

# Intelligence, soul, culture as factors of interaction in a fractured world<sup>1</sup>

## 1. Fractured World

The modern world is a bizarre combination of fragments changing their positions, sizes, and states. This is typical of the micro-level at which individuals, families, groups, and organizations function, and of the mega-level where states, supranational political structures, and transnational companies interact. In recent years, a significant part of the global socio-economic and political landscape has been predominated by flashing and fading social networking systems formed on the basis of an affinity between their participants' views of the trending topics and events (with a negative connotation, excited discussions in social networks are often termed as a hype). Generally, the modern world can be likened to a scattered Lego set, the only difference being that individual fragments, unlike the Lego set, are not fit for interlocking. Moreover, the design and shape of individual elements are unstable and sometimes constitute a mystery to others. In general, the picture of the modern world resembles the landscape of the Zone described by Arkady and Boris Strugatsky in *Roadside Picnic*: a territory left behind by aliens after their visit to Earth, filled with mysterious objects with inexplicable properties.

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According to M. Burrows, “at the international level, the diversity of states, not to mention the growing role of non-governmental humanitarian organizations, international corporations and influential individuals, makes it difficult to create a coherent world order”<sup>2</sup>.

The loss of the world’s integrity described by Nikolai Gogol destroys the integrity of the human inner world, deforms human identity, and makes people susceptible to a variety of contradictory external influences. The instability also extends to the individual’s commitment to certain moral and spiritual values, as well as willingness to form sustained alliances, coalitions, and associations. The world appears to be fractured in both spatial and temporal dimension. Its individual components also lose the ability for natural connection (complexation), development and self-reproduction, inherent to socio-economic systems. We witness the world turning from a “system of systems” to a “non-system of non-systems”. This creates a threat not only to the world’s future, but also to its past. Multiple processes of complete revision of the past (examples: BLM movement, results of World War II, Holocaust) involve not only the artifacts – sculptural monuments to historical or literary characters – but also the subject matter of historic events and reinterpretation of different historical stages. The world appears not only *fractured* but *fragmenting* even as we watch, since the external boundaries and internal state of the fragments change every second. The situation has significantly deteriorated in recent decades due to the development of information and socio-political technologies that can be used to manipulate social groups, strata, or even populations. The wording “fractured world” has been increasingly used by many political actors in recent years, and has even entered the titles of the World Economic Forums: “Shared future in a fractured world”

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<sup>2</sup> M. Burrows, *Future: declassified. What the world will be like in 2030* (Moscow: Mann, Ivanov and Ferber, 2015), 345 p.

(Davos – 2018); “Stakeholders for a Cohesive and Sustainable World” (Davos – 2020).

What forces and factors can fundamentally counter the divergent trends? The three sources and constituents of these forces are intelligence, soul, and culture.

## 2. Intelligence

The common opinion is that the vector of the society’s development points toward the knowledge society: a society where knowledge is the main factor and result of social effort, including economic activity<sup>3</sup>. Intelligence is the means of acquiring, accumulating and storing knowledge. As the knowledge economy develops, intelligence becomes the most important factor and result of socio-economic activity. Intelligence can also be regarded as one of the most important prerequisites of the dialogue of cultures in both intercountry and intra-country spaces and periods.

Defining, attributing and measuring the intelligence level is still very difficult. Intelligence is often understood as a person’s ability to successfully resolve problems arising in the course of life<sup>4</sup>. However, for the purposes and in the context of analysis of the global society’s long-term development, we believe that this understanding has to be specified in order to answer the following questions:

(a) who is the subject (owner, bearer) of intelligence in the modern society; can it extend beyond an individual to a group of people, an institution, a social stratum, a society of a given country or mankind as a whole; can it be an algorithm, a program, a device?

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<sup>3</sup> D. Bell, *The coming of post-industrial society: A venture of social forecasting* (N.Y.: Basic Books, 1973); V.L. Makarov, G.B. Kleiner, *Microeconomics of Knowledge* (Moscow: Economics, 2007), 203 p.; G.B. Kleiner, “The Intelligent Economy of the Digital Age” *Economics and Mathematical Methods*, 2020, V. 56, no. 1, p. 18–33. DOI: 10.31857/S042473880008562-7.

<sup>4</sup> D.V. Ushakov, *Intelligence: Structural and Dynamic Theory* (Moscow: IP RAS, 2005), 260 p.; G. Gardner *The Structure of Mind. The Theory of Multiple Intelligence* (Moscow: Williams, 2007), 512 p.

(b) is the result of intellectual activity limited to successful problem *solving*; what role does the intelligence play in the process of adequate and timely problem *setting*, i.e. determining the conditions, goals and acceptable methods of problem solving?

Generally, intelligence is manifested in structuring the subject matter, in the formulation and resolution of issues that are important to the subject (bearer of intelligence) in order to improve and prolong the subject's functioning.

The concepts of animal intelligence, plant intelligence, software-algorithmic intelligence, company intelligence and other kinds of social intelligence have long entered the modern discourse. Since intelligence is attributed to a very wide range of diverse socio-economic, natural and man-made phenomena, there is a need for a generalized description of the bearer (subject, possessor) of intelligence. The search for a generalized bearer of intelligence brings forth the concept of a *system*. The concept of a socio-economic system covers an entire range of entities and phenomena studied by the social sciences, natural sciences and humanities, such as the individual, social group, community, population, institution, technology, infrastructure, etc.<sup>5</sup>

What is the main purpose of intelligence? Intelligence helps its owner navigate a variety of multi-level factors affecting one's everyday goals and analyze the results accordingly. These factors arise from functioning of various socio-economic systems. The owner of intelligence can be imagined as positioned in the imaginary center of a multidimensional configuration (network) reflecting the interaction of the subject with other systems and the relationship between the systems. This "spiderweb" model of intelligence helps incorporate it into the systemic structure of factors constituting the dynamics of the modern world. Speaking of intelligence, we will apply the concept of intelligence to diverse, multiscale and multivalent social, economic, administrative, political, technical and natural biological systems that need to be included in the scope of analysis.

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<sup>5</sup> G.B. Kleiner, "The New Theory of Economic Systems and its Applications", *Bulletin of the RAS*, 2011, V. 81, no. 9, p. 794–808.

Therefore, we will describe the intelligence of a given socio-economic system (*system intelligence*) as the ability of the system to create and analyze the “systemic picture of the world”. In particular, this picture reflects the structure and dynamics of a population of systems that are essential for the subject, including the identification of these systems, their boundaries and locations in space and time.

In functional terms, the efforts of intelligence to acquire new knowledge begin with the perception of the “situation of ignorance”. The situation of ignorance, being identified and realized, acts as a trigger, an impetus to development. Awareness of ignorance helps initiate the process of finding a solution and further progress towards success. And this is what intelligence does, performing: a) discovery, realization and identification of ignorance; b) transition from ignorance to knowledge. Thus, gained knowledge and identified ignorance can be seen as the initial resources of the efforts intelligence makes to expand the scope of knowledge and identify new situations of ignorance<sup>6</sup>.

The intelligence of a socio-economic system is not a constant. It can change both under the influence of special efforts to develop intelligence, and due to the interaction of the system with other systems. A manufacturer of hi-tech products created using a significant amount of knowledge, not only transfers to the consumer a part of such knowledge together with the product, but also contributes to the development of the consumer’s intelligence, since the use of new knowledge requires an update (increment) in the intelligence. Therefore, most transactions in the intellectual economy are related to the movement of knowledge, ignorance, and intelligence. All three of these factors serve as objects of circulation in an intellectual economy.

The intelligence level of a system is among the slowest-changing variables. Intelligence does not tolerate rigid control, but under certain conditions can be developed and improved. The development of a country’s intelligence is one of the urgent goals of the public policy in the field of science and education.

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<sup>6</sup> G.B. Kleiner, “Intellectual economics of the new century: the economics of post-knowledge”, *Economic revival of Russia*, 2020, no. 1, p. 35–42.

According to the definition above, intelligence is inherent to all participants of geopolitical activities, including states, interstate and supranational associations. The participants should not be limited to stationary organizations with an indefinite life cycle; they can also be temporary groupings of such participants connected through the implementation of joint programs, projects, and processes. Using their intelligence, each participant creates their own picture of the world. In the absence of a single ideology and a widely recognized system of universal values, the objective of harmonizing worldviews, actions, and development benchmarks appears intractable. Its solution represents one of the most pressing challenges faced by the humanity.

At the geopolitical level, intellectual leaders of each of the countries participating in the geopolitical interaction have a special role to play. Not every country today has a figure of an intellectual leader that can be defined with sufficient clarity. In many countries, intellectual leadership functions are performed by collective bodies – commissions, councils, elite clubs. In our opinion, the goal should be to personalize the country intellectual leader, with the support of formal and informal institutions such as the Academy of Sciences, the system of personnel certification, the system of scientific titles and affiliations, scientific and public expertise, etc. Experience shows that attempts of authorities to put together the nation's intelligence in the absence of an intellectual leader are futile.

### **3. Soul**

Rational picture of the world created by a subject in the course of intellectual analysis is a very complex construct. Individual components of this picture have varying degrees of attractiveness for a given geopolitical subject. Besides, the intelligence portrays different components of the picture of the world and their state with varying degrees of detail and certainty; the stage of the subject's life cycle also has to be taken into account. Difference in the subjects' positions in the ranking of leadership in the global geopolitics add heterogeneity to the gallery of such pictures.

This is not an exhaustive list of objective reasons for the incompatibility of worldviews and, consequently, discoordination of systemic subjects of geopolitical space-time. An outlined rational construct offered by intelligence is overlaid by the colors of emotion, reflecting, on the one hand, the attractiveness (desirability) of a certain state for a given subject, and, on the other hand, an assessment of the probability that this scenario can be realized. In other words, the outlined map of the world becomes colored according to the landmark state and position of a given subject, taking into account the expectations about the achievement of these landmarks.

The subject performs this animation driven by a special force that is inherent to each subject, and that determines the direction and nature of the subject's behavior. The source of such power, partly metaphorically and partly literally, is characterized in literature as the subject's "soul"<sup>7</sup>. Depending on the individual characteristics, the subject demonstrates more or less ambitious behavior in society, more or less consistency of intentions and actions, experiences more or less reasonable expectations regarding the reaction of the environment to the subject's actions, etc. The work<sup>8</sup> introduced the concept of the "soul" of an economical system, generalizing the concept of the "soul" of the enterprise (firm). Thus the discussion can progress beyond the "soul" of an organization as an object with an indefinite end of life cycle to include the "soul" of a project, program, strategy, or plan with a known end of life cycle. Temporary alliances of states formed to implement specific tasks such as the creation of the Hadron Collider, the ISS, tokamak installations, combating pandemics, etc., are also to some extent endowed with a "soul" as a source of coordination of the participants' intentions and activities

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<sup>7</sup> L. Berry, *Discovering the Soul of Service: The Nine Drivers of Sustainable Business Success* (Detroit: Free Press, 1999), 288 p.; R. Gallagher, *The Soul of Organization* (Moscow: Dobraya Kniga Publishing House, 2006), 352 p.; G.B. Kleiner, "Institutional factors for long-term economic growth", *Economic Science of Modern Russia*, 2000, no. 1, p. 5–20; G.B. Kleiner, "Humanistic Management, Social Management, System Management – the Journey to the 21st Century Management", *Russian Journal of Management*, 2018, V. 16, no. 2, p. 231–252.

<sup>8</sup> G.B. Kleiner, „System Paradigm and System Management”, *Russian Management Journal*, 2008, V. 6, no. 3, p. 37–50.

in the socio-economic space and time. Owing to this source, unique to each system, it maintains an identity throughout its life cycle. In fact, wars, including actual military action, sanctions, cold war, hybrid wars, are not so much a tool to seize territories and resources, but a means of deforming (changing) the “soul” of a given system.

Four main aspects can be distinguished in the activity of any economic system:

- functional, including the system’s actions and its sustained relationships with other systems;
- intentional, covering the processes of development and implementation of intentions with respect to one’s activity;
- expectational, characterizing the development of expectations of the system regarding the reaction of objects in the external world to certain actions or events;
- cognitive, reflecting the system’s knowledge of the world around it.

Accordingly, the economic system can be regarded as an aggregate of the four interacting spheres (subsystems): functional, intentional, expectational, and cognitive. The roles of these subsystems can be summarized as follows: the functional subsystem refers to what the system *can do*; the intentional subsystem refers to what it *wants*; the expectational subsystem refers to what it *expects*; and the cognitive subsystem refers to what it *knows*. Managing the system as a whole requires organizing the cohesive, synchronized and balanced development of these subsystems and coordinated interaction between them. Thus, the “soul” plays the role of a mediator and coordinator of these aspects of the socio-economic system’s activity in the long term. At the same time, the spiritual and moral foundations of the system’s life, concentrated in the “soul” of this system, form the criteria of its activity and the basis for their monitoring in the course of functioning of the subsystems.



One of the components of the “soul” is conscience, a force that awakens from time to time to influence the manifestations of the “soul” in determining and implementing its developmental goals.

Notably, the conclusion about the need to develop, “nurture” and cultivate the spiritual foundations in the activity of economic systems is of a particular importance for the successful functioning of a socio-economic system.

The level of development of the “soul” of a given socio-economic system, or the level of its spirituality, as well as the level of its intelligence, is among the slowest-changing variables. The “soul” does not tolerate rigid control either, but under certain conditions can be developed by nurturing the moral qualities of its participants.

In our opinion, the key role in this regard can be played by the figure of a spiritual leader, who is responsible for improving the system’s “soul”. Such a leader uses the support of institutions such as religion, ideology, education, and art. Every country should strive to put a figure of a spiritual leader side by side with the figure of an intellectual leader.

The rational picture of the world offered by the subject’s intelligence and the emotional picture of the world formed by the spiritual aspects can be contradictory. The interdependence of these views is reflected in the language in expressions like “The only way to get rid of temptation is to yield to it”; “have your head in the sand” etc. Culture plays a major role in resolving the contradictions between the intellectual and the spiritual.

#### **4. Culture**

By culture we understand the totality of sustained forms, rituals and rules of human activity and behavior, typical of a given society (population of the country, territory, organization personnel, etc.).

Just as the concepts of intelligence and soul have been extended to broader classes of socio-economic systems earlier in this paper, the term

“culture” can also be applied to supra-individual entities such as organizations, social groups, states, and other socio-economic systems. Culture is formed in the process of historical development; being a concentrate of characteristic features of a given society, it determines the mechanisms of interaction between individuals and socio-economic systems. If the prevailing spheres of activity of intelligence are the analysis, typology, and structuring the reality, the prevailing spheres of manifestation of the soul are the determination of goals, landmarks and images of the future, then the prevailing spheres of culture’s influence are the possibilities and limitations of synthesis between the present and the future, that is the ways of implementing the established goals and achieving the desired landmarks. In contrast to sober intellectual reasoning and emotional impulsiveness of the soul, culture concentrates historical background and does not allow either reason or emotion to go beyond what is acceptable. In this way, culture embodies the idea of evolution as consistent movement from the present to the future.

Addressing the problem of interaction between participants of the geopolitical community, we can see that such circumstances as significant differences in the levels of country intelligence, competing goals and claims of countries are factors hindering the coordination and coevolution of state entities. Convergence of country cultures through cultural exchanges, dissemination of the best examples of national literature, music, cinematography, and art on a universal human scale is perhaps the only factor capable of overcoming the world’s fractured state<sup>9</sup>.

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<sup>9</sup> G.B. Kleiner, “‘Consent of Dissenters’: Role of Culture in Sustainability of the Geopolitical System” in “Contours of the Future in the Context of Global Cultural Development: the 18th International Likhachev Conference”, May 17–19, 2018, SPb: St. Petersburg Humanitarian University of Trade Unions, 2018, 628 p., p. 95–98; A.S. Zapesotsky, *Development of Global Culture and Conflicts of Civilizations* (SPb: St. Petersburg Humanitarian University of Trade Unions, 2018), 608 p.

Culture of a nation is more malleable than its intelligence or soul and, accordingly, is easier to influence. Most countries have active cultural management bodies (ministries, agencies, and departments). It seems appropriate that every country puts a figure of a cultural leader – a person who is the bearer of authority in the sphere of embodiment of cultural rituals, traditions and benchmarks – next to the figures of an intellectual and spiritual leader. Preferably, this character is a subject matter expert on cultural values in more than one major cultural field. Although one and the same person cannot be an unquestioned expert in literature, music, painting, etc. at the same time, a cultural leader must have a sense of beauty that can help identify cultural achievements. In support of the cultural leadership, many countries have institutions of art criticism and reviews, state awards, honorary titles, membership in authoritative national and supranational expert bodies, etc.

## **5. Hopes and prospects**

As we saw in paragraphs 2–4, strategic decision-making regarding the choice of the national development trajectory involves national intelligence, soul, and culture. The intelligence structures the space of decisions, helps us describe their prerequisites, consequences and interrelationships. The soul determines the preferences across multiple possible decisions, the hierarchy and urgency of the criterion achievement. In these conditions, the culture determines the limitations regarding the permissibility of certain decisions, their consistency and compatibility with the decisions of all participants in the process.

Notably, intelligence is essentially structured, soul is individual, and culture is integrative. Through this combination, the interaction of intelligence, soul and culture provides the integrity and development of the subject.

This entails the emergence of the three figures of national leaders: intellectual, spiritual (soul-promoting), cultural. They are all superseded by the figure of the administrative national leader – the authoritative head of state (president, head of the executive or legislative authority, monarch, etc.). Regardless of the intellectual power, spiritual depth, and cultural development of such a leader, it is desirable that intelligence, soul, and culture are embodied in autonomous physical persons, which would ensure that the country remains resilient to various unfavorable external influences.

The concept of the three leaders is figuratively expressed in V. Vasnetsov's *Bogatyr*s. Ilya Muromets can be attributed the role of an intellectual leader, Alyosha Popovich – spiritual, Dobrynia Nikitich – cultural. Beyond the picture's frame, one can imagine the figure of a tsar, the head of the state whose boundaries are guarded by the bogatyrs. We can draw parallels between this configuration and the top of the pantheon of Olympian gods in Greek mythology: Zeus, administrative leader; Pallas Athene, intellectual; Dionysus, spiritual/soul; Apollo, cultural.

Literature also describes other varieties of the configuration of power in which the leaders do not have personalities (“unknown forefathers”) but are represented by the relevant institutions. In Russia, with its experience of intellectual, spiritual and cultural construction, the gallery of outstanding thinkers, writers, musicians, who were among the greatest representatives of the world elite, the most organic journey, conducive to sustainable socio-economic development, would be personal representation by generally recognized and well-known national leaders – “masters of thinking” and “masters of affairs”.

The purpose of studying social intelligence, the “soul of society” and the culture of a nation was jointly emphasized in the work by Nobel laureate R. Shiller, *Narrative Economics: How Stories Go Viral and Drive Major*

*Economic Events*<sup>10</sup>. Introducing the concept of narrative economy, R. Shiller drew attention to the fact that the high socio-economic value of the narrative is fueled by the connection between the intellectual, spiritual and cultural components.

Recently, there has been growth in information and communication technologies for obtaining, storing and distributing data. This leads to the assumptions that artificial intelligence can replace natural intelligence in most areas of economic and social life. In our opinion, such fears are unfounded, because, as we saw in (2), the formation and identification of situations of ignorance (task setting), being an indispensable factor of intelligence (along with knowledge), cannot be performed by artificial intelligence. Similarly, notions such as “artificial soul” and “artificial culture” have no actual embodiment. The same is true of the impossibility of creating an “artificial administrative leader” in the foreseeable future.

As the experience of global development in the 20th and early 21st centuries has clearly shown, the interaction between the administrative heads of states is insufficient to maintain the stability and integrity of the world. The prospect of moving toward a sustainable and secure world can only be achieved through real interaction of “live” figures of intellectual, spiritual, cultural and administrative leaders of member countries of the global community. Organization of such interaction is, in our opinion, a necessary condition for restoring the systemic structure, integrity and continuity of the world in space and time.

Implementation of the aforementioned proposals to identify and institutionalize a core configuration of four systemic leaders – intellectual, spiritual, cultural, administrative – in the structure of each of the significant participants in the geopolitical process would help solve two problems: a) to give a

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<sup>10</sup> R. J. Shiller, *Narrative Economics: How Stories Go Viral and Drive Major Economic Events* (Princeton University Press, Princeton, 2019), 400 p.

systemic form to the subjects of geopolitics, ensuring their internal stability and ability to interact with others; b) on this basis, to overcome the fragmentation of the existing geopolitical space.