III. THE ASPECTS OF SOCIO-CULTURAL AND POLITICAL EVOLUTION

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Mind and Vision: Social Evolution and the Origins of the Political

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Abstract

During the transition from family to state organizations, that is from structures built upon the cooperation of a few relatives to organizations controlling the behaviour of thousands and millions of genetically distant individuals, the unification of people around ideas processed by the mind became increasingly more important. A large part of the mechanisms that control these processes has been beyond scientists' interests. Meanwhile, the results that are available from archaeological research show that political control of the masses by specialized organization began to develop around 6,000 years ago in Mesopotamia and Egypt, and not only because of the increasing complexity of Neolithic agricultural societies. It was incredibly important that cooperating individuals shared visions of universal order. The results of modern neuroscientific research show that, ultimately, the emergence of political phenomena and their development were determined by the specific mental abilities of Homo sapiens, which were unprecedented at such a level of development or even absent in other species. In this text the authors analyze the most significant of them, explain how political mobilization was initiated and how many other political phenomena evolved to define the functioning of the human species today.

Keywords: *social evolution, Homo sapiens, mind.*

Introduction

Why and at what stage of social evolution did humans begin to function politically? Is it not a fundamental question for the contemporary social sciences? Has ‘the political’ been a feature of our species since it began uniting into bands and tribes? Or, perhaps, is it a result of the developmental processes in the structures with a higher degree of social complexity and was significant

enough that the rise of political organizations which united large populations increased their fitness to the requirements of the environment?

The results of research on the topic (which are presented further in the text) allow making the following hypotheses:

1) Political phenomena (*e.g.*, political power, state, dynasty, and political parties) evolved in communities only when a specific organization controlling the behaviour of its members in a distinct way developed. However, its establishment was ultimately determined by the features of *H. sapiens* brains and the high, advanced mental properties of *H. sapiens* that developed thanks to them, that is the properties which were not found in such advanced forms or even entirely absent in other species. Among others, these are the capacity for abstract thinking and symbolic, imaginative skills, the broad ability to feel and express emotions, the propensity to cheat, self-deception and being driven by positive illusions as well as creativity and highly developed skills of learning through imitation.

2) Initiating political phenomena occurred as a result of the increasing complexity of the network of social relations in Neolithic societies. Their development was one of the factors determining the process of converting theocratic systems of power and simple chiefdoms into increasingly complex organizations. After this they transformed into the first states in the basin of the Tigris and Euphrates and the Nile, then in the lower reaches of the Yellow River and the Yangtze River and in the valley of the Indus.[1] Political phenomena developed in a specific ecological niche and can now be fairly well understood also due to archaeological research.

3) Political phenomena were initiated independently in few different parts of the world in the long evolution of the social organization of groups of people based on the principle of kinship to larger societies which did not rely on family ties to such an extent[2] but on the ideas that make up the visions of universal order. Originally, such an order was believed to be the desire of the deities or a God. Much later came the belief that the right to determine it is reserved to race, class or nation. Such visions made possible to perceive the feeling of identity more deeply, which strongly integrated the opposing competing unions of selfish organisms.

4) Political phenomena evolved as the effects of the subsequent adaptation of human relationships to the conditions in the ecological niche they settled in.

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[1] The transition from simple societies to more complex ones is a certain simplification. It is worth noting that the process did not follow any universal pattern (for more details see, *e.g.*, Bondarenko, Grinin, and Korotayev 2002).

[2] Even though family ties did not lose their full significance as political unions connect whole families. The fate of a political union also influenced relatives. That is why political engagement or submission to political mobilization might frequently be influenced by one's care for relatives.

The cooperation of thousands and sometimes millions of individuals allowed the communities which adopted this a new way of functioning, thus winning an advantage in the struggle for survival with traditional lineages, because political mobilization allowed concentrating resources on an unprecedented scale. The elites, which originally justified their privileged position with religious visions and were capable of initiating and conducting military campaigns, organized successive conquests and gradually ruled over territories that were larger in area.

5) Political phenomena are the result of stimulating the mind to establish a universal order in actions motivated by a sense of supreme obligation (and thus the readiness for sacrifices). This sense is unprecedented in other organisms and in humans is experienced additionally via feelings to the images of god/s, race, class, nation, and in connection with the institutions of a church, dynasty or party. Their (images and institutions) standing in the society is expressed in the collective mobilization of people under the leadership of priests, an anointed ruler or party leaders. This mobilization is ultimately realized on the territory maintained with all the required resources (in extreme situations, regardless of the costs, survival and triumph are the only goals), and controlled by a central authority which possesses a monopoly of legitimate violence in more developed systems. The promotion of such forms of social organization by evolutionary selection has capacitated the emergence of a complex variety of political phenomena (*e.g.*, constitutional law, political interest, political ideology, and political program) and has completely changed the way the human species functions. As a result, our species live in a political system of territorial organizations (polyarchy) ready to compete with one another by any means.

This text is an attempt to present some elements of the theory of the origins of political phenomena, which became possible as a result of the development of the neurosciences. We realize that the evolution of political phenomena was influenced by many interrelated processes, such as technological development, population growth, increased horizontal and vertical social mobility, development of agriculture, crafts and trade and the evolution of religion. Because these issues cannot be discussed in a short paper, our deliberations are limited to those aspects of the functioning of our ancestors' minds that finally made one of the most important innovations in the evolution of our species: the transition from organization based on kin ties to organization maintained by political mobilization.

Evolutionarily Shaped Brains of *H. Sapiens*

People are animals equipped with a large and complex brain. During the last 3.5 million years it increased its volume by more than 250 %. The lion's share of this growth took place during the last 500,000 years and involved primarily the human neocortex (Flinn, Geary, and Ward 2005: 11). The capacity of the

braincase of Australopithecus was approximately 450 cm^3, while in modern humans it reaches 1,350 cm^3, and Neanderthal's was 1,500 cm^3. Taking into account the factor of encephalization (*encephalization quotient*) ($EQ = E_a/E_e$), showing the extent to which the brain size of a species (E_a) deviates from the expected size of the brain of an animal of a certain weight (E_e), we learn that it has assumed the highest value in humans, that is 7.4–7.8. This means that our brains are, on average, seven-eight times greater than one would expect (Roth and Dicke 2005: 251–253). Similarly, we can determine the rate of progression (*progression index*) for each of the regions of the brain; for example, the rate of progression of the neocortex of insectivores assumes a mean value of 1. In the case of the chimpanzee it increases to 56, and in humans it amounts to 156 (Changeux 1986: 45). The potential of the human brain is also associated with the large number of neurons that make it up and the connections between them. In an adult brain the number of nerve cells is estimated to be nearly 100 billion (10^{11}). In turn, the capacity of its memory, according to the Yingxue Wang, Dong Liu and Ying Wang model (2003), is around 10^{8432} bits.

The literature provides a number of hypotheses proposing an explanation for the reasons of growth of our ancestors' brains. Some of them place special emphasis on the evolutionary arms race (*e.g.*, Alexander 1971, 1989), the size and dynamics of social groups (*e.g.*, Byrne and White 1988; Dunbar 1998), or the instability of the environment (*e.g.*, Potts 1998). Others emphasize the duration of pregnancy and litter size (*e.g.*, Pagel and Harvey 1988) or the rate of the mother's metabolism (*e.g.*, Martin 1981). There are also those that associate the development of the cerebral cortex with the presence of fatty acids ω-3, in particular docosahexaenoic acid (DHA) (Broadhurst *et al*. 2002). According to this hypothesis, which is gaining wider acceptance, the most important factor influencing the increase in hominid brain size was the quality of the hominids' diet; and specifically modifications in eating habits, that is enriching the diet with meat, which over time began to be heat processed (Wrangham *et al*. 1999).

African forests fed our ancestors with fruits, nuts and fresh sprouts. When under the influence of climate change they began to give way to the savannah, an urgent need appeared to alter the current menu. In addition, this need was intensified by the demand for energy of already enlarging and complicating neuronal circuits. As a consequence, natural selection began to favour individuals with adaptations that facilitated hunting. This included: (1) shedding hair, and profuse sweating as a response to the need for more effective thermal regulation of the body; (2) anatomical changes allowing a long run after prey, for example, extension of the lower limbs, the growth of articular surfaces, Achilles tendon lengthening, shortening of toes, or enlarging the gluteal muscles; (3) anatomical changes making possible the use of weapons, such as a movable

shoulder girdle, the shoulder joint acetabulum turned to the side; and (4) brains, with which hunter-gatherers could invent new tools and new ways of killing and processing animals (Morgan 1994: 69–103; Bramble and Lieberman 2004: 348–350; Roach *et al*. 2013: 483–486).

Thus, having large brains required access to significant amounts of glucose as well as to animal proteins and fats. Yet, this is not all. According to the *expensive tissue hypothesis*, which was proposed by Leslie Aiello and Peter Wheeler (1995), the growth of our brains was enabled by a shorter gastrointestinal tract, that is specifically shorter and smaller intestines. Digestion is an extremely energy-intensive process, so intestines which were adapted to digest high-quality food no longer required such large energy inputs. Accordingly, the calories that were saved could be used to power the expanding brain's cortical structures, thus increasing the organism's adaptability.[3]

Molecular biology also provides relevant information on this subject. Several genes are involved in the development of the human brain. Two of them regulate its size and complexity; specifically, MCPH1 (*microcephalin*) and ASPM (*abnormal spindle-like microcephaly-associated*), which were identified in 2002 (Jackson *et al*. 2002; Bond *et al*. 2002). Failure of any of the two results in primary microcephaly, which is an autosomal recessive disease. During the evolution of our species both genes underwent significant changes. The evolution of MCPH1 accelerated with the advent of the primates, and the ASPM gene was under particularly strong selective pressures from the already common ancestor of gorillas, chimpanzees and humans, *ca*. 8–7 million years ago (Evans *et al*. 2004: 1143; Kouprina *et al*. 2004: 0659; Mekel-Bobrov *et al*. 2005: 1720). It turns out that the allelic structures of both genes continued to evolve under the influence of positive selection. Sequence analysis of MCPH1 and the ASPM gene in people of different ethnicity revealed the existence of closely related haplotypes that occur more frequently in certain populations. A cluster of such haplotypes is called haplogroup D. MCPH1 haplogroup D appeared about 37,000 years ago, which coincided with the 'explosion of creativity' in *H. sapiens* (called the *Upper Paleolithic Revolution*) (Evans *et al*. 2005: 1718). In contrast, ASPM haplogroup D evolved around 5,800 years ago, coinciding with the birth of written language and the formation of the first states (Mekel-Bobrov *et al*. 2005: 1722).

Specific Human Mental Abilities

Large and extremely complex brains constituted a biological foundation for mental capacity. This meant that people received an overwhelming advantage

[3] Research on the evolution of metabolism shows that there might have been different relocation of energetic expenditures in human organisms. This concerns limiting the strength of the muscles, which allowed economizing energy for our exceptional cognitive skills (Bozek *et al*. 2014).

in the struggle for resources, especially when they developed cooperation within unions that were several times larger than the largest relationships of their ancestors based on kinship.

Studies show that specific human mental abilities evolved as adaptations to a complex social life (Jolly 1966; Humphrey 1976). They became necessary to function in specialized networks of interpersonal relations – as increased personal skills and united members of the communities into more efficient collectives, ready to fight for more and more ambitious targets. Such aggregations of the human masses had the capacity to grow in number and to achieve more fundamental goals, especially in environment subject to urbanization and development of trade outside their own territory. These new collectives were then mobilized for even more far-reaching purposes, presented in the form of visions of order, which was attempted to be introduced by conquest.

In complex social structures, selection promoted individuals guided by aspirations that went beyond typical for kin relationships, where behaviours were determined by loyalty to the family and the desire to survive by simple control of resources available in the vicinity. New leaders wanted to acquire the world and had to lead a much larger number of individuals with diverse ancestral and ethnical origins. They become responsible for the fate of not only relatives or the direct clients, but also other members of their own community who, for instance, only shared the faith in the god/s and poorly perceived their own ethnicity.

The mechanism of selection led to the grouping of members of the community into increasing unions subjected to the central government and to the emergence of rising powers that controlled territories. These unions competed with each other using all available resources to institute their vision of world order, and presented their own actions as an appointment in terms of duty or even destiny. Initially, it was understood as the destiny defined by the god/s and later, after a few thousand years, justified by the special significance of race, nation or class. All of this became possible mainly because humans had a specific mind, able to process visions of social order and arousing hopes for better life.

Abstract thinking and imagination

The ability to think in abstracts, that is to handle concepts related to objects, phenomena and conditions (including non-existent ones), is a key feature of the modern human mind and is inextricably linked with the development of language (*e.g.*, Pinker 1994). This is evident in interest in fiction, through which there has been a rapid development of common knowledge, then increasingly sophisticated literature (sacred and secular), and the art of film.

Abstract thinking stimulates development of the imagination and allows one to create different visions. The visions consist of not only fables but also of

more complex interpretations of the past (legends and historical narratives) and present forces that are responsible for the existence of the world, caring for people or harming them. Sometimes they include also presentations of images of the social order to be built. Few such interpretations and visions affected people so strongly that they became the foundation of the collective identity; for example, visions of state implementing the will of the gods or manifesting certain features to justify its domination over the world due to rights attributed to a given race, class or nation. Based on visions that spread and became an object of faith, people experience their own identity to such an extent that they develop intensive cooperation and then, as a centrally directed union, they compete with strangers by involving increasing amounts of resources and are willing to sacrifice their own life.

The mental states presented here can be experienced emotionally and shape one's relationship towards the *sacrum*, others make the individual be treated as both a leader and a confidante. The collective experience of feelings, even more intense when occurring in public, contributes to taking up big economic challenges, and motivates various groups and associations to be involved in building the power of their own state. Imagination focused on the *sacrum* contributes to political thinking and facilitates one to receive a vision of universal order as an outcome of the will of supernatural beings. This makes possible to use previously unavailable resources, including those that require the greatest sacrifices from members of a political community.

Imagination was probably, next to the search for resources and the pursuit of profit, one of the most important factors triggering the mobility of early humans. Our ancestors were anatomically and physiologically adapted to cover long distances on foot. Upon their return to their groups they provided information about unfamiliar places, which were then translated into images. During the pre-lingual period they communicated by using gestures and facial expressions, which further stimulated the minds of their tribespeople. New opportunities associated with the use of hitherto inaccessible resources opened up before the hunters, who could imagine the reported space (Mithen 2001: 40–41). In contrast, political communities oriented on conquest had to have a justification for their annexations. They used vision of order, which they believed to introduce not for their own benefit, but out of the creator's will. In this way mass killing of strangers was presented as a duty liberating a great moral strength. Its main source was, again, imagination.

Symbolic thinking

The modern humans define their own identity and relationships with the world through symbols. This ability is a universal feature of the human mind and determines the special position of humans within other primates because it ena-

bles them not only to practise art. Symbolic thinking capacitates one to communicate complex content by using simple characters and concepts, immediately classified by the mind. This, in turn, makes able not only fast communication but also enables to distinguish one's own tribespeople and strangers, as well as to affect feelings, especially those of fear and hope. Manipulating these two feelings is crucial in gaining leadership and control over the behaviour of the masses, especially when material possessions and life are at stake.

Symbolic thinking enables one to popularize a very simple and acceptable belief that one's community acts accordingly to the highest forces which looks after 'our' people. It may also lead to explication of a vision of a treaty with the supernatural power. Therefore, our community or state acts out of highest necessity, and we are entitled to specific deeds:

1) conquest of the world to introduce the order imposed by our god/s;

2) enslaving and even killing infidels, people who are racially inferior, or the privileged class.

Finally, supernatural beings are symbols of power as being the centre capable of shaping the world and taking care of humans according to their will, provided that humans deserve it. The vision indicating they chose us causes a dramatic increase in moral strength and increases our willingness to fight to the death. A similar influence was later attributed to the belief in the position of race, class or nation.

The first known artefacts indicating the presence of symbolic thought in *H. sapiens* originated in Africa. They are engraved pieces of ochre and beads made from snail shells found in the Blombos Cave on the southern cape coastline in South Africa. These findings are estimated to be 70,000 years old (Henshilwood *et al*. 2002, 2004; d'Errico *et al*. 2005). The vast majority of archaeological records proving the artistic and creative abilities of our ancestors come from the last 40,000 years and are linked with the advent of Cro-Magnon man (Mellars and Stringer 1989). This includes, among others, cave paintings, small sculptures made from bone and horn as well as various kinds of ornaments. Many of these elements indirectly prove the presence of ritualistic behaviour and that Cro-Magnon was familiar with a complex mythology involving deities (Mithen 2001: 48).

How did this qualitative leap in the evolution of human cognition happen? According to the concept of cognitive fluidity by Steven Mithen (1996: 70–72), it is associated with the ability to integrate contents from different fields of human activity, namely, social, environmental and technical. It appeared only in modern humans. The minds of other hominids operated on the basis of poorly integrated and highly specialized cognitive domains.

Symbolic thinking dramatically speeds up the work of the mind, especially when it has to solve complex problems associated with the struggle for survi-

val. The symbols can simply express intricate, even incomprehensible content and strongly influence the feelings and emotions of communities. Symbolic thinking raised *H. sapiens*' ability to combine facts, interpret events and create comprehensive explanations. Moreover, it enables to express, accept and reformulate interpretations of the past, visions of social order, the law and all legal issues, crucial for political mobilization and the emergence of other political phenomena. Especially in processes of development multi-generation relationships and later states that bind together unrelated individuals, unite communities to implement prophecies and visions in order to repay providence for its care and to ensure its continued favour. Complex symbolism was also the basis for the idea that the ruler is the representative of the god/s on Earth and takes care of his/her subjects by using the god's/s' supernatural powers.

Emotions and feelings

The mind tries to construct the most probable conjecture about the external world in relation to the organism, namely, its environment (Pinker 1998: 255). Because feelings are focused on those elements of reality, which are most important for the body, it capacitates to almost automatically select data that the mind receives in excess from the environment. Additionally, the mind perceives this data particularly by expressing the strongest emotions towards facts or representations that are considered crucial for the fate of the body. That, in turn, is reflected in current mood people experience.

Feelings reflect in mind the state of the body in the environment (Damásio 1995: 145); for example, the state of emergency (it expresses the feeling of fear), the opportunities for the organism (the feeling of hope) or triumph (the feeling of pride). However, emotions represent the body's responses to the events occurring around it, and appear in the form of smaller or larger fermentations. Therefore, they can be regarded as movements of the body against the processed images, governing its behaviour. For example, emotions can be seen in reactions to one's thinking about beloved God and his possible actions, at the sight of a beloved Leader who leads or has lost his or her way, or at an enemy who is a deadly threat or who aspires to play the role of an ally.

Because decisions about actions are made under the influence of feelings and emotions, the human body can be effectively influenced from outside when the processed images are affected; for example, when new images are supplied or previously appreciated ones are disavowed. This is true especially when operating with visions relating to the most important issues, daily existence, reproductive opportunities, the expectations of higher forces, the power of the ruler and the state or position of a nation, race or class in the world. In the conditions of social destabilization, such an impact may be easier and more effective to attain. In moments of deeper acceptance of the social sys-

tem by its people it is sometimes difficult to achieve or even turns out to be impossible.

The mind seeks to ensure that the vision of the world in its disposition is internally consistent and can convincingly explain the fate of the body it is enclosed in. Every vision is perceived as reasonable and meets the basic functions when it clearly and irrefutably proves that its existence is not accidental, and the body has prospects in life, and even after death. Therefore, the mind that seeks meaning emphasizes the need for visions of immortality, paradise, and sometimes even places or projects where it will be able to cleanse its infamous deeds. In specific situations it may be expected that the mind will be shown the objective of a glorious struggle and the opportunity will open up before the organism great, economic, intellectual and political achievements, and even a chance to participate in a military clash in which it will obtain the status of a hero.

Feelings, notably in the context of emotional excitement, substantially modify even fundamental behaviours of an organism. It takes place especially when specific visions become the basis of the collective experience of fear and hope, and commotions on their background. People interact with one another in a very unique way, for example by demonstrating obedience to a king, homeland or nation reinforces the impact of feelings and emotions, especially towards symbols and visions. The mind begins to perceive and experience them to such an extent that it can reach a state when it despises even basic, evolutionarily specified objectives: it resigns from eating (a religious reformer), having children (a cleric), and is even ready to sacrifice its life to achieve what is most highly regarded in the surrounding environment (a soldier or a revolutionary).

The above-mentioned modification of behaviours was crucial for the long evolution of human relationships, from those built on kin loyalty to those held as a result of feeling religious, and then political identity as the belonging to a group connecting genetically different individuals has become more significant. They were perceived by the mind as symbols (leaders), or remained personally unknown (fellows in political unions of thousands or even millions of members). The mind of individual was now driven more and more by a sense of belonging to the same church, race, class or nation. Knowledge about leaders and anonymous companions had such an impact that the individual was willing to fight and die, experiencing specific feelings while processing images provided in visions. He or she felt a common identity with them on the basis of faith. This sense of belonging was not perceived by considering the arguments for and against, but it was experienced via feelings towards various representations of non-existent conditions of life, often in conflict with each other, and through emotions that operated automatically in specific situations.

In this way feelings experienced by the mind, especially in conjunction with emotions, have enabled a new way of connecting people. Population and available resources grew just as the technology of processing energy resources developed.

Feelings and emotions make the mind sensitive to visions and play a key role in enabling the body to take part in the collective life of organisms capable of acting in a new way, in accordance with the requirements of political mobilization. Especially fear and hope make a person susceptible to presentations of the unreal phenomena: paradise, justice, freedom, equality, truth or a better order. Due to them a new form of adaptation to the requirements of the environment appeared as they increased inclusive fitness of millions of people.

Deception, self-deception and positive illusions

The brain is the organ of the body which takes care of the latter. The mind was created specifically for this purpose (Damásio 2004: 194; Pinker 1998: 43). The task of the mind is to direct the organism in such a way that it not only survives, but also reproduces, that is finds the best possible partner for the body. Such a primeval activity is related to courtship, which involves the art of influencing the most attractive individual. Therefore, from the beginning the mind has been subjected to selection for the ability of a specific presentation of the body it is carried by. The more effectively it manipulated the perception of both objects, the more probable it was in raising the chances of the body for successful reproduction.

Manipulation of data, and in fact cheating, is the ability that the mind was equipped with a long time ago as a result of natural selection. Next, the ability was developed in different forms, also for the purpose of controlling human communities. However, it turns out that the same mind has an even more unusual feature: it is willing to manipulate itself, *i.e.*, to self-deception. Not only is it misled by the false claims of others, but it also creates various theses for itself which are unrealistic or far from reality.

Robert Trivers (1985: 395–419) showed that the tendency towards self-deception develops inevitably in the process of social evolution. The more we believe in some content, the easier we hide its falsehood from others, especially when we use language and want to use it as a tool of persuasion, in addition to experiencing feelings and expressing emotions. When we are forced to perform complex operations, which could easily reveal our true intentions, it becomes increasingly difficult to stick to the truth. This means that natural selection will favour individuals who deeply believe in what they are communicating, at the expense of those who have a tendency to over-analyze, criticize and respect facts.

In addition, abstract thinking necessitates the interpretation of data and their selective presentation. This creates not only the opportunity to manipulate, more or less consciously, but even allows the use of our species' tendency towards self-deception; for example, in terms of the belief that there is a power capable of taking care of people and of helping them in a fight. When faith is expressed in rituals repeated for generations, it will be perceived as reality, thus forcing the elimination of facts which are inconsistent with its rules.

Self-deception not only increases the ability to manipulate others, but also reinforces the feelings of a good mood, which are so important to the human mind. Positive spiritual experiences energize a person because they give him or her a sense of value and moral strength. The mind does not work just because the brain is nourished by energy resulting from the chemical processing of nutrients. It also uses the resources that are available as a result of the accumulation of images relating to possible states of the mind, and the body that carries the mind. As a consequence, the mind is able to mobilize the body to fight, even in situations where logical analysis of the systems determining its location proves that the body is doomed to either death or slavery. This is where the so-called moral force emerges from. The force plays a significant role in the political struggle pushing the individual towards ultimate mobilization. Under the influence of the moral force, even logic is distorted and the personal self-preservation instinct is affected. Therefore, when confronted with a loss, selfish individuals neither flee nor hide, but rather fight and struggle with the hope for victory (Skarzynski 2011a: 155).

The ability to experience positive illusions, referred to by psychologists as a slight distortion of reality and considered a determinant of sustainable existence, played a significant part in the process of social selection (Taylor 1989: 238). Yet, are positive illusions truly the result of minor modifications to the image of the world, or can they develop so that there is a total reinterpretation of the knowledge of the world? And just because a radical modification of the strongest performances of unreality influences the awareness of the members of large communities who are jointly seeking identity and hope in the vision of the god/s, prosperity of race, class or nation. Are positive illusions only helpful in managing a stable life, or perhaps they are more useful for mobilizing people to fight for an imaginary order of the world? Is experiencing illusions not the basic activity that allows *H. sapiens* to undertake far-reaching projects, for example, trading with strangers, mass conversion of the unfaithful or building empires?

Positive illusions consist of ideas and an assessment of the presentation of the world and an individual's surroundings in a much more favourable manner than they are in reality. One of the fundamental, almost universal illusions of this type is the belief that we are simply succeeding and that the future will bring

something better, which will be identical to an improvement of our position (this is how hope is born). Thus, convincing people by promising what they consider good for themselves gains their favour and makes them follow us. Consequently, we become their leaders and trigger the hidden moral forces and energy within them. This is how a new church or another political party are created.

In complex systems of social relations, positive illusions perform multiple functions and contribute to their support when some images and pieces of information are promoted and others are eliminated. The images symbolizing these systems are the basis for collective expression of emotions and feelings, *i.e.*, experiencing excitement of vision of universal order, which is to be introduced by the will of the god/s, by the claims of race, class, or nation. The order in which people will live better, in dignity and may even be in a privileged position as opposed to the followers of other gods, representatives of foreign classes, races or nations (Skarzynski 2011a: 151–152). In practice, however, systemic self-deception leads, over time, to strengthening the factors of destruction; for example, when incompetent people come into power, their rivals are presented as the root of all evil, and fellow members are directed towards unattainable targets, which leads to waste of energy on a large scale (Trivers 2002: 286–290).

Imitating and copying the contents

A person learns imitation from birth. Few-day-old infants reproduce the gestures of adults; for example, they smile, open and clench their mouth, when analogous gestures are previously performed by the mother (Meltzoff and Moore 1977). Later in life they also manifest behaviour indicating a desire to mimic intentional manipulation of objects around them (Williamson, Jaswal, and Meltzoff 2010).

The human ability to learn by imitation is much more developed than in the case of other primates. It became the foundation of cumulative cultural evolution (enabling horizontal and vertical transmission of cultural patterns, including political institutions [Tomasello 1999: 37–40; Cavalli-Sforza 2001: 179–191]). It is worth noting that adaptation played an equally important role in the emergence of language. According to Merlin Donald (2005: 283–300), it would be impossible for language to evolve if it had not been for the earlier ability of mimesis.

The ability to imitate generates a tendency to duplicate content, which significantly accelerates the development of society. It is possible to copy technological advances made by others by observing their skills. However, it seems more important to reproduce ideas, that reach a much larger number of people in a short time by gaining popularity and modifying the behaviour of the whole community. Imitation is of particular importance for the dissemination of vi-

sions of social order. Most often it serves the purpose of maintaining the existing system. However, when foreign ideas appealing to human feelings are copied, we have to deal with a reverse phenomenon: the erosion of the legitimacy of the social system and the threat of revolution, a rapid process of changing important elements of the social system, which is possible only in human societies in cases where kinship ties no longer play a crucial role.

Copying ideas which have a greater appeal to human feelings enables efficient movement of the masses, in controlling and directing their behaviour to tasks they would not normally do. Several ideas have played a more important role in mobilization in this field. Primarily these were the ideas of one god, then truth, justice, equality, freedom, rationality, emancipation, race, class, nation and the community of nations. They successfully moved and continue to move people to the point where they are sometimes ready to sacrifice their lives and family, even though they had never personally experienced a relationship with God and they are not able to tell what the truth, justice, equality or freedom are. Nor do they have a clear idea of what race or a nation is. Consequently, they cannot understand how an emancipated society or a community of nations can function. It is enough to have a ritual of just treatment of these ideas and people will acquire specific words, taking them as valuable symbols. Owing to experiencing deep feelings and emotions, they are stimulated to action, especially when they observe ceremonies repeated within a greater community, such as masses, enthronements, holidays, parades, and party conventions.

Creativity: from a hand axe to the art of politics

The ability to create something new, especially when a discovery or design changes the conditions of life and increases efficiency in the struggle for control of resources, is one of the main driving forces of cultural evolution, and with it the evolution of social structures and institutions. This ability is becoming more and more important, when not only individuals but mainly communities dominate subsequent technologies effectively and accept their unifying beliefs, visions of universal order and become subjected to new forms of social organization.

Creativity starts to count particularly when such entities eventually develop not only the ability to control a great territory where millions of people live, but even establish a monopoly of legitimate violence: an institution unknown to other animals because it is possible only after being subjected to the collective political mobilization of individuals. Then internally integrated powers face one another and are able to bring all the means into the struggle for control over key resources. They become increasingly dependent on the ability to process energy resources. Rivalry within the system of polyarchy gains a new

dimension, and technological inventions give advantage and contribute to rapid changes in the conditions of existence of the entire species.[4]

Archaeological records provide numerous examples of the origins of creativity – a very rare ability in the animal world. In the case of early humans, they may include hand axes from more than 1.76 million years ago found at an archaeological site, Kokiselei 4, in Kenya (Lepre *et al*. 2011) and from 1.5 million years ago in the Konso-Gardula in Ethiopia (Asfaw *et al*. 1992). They constitute typical examples of qualitative changes in the technology of stone processing in the Acheulean culture. With the development of the cerebral cortex of hominids, socio-cultural adaptation of a higher level of complexity and functionality appeared, for example, the ability to sew warm clothes and construct safe shelters, generate heat and light, build weapons, hunt for large mammals, cook, or construct boats with floaters. In a very short period of time (*i.e.*, for evolutionary standards) these skills allowed for the human colonization of other continents (Boyd, Richerson, and Henrich 2011: 10918–10925).

As Steven Mithen (1998: 124–125) noted, it was important for the development of creative thinking in *H. sapiens* to discover that other people have not only goals they want to achieve, but their own mental states too. In other words, they also have a mind. The importance of this adaptation is best shown in people with damaged parts of the brain which are responsible for the formulation of conclusions about the mental states behind the behaviours of others. Much data has been provided by research on autism. People affected by this disorder have difficulty in communicating and in becoming involved in complex social relationships. It also seems that the limited awareness of the presence of others as individuals equipped with a mind greatly impairs one's efficiency in predicting alternative courses of action.

From the perspective of the present considerations, awareness that the mind can be affected in a controllable way is far more significant than the fact that other people have minds of their own. Such influence over the mind can be achieved primarily by playing with the feelings of hope and fear which modify behaviour most effectively. In this way, people can be driven to a condition that is unfavourable for them, for example, using their own property and even persuading them to sacrifice their lives for a given vision.

Some individuals' creativity in the field of manipulating people and controlling their minds to subordinate them to a leader is a unique skill. This skill capacitates to consolidate relationships between millions of individuals, the efficient use of resources and to identify courses of action of great powers that group masses of unrelated individuals in crisis situations to be ready to die

[4] The history of political powers, at least since the time when man used a piece of iron to fight, and then reached for atomic power thousands of years later, evidently shows the significance of innovations, discoveries and the implementation of knowledge in all aspects of life.

for ideas. Creativity in leadership enabled the development of a previously unknown political action and constitutes one of the foundations of political mobilization (Skarzynski 2011b: 72–90).

Evolution of Social Relationships

The late Pleistocene climate change determined significant transformations in the ecological niche inhabited by scattered, nomadic populations of *H. sapiens*. The temperature rise, probably determined by increasing activity of the Sun (Usoskin 2008), influenced the area of the Fertile Crescent in a special way. With longer and warmer summers the people who lived there 11,000–10,000 years ago initiated the process of domestication of wild species of plants and animals (Richerson, Boyd, and Bettinger 2001; Brown *et al*. 2008).

The transition from the hunter-gatherer and nomadic way of life to the semi-nomadic, and later settled agricultural lifestyle triggered a number of changes in both the material and mental perspective. More and more efficient ways of growing crops, livestock and technological development associated with the need for irrigation and drainage of fields as well as processing and storage of crops affected the formation of surplus food. This, in turn, stimulated growth of the population. While the Pleistocene tribal organizations consisted of dozens of hunter-gatherers, the villages of 10,000 years ago were inhabited by dozens of families (*e.g*., the early Neolithic position of Netiv Hagdud of the Jordan Valley [Bar-Yosef *et al*. 1991]).

However, the human population at that time was still growing very slowly. It is estimated that in the early 'Neolithic Revolution' the global population of *H. sapiens* did not exceed 5–6 million individuals. During the formation of the first states it was not more than 100 million, at the edge of our era, that is in the initial phase of the development of political organization, still covering only a few areas of the world, it reached the size of 252 million (Namboodiri 1996: 31; Livi-Bacci 1997: 31, 38; Cavalli-Sforza 2001: 93–95).

It was only at the stage of developed political organization of the human species that the population growth accelerated rapidly as the exploitation of common resources and processing them into energy through centrally controlled techniques became more efficient.[5] This acceleration gained such momentum that during the development of agriculture it took 8,369 years to double the population, while in the phase of the global political system, that is po-

[5] On example from the early period might be the methods of irrigation which were developed by ancient civilizations (Mithen 2012). Other developments were aqueducts, hard roads and water pipes. This was accompanied by the development of taxation systems, administration, justice, police and the military. Today we have central systems of energy production, communication and information. All this was initiated in conditions of political mobilization that capacitated to implement a monopoly of legitimate violence. This ensures the protection of more and more sophisticated and complex systems.

lyarchy which regulates the life of the entire human species, it was only about 40 years (Livi-Bacci 1997: 31). This is how a population of millions transformed into a phase in which it is counted in billions of individuals (currently more than 7 billion) in a relatively short period of time.

By becoming producers of food, humans radically changed the behaviour they had inherited from their ancestors.[6] Since then their lives have closely been associated with the cultivated ground. All manifestations of activities of agricultural societies, also in the field of symbolism related to the functioning of the world, were more or less associated with the overriding objectives of: harvesting, procreation and protection of territory or its expansion. Their implementation determined the prosperity of the village, and then chiefdoms and the first states, which were led by rulers who justified their powers by the will of the gods.

Economic changes and the evolution of social organization had to take their toll on the understanding of the *sacrum*. Periodic renewal of the world, the associated regularity of the rhythms of nature and the movements of the celestial bodies were a significant component of visions which were based on kingship. It was the ruler who bore responsibility for the cyclical nature of vegetation and, consequently, field works and harvesting (Eliade 1981: 38, 41). Symbolically, this duty is captured in the Babylonian New Year ceremony, *akitu*, whose origins lie in the Sumerian era. During the twelve-day ceremony of *akitu*, the cosmogony was ritually repeated. The *hieros gamos* of the god Sarpanitum, played by the king and the high priestess of the goddess, finished the ceremony. With the rite of Holy Matrimony the king not only renewed the capacity of the farmlands, thereby ensuring the well-being of the whole society but, more importantly, he ensured his own powers to reign (Eliade 1959: 55–58).

In this way the human mind explained to itself the functioning of the world as a kind of world order in which the body struggles for survival. The body is more efficient in fighting when the mind feels that it is taken care of by a higher power and the undertaken activities are not random but are understood as necessary and requiring conduct in close cooperation with companions. Such remarkable products of the human mind as visions of the world, forces governing the world, and especially the expected order, quickly gained importance.

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[6] Adjustment to new conditions was not easy, especially when considering the fact that 99.8 % of the history of mankind is associated with the dominance of small nomadic tribes (Carneiro 1978: 219). According to evolutionary psychologists, most of *H. sapiens*' evolution of mental abilities took such a course. Therefore, our minds ought not to be treated as ones adapting to a modern environment. This is due to the fact that our minds have developed as a response to challenges posed for hunter-gatherers by the Pleistocene environment, *i.e.,* by the environment of evolutionary adaptedness (EEA) (Tooby and Cosmides 2005: 22–23).

Along with the evolution of sedentary farming communities and the transition to political organization, human communities began to be subjected to the processes of transformation in increasingly complex, multi-level and hierarchical social structures. These changes were reinforced by pressure from foreign unions, mobilized to establish world universal order according to the professed vision. The most powerful of them quickly began to conquer the world, to develop control of a territory and to enter into mutual interactions, thus creating a system of polyarchy.

In previous systems, kinship relationships were subject to the daily renewal of cyclic interactions. Companions were united by feelings which were constantly or almost constantly experienced together by their minds. They distinguished them from strangers and determined the maintenance of relationships and identity. However, a rapid increase in population changed people's behaviour. Primarily, it forced them to intensify contacts with those who were previously considered strangers but who lived in the neighbourhood, especially when they had to resist the very dangerous and previously unknown aggression of centrally-governed associations of people coming from distant places, no longer satisfied with plundering and capturing slaves but steadily worked by appointment and wanted to establish a new order, including a new cult of god/s.

In such territorial structures of guarding their autonomy and identity, coming into mutual interactions and rapidly developing under the polyarchy, bringing together tens and hundreds of thousands of individuals who had a high degree of complexity of the network of human relationships, when large economic and military projects were undertaken, the mechanisms regulating the functioning of social relations which were built on the bonds of kinship became insufficient. Even religious beliefs relating particularly to the fate of individuals could not effectively unite people who not only did not know one another personally, but did not even know about one another's existence. However, they had to bear the costs of protecting the cohabited territory from subsequent aggressors, defend places of worship of their gods and demonstrate increasing efficiency in the control of resources and their conversion into energy. They could do so only under the guidance of a political power. Although new communities were ruled by people who were genetically and socially strangers (nor their competences were determined by kinship ties neither contacts renewed on a daily basis), the political power was not perceived as accidental, and it was frequent that people gave their lives to protect it.

Ancient inscriptions written in stone from the 3rd and 2nd millennium BC survived to our times and show us how the new government functioned when it reached advanced form. It had to manage hundreds of thousands, then millions of people and exist only if it had visions of perpetuating the widespread belief in the mission entrusted to it by powers coming from outside of this world. This

is how the first rulers of the great powers, the kings of Akkad, interpreted their position in the 3rd millennium BC. The relationships between the founder of the dynasty of Sargon's Akkadian (2334–2279 BC) with Enlil, one of the trinities of the great gods, is shown in the following inscription: 'Sargon, king of Kish, won 34 battles, destroyed the city walls up to the sea shore. He made ships of Meluhha [Melukkha], ships of Magan, ships of Dilmun dock at the harbor of Akkad. Sargon, the king, bowed down in prayer to Dagan in Tuttul, and (the God) gave him the Upper Country: Mari, Yarmuti, Ebla, up to the Cedar Forest and the Silver Mountains. Sargon, the king to whom Enlil gave no rival: 5,400 people daily had their meal in his presence' (quoted after Liverani 1995: 2356).

The rulers of Akkad claimed to be representatives of the supernatural, and starting with Naram-Sin's (2254–2218 BC) rule, who was Sargon's grandson, also as 'kings of the four quarters of the universe', so that is what they called themselves (Van De Mieroop 2004: 64; Michalowski 2010: 153). They did not want to be only the administrators of a small organizational structure. As the inscriptions show, they slowly ceased to be interested in local affairs, directing their attention towards universal phenomena. In the end, they wanted to rule over the whole known world (Liverani 1993: 4). The imperial vision of the 'four quarters of the universe' was to present the whole of nature accessible to people, beyond which there are no *profane* places because there are only gods (Michalowski 1993: 87–88).

The image of 'four quarters of the universe' aptly indulged the feelings and ambitions of that time and became firmly rooted in people's consciousness to such an extent that it was reproduced in visions which justified the existence of other states and empires. It was referred to, for example, by Ashduni-Yarim, the king of Kish (around 1880 BC) when, following the example of Naram-Sin, he ordered to make an inscription celebrating a victory in the war against his neighbours.

> When all the four quarters of the world rebelled against me, during eight years I made war, and in the eighth year my worth was reduced to nothing and my army was reduced to 300 people. But when my lord Zababa decided in my favour, and my lady Ishtar came to my rescue, although I had taken just a little bread as my food, and I had left for an expedition of one day only, I held the country in awe for 40 days (quoted after Liverani 1995: 2363).

The idea is then found in the Babylonian *Hammurabi Code* (Harper 1904: 9), and in documents from the time of Ashurbanipal (668–627 BC), the last great king of Assyria (Saggs 1962: 258). It also occurs in the title of

the Persian ruler Cyrus II the Great (559–530 BC), recorded in the so-called Cyrus cylinder (Waters 2004: 94).

At that time the Assyrians created the most advanced variants of the vision of the world that defined not only the actions of their rulers, but primarily justified their positions and powers to govern. The kings of the country perceived themselves as messengers of the god Ashur. They waged wars to realize the plan of the order and they felt empowered to exert control on behalf of 'the four quarters of the universe'. They required absolute obedience from all. The rulers of Assyria called themselves, inter alia, 'the kings of the universe' and the possessors of the whole known space '[...] from the great sea in the East to the great sea in the West' (Oded 1992: 9–24, 163–175). Their visions were so sophisticated and mature and they influenced feelings so strongly that they planned to create an empire which would not be an area of personal domination but of universal peace. They considered themselves to be its guards (Oded 1992: 103), presenting war not as an act of acquiring new territories but as an act aimed at saving the order from becoming chaos (Maul 1999: 214). This is how they gave their ventures a universal character. This style of reasoning and argumentation was at the root of successive imperial visions and great conflicts.

In the world of increasing competition of powers, mobilizing communities to take actions which would please the gods or a god changed the lives of millions of people. And not only because they were able to cooperate with their companions, whom they personally did not know, towards whom the feelings they experienced referred only to the vision of universal order. They were also ready to provide services and to make sacrifices that were unknown to their ancestors. They began to pay taxes to the organization (the state, dynasty, and parties), perform exhaustive military service (sometimes involving them throughout their lives or nearly their whole life), and they were even ready to die and they did die for ideas. Some members of the political unions opted out of having a family or children, and ceased to care about their personal fate. Political mobilization entailed the obligation to bear previously unknown costs. This became possible only because these activities were prepared by the human mind, capable of mobilizing the body for action on vocation, which consists of the struggle for realizing a vision that is perceived emotionally.

In the process of the evolution of political unions, loyalty towards relatives gradually gave way to loyalty towards symbols appealing to the minds of millions. They modified their behaviour to the extent that it not only changed the importance of kin relationships, but weakened economic calculation. Political mobilization was, in fact, based on a completely different account: political, which allowed to fight great wars (so great that it was often difficult to identify a close or even distant purpose), make sacrifices (*i.e.*, waste) of substantial resources and, above all, of the lives of thousands, then millions of

people. This was done for ideas that were the symbols of a specific, non-random order that had to be established in the world. In the 12th century in the fight for the visions of communism, the Thousand-Year Reich and against them directly on battlefields joined more than 110 million people (the total population of 61 engaged countries amounted to about 2 billion). It is estimated that as a result of the war, 50 to 60 million people were killed, including about 20–25 million soldiers (Overmans 1990: 103–104). In the Soviet Union, which suffered the greatest losses, 24 to 26 million people were killed, including 8–9 million soldiers (Harrison 2003: 939–944). In the Third Reich, 9 to 10 million people were killed, including nearly 5.5 million soldiers (Wehler 2008: 942–946).

In increasingly complex societies undergoing political mobilization, particular importance gained people who were able to create and above all use visions to control the behaviour of the masses. This was not a simple task because political mobilization requires actions which are contrary to the ones attempted by the body formed through natural selection, which typically strives to preserve itself, or its nearest and its offspring. In acts of political mobilization it is forced to perform actions which are personally unfavourable for itself, and even destructive for it, for example, when it needs to participate in a war on distant, unknown territory fought in order to establish public order and actually devoted to the construction of the empire.

A mode of action typical for large human communities shows that political mobilization can be the source of another fundamental political phenomenon that began to emerge about 6,000 years ago along with the increasing complexity of Neolithic agricultural societies. This was a time of transformation of the chiefdoms into the first states in Mesopotamia (*e.g.*, Algaze 1993: 5, 97–115; Van De Mieroop 1999: 139–161; Cohen 2005: 117–155; Kleber 2008: 326–332; Postgate 1995: 395–411; Liverani 1993: 4; Michalowski 1993: 87–88), and Egypt (*e.g.*, Kemp 1991: 4, 27, 51–52; Quirke 2001: 7–21; Kahl 2006: 95–96). In the centuries that followed the same phenomena related to the political mobilization of large human communities took place in the lower reaches of the Yellow River and the Yangtze River and in the valley of the Indus to cover the entire area inhabited by the human species.

Propitious living conditions in the ecological niche populated by *H. sapiens* led to the formation of new unions of politically mobilized individuals equipped with a specific type of mind. These associations competed with one another and created an increasingly complex system of political units, that is polyarchy. Maladjusted to its requirements were eliminated and replaced by units carrying new visions of universal order, which they wanted to establish by all means because they believed to act by appointment of the god/s, and then in the interest of the race, class or nation. Rivalry within polyarchy required

continuous adjustment associated with, among other things, the modification of religious beliefs (the most important of which was the transition from polytheism to monotheism) and internal political systems of power (successive versions of the theocracy, dynastic power, oligarchy, dictatorship and democracy).

Social selection in the last six thousand years influenced human unions many times and always led to the ultimate triumph of a more effective political organization, for example, to the form of states rapidly developing their own power and system controlled by the greatest of them. This process continues to this day. One of its manifestations is the latest vision of a world controlled by 'the international community of states'. Invariably, the triumphant states were those that owned the most appealing presentation of the view of the world.

This was convincingly showed by Hendrik Spruyt (1994: 130–150) on the example of the Italian cities in the late Middle Ages and the Renaissance. Although these centres were rich, vibrant and militarily active, and even though they were often ruled by skilled and courageous people, they could not meet the challenges of the modern state because these associations were ruled by lineages effectively disseminating the vision of divine origin of their power. None of the Italian families generated ideas convincing enough in this field to be able to reach for the crown, as was the case north of the Alps.

Particularly instructive is the story of the greatest Italian power before unification of the Peninsula that is the Republic of Venice. It proves that even gigantic material wealth is irrelevant for the well-being of an organization manifesting ambitions to control a vast area when there is no vision of general order influencing the minds of the people and making them ready to use their resources in a disadvantageous way, to giving up having children and even to sacrificing their own lives (Rosand 2001; Landwehr 2007). Material power can be built by rational actions, but vision cannot be produced in that way. It has to take roots in the minds to successfully move millions of people for generations. In contrast, the history of the Papal States shows just the opposite. If one has a potent vision of human feelings, then even an economically weak entity may be able to modify the actions of millions of people and to mobilize them to build an empire for even a thousand years (Skarzynski 2011a: 265–290). When such an entity appears, the greatest economic powers and cultural centres must recognize its unique position, as was the case in the period from the 9th to the 18th century in Italy and in Europe.

The development of political forms of inclusive fitness, which is to mobilize millions to join common activities directly involving property and life, was possible in those days only by reference to the dominant faith and specific political theology which showed the body of the king as a symbol of the universal eternal order and the forces guarding him (Kantorowicz 1957). In the world of political unions, which are forced to compete with any available means, thin-

king in terms of cycles was replaced by a linear understanding of the world, now perceived as an object of conquest and expansion, that is uninterrupted continuation. The idea of progress formed the basis for subsequent political visions developed on this ground. When racial, national and class projects of the universal order appeared, the time for dynasties ended. Their place was taken over by political parties. Kinship eventually ceased to play any role in the mechanisms of political mobilization.[7]

Conclusions: Mind, Identity, and Inclusive Fitness

The development of specific abilities of the human mind enabled the transition from relationships of men and women who were united by family ties to relationships that functioned via feelings to visions of universal order. The creation and reproduction of these visions in different variants led to the formation of a new type of identity.

Identity is a primary and longstanding feeling of belonging that is already experienced by people involved in the simplest interpersonal relationships; for example, these can be feelings of belonging to a family, lineage or tribe. As the human mind develops under this experience an individual sees oneself as a part of a real larger whole, which in turn as a union, constantly operates through daily personal members interactions.

Political identity is a much later and completely different phenomenon. It is the result of the feeling of belonging to the union of people responsible for a specific order of the world and retained by it, whether it is an order expected by the god/s, attributed to race, class or nation, or even the community of nations. In each of these cases it is a particular vision that brings together members of a community in rapidly growing unifications which are able to fight and, above all, are organized so that they are perceived by their members, especially the elite, as bodies which have been established to rule the world.

When the identity of people was determined as the political, the social world ceased to be renewed mainly by day by day interactions. Since then it has been secured primarily by the state of mind of the people and the constantly required readiness of their unions to fight with the enemies. However, the principal activity of such organized communities is central access control to resources and processing energy on an unprecedented scale. Only so can the political union obtain the resources which allow an effective fight with rivals.

Along with the spread of political identity, the explanation of the functioning of the world in cyclical terms was replaced by thinking about development, expansion and progress. This understanding of reality began to direct aspira-

[7] This process transformed small, local societies based on kinship, during a period of six thousand years, into large organizations, into states, *i.e.*, a new kind of societies for '[…] which a definite set of political institutions is adequate' (Bondarenko 2008: 22).

tions, especially those of the elites; the populations that were concentrated in the states had to submit to them and follow the leaders.

When under dynasties the kinship ties were still significant, the ability to connect genetically distant individuals ready to fight for the order of the world played an increasingly important role (such a dynastic unification of people is of a political nature and is based on the relationships of relatives and unrelated people who form their surroundings as clients). In the modern structures of political parties an increasingly formalized bureaucratic organization plays a key role in bringing together the supporters of a particular political program, or it is simply conducted by their interest groups. The foundation of modern states is, next to administration, the monopoly for legitimate violence, justified by the vision of the world, race, class or nation, supported and protected by the dominant political party or a coalition of such entities.

However, even today's non-ideological political parties, which are ruled by coalitions of interest groups, have not only grown from cooperation constructed on the basis of popular visions of universal order but must still relate to them and manipulate them to succeed and gain electoral mandates to govern the country. They refer to the feelings of political identity in order to preserve the territorial unity of the relationship, which is the modern state, thus bringing together millions of individuals.

Mind capable of processing of ideas (especially systems of ideas) drastically modified the degree of fitness of the human collectives. It allowed rearrangement of societies from families and big lineages to political unions. This process has resulted in an acceleration of technological development and population growth. The competition between politically mobilized unions has defined the life of our species as a whole: it ceased fighting for resources with other species of animals, and transformed them into its own means which are only used and consumed.

The evolutionary theory of the origins of political phenomena explains how the division of human species in the evolutionary process in the 4th and 3rd millennia BC was possible and started in practice. Our species began to operate in a completely new way when grouped in powers that rivalled by any means. Then they have become ready to capture all of the available niches on planet Earth and drastically exploited them.

The effectiveness of the activities carried out by unions of individuals mobilized for establishing universal order caused the ancestral organization to be replaced by a political organization during the past six thousand years. The political system of polyarchy, first in a regional form, regulated the acquisition of resources and controlled the processing of energy. Today it is already a global system and its importance continues to grow.

So far it was shown that cooperation can be initiated and performed only as an effect of a game of organisms in time (Maynard Smith 1982; Axelrod 1984). Our research shows that the development of a specific type of mind leads to the strengthening of cooperation to the extent that it is possible to combine millions of unrelated individuals who are not personally engaged in interactions with each other but are able to struggle for long-term goals only because their minds experience feelings towards specific symbols and the associated vision of universal order. Submission to political mobilization means taking even destructive actions to the involved individuals (depriving chances to have offspring, reduction of income and forcing to sacrifice life), but it strengthens the dynasty, party and country. Thanks to this, related and unrelated individuals can better control resources, the population grows and the power of such cooperation develops.

The analysis of the genesis and rapid political mobilization of the human species will facilitate to pose a hitherto neglected question of the functions and importance of political phenomena in the process of inclusive fitness at the social level,[8] especially when we finally realize the importance of one of the key problems of the analysis of social sciences: the disintegration of kinship and replacing it with a political bond, characteristic of the dynastic state, then the post-dynastic state, that is the one that currently exists in the forms of dictatorship and democracy. The result of the evolutionary turn was the grouping of the entire species into a global system of polyarchy.

Acknowledgement

We are very grateful to Marek Konarzewski for useful discussions and comments.

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[8] Such a conclusion can be drawn from a careful reading of works by biologists who researched breakthrough moments of evolution (Maynard Smith 1982; Maynard Smith and Szathmáry 1995; Michod 1999), the functioning of the super-organism (Hölldobler and Wilson 2009), extensions of the extended phenotype (Laland 2004), and the problem of adaptation and selection in the process of evolution (Brandon 1990). The key role is played by understanding multi-level selection (the significance of the discussion of the issue for the development of the theory of evolution is presented by Okasha [2006]) and the importance of social phenomena (Sober and Wilson 1998). Now it is time that social scientists face the question of the role of political mobilization in human evolution.

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