies find their origins in centuries-long traditions. As a result, the state rationalizes the management of society, organizes its administrative functions and develops a more advanced technology of political power. However, people's dependence on technology is connected with decreasing interpersonal cooperation, growing individual dependence on power and other negative experiences. The modern humanities aim to determine regularities in the evolution of political power technologies and overcome the negative consequences of modern power technologization.

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