

Plemię Europa? „Emocjonalny” obraz rzeczywistości

Streszczenie

Głównym celem eseju są rozważania dotyczące obecnego stadium rozwoju „organizmu” europejskiego w perspektywie politologiczno-neurobiologicznej. Takie transdyscyplinarne podejście pozwala na dostrzeżenie aspektów postępowania człowieka, które często są pomijane w analizach politologicznych. Wychodzę z dość prostego i chyba oczywistego założenia, że podmiotem polityki jest człowiek. Grupa, zbiorowość to zgromadzenie ludzi. Skoro tak, to warto może przyjrzeć się mechanizmom działania organu kluczowego dla wszelkich zachowań ludzkich, czyli mózgu. Drugą istotną przesłanką jest koncepcja współewolucji i założenie związku między człowiekiem i jego otoczeniem. Celem jest pokazanie ważnego splotu zależności między wewnętrżnością (mózg, ciało) i zewnętrżnością (zachowanie, struktury społeczne i polityczne). Kontekstem dla tej analizy może być Europa, ale przede wszystkim jest nasze człowieczeństwo.

Słowa kluczowe: emocje, mózg, zachowania, współewolucja, współpraca, Europa, polityka

Abstract

A main goal of this essay is the analysis of the contemporary phase of evolution of European “organism” by using approaches from political science and neuroscience. The transdisciplinary perspective allows for better understanding of finer points of human behavior which can be lost only in political science analysis. My simple and obvious assumption is that politics is about people. Human beings create groups, communities, etc. If it is so, maybe we should start with looking more closely into mechanisms of the most important part of ourselves. The brain. It is responsible for all human behaviour. Another crucial point is the connection between humans and environment. The concept of co-evolution is fundamental and very useful when we want to show intertwining relations between interiority (brain, body) and externality (behaviour, social and political structures). Europe may be the very context for this analysis, but it is most of all our humanity.

Key words: emotions, brain, behavior, co-evolution, cooperation, Europe, politics

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A tribe called Europe? An “emotional” perception of reality

We live in times when social and political sciences are more and more willing to absorb concepts deriving from other disciplines, exact science in particular. A conceptual “blend” is not a novelty in political science. A purpose of cognition is to find patterns which will provide answers to mind-boggling questions. My question was as follows: Why is the surge of system distortions in Europe and the world escalating? Since this is a global question, it requires a comprehensive approach. Therefore, this essay has naturally been based on the qualitative method. It is a heuristic analysis that essentially involves a description of my and other people’s experience of the phenomenon. A second method of learning and understanding is interdisciplinary bricolage, which may be a useful technique in searching common features and patterns. Using narrative, reflective and creative strategies to interpret has been (and probably will be) criticised many a time. A choice of the research practice depends on the questions posed within a cognitive context; i.e. what is attainable in this context, and what can be done under these circumstances? In my case, these conditions imply the use of exclusively cognitive processes (I am not an empiricist). Bricolage involves crossing boundaries and exploring other ways of processing information by human cognitive networks (cognitive processes). My contribution is creative “weaving” of my experience of perceived reality into a theoretical “patchwork” to show the correlation between interiority and externality.

Hence, how do I understand interiority? For me, it is human and his brain because I assume that everything begins and ends in the brain. Political sciences, including

European Studies, explore structures and processes of (political) power, which are nothing more than a result of our humanity (the entire history of the world and evolution confirm this indisputably). If so, I reckoned that we should look for the explanation of political and social behavior that often result in different crises (Europe, or more narrowly the EU, is now experiencing an immense surge of unrest in a source, that is “in our heads” (brain), and consequently, in emerging emotional states. Hence, I use neuroscience.

For me, externality means the world, politics, political structure, region, and community: just “the tribe” from the title. This term contains both a pinch of irony and a hint of reflection as it evokes a question about the boundaries of our community (“ourness”); or rather flexibility: openness and/or closeness. I suggest emotions are crucial determinants despite our belief in rationality of our behaviour (I know it may evoke protests and critique). It appears to me that in political science (probably in European Studies as well) we have abandoned simple observation for the sake of complex institutional and statistical analyses (certainly very necessary). Nevertheless, I have decided that humanistic – humane, human and “emotional” – narrative will be useful.

Humans do not exist in vacuum. They function in a community. Hence, the term of co-evolution is invoked. It implies something called adaptive behaviour. It may embrace conduct which depends on the context, i.e. how others will act or behave (it may concern a community, business, and political competition). Contextual adaptation is a process enabling an individual to handle different and overlapping contexts of his own ego and experienced interpersonal relations and social and cultural needs. In other words, it is a complex relation between interiority, experience and external impact.

Let's start with ... a human

The brain is a very complicated system. What is more, it is alive and responsive. The cells contact each other through electrical impulses as well as chemical reactions. Larger or smaller amounts of chemical substances may be released, thus leading to distinct behaviour. Human evolutionary superiority is the effect of externalised biological domination and the creation of culture (widely understood), which implies accumulation of advantages and further evolution. is a social being. He builds settlements and connections, which provides for a long process of observation, learning, creating information, narration and transmission. People cooperated to find food. Humans controlled

fire, which does not only warm them up. A fire facilitates social contact, intimacy, conversation, eating together, observation, and imitation. It also allows for thinking in the categories of good and evil. Cooperation means “shared intentions” – this is a core of morality (Tomasello 2016). Morality is composed of two elements: empathy and caring for others (other primates share this too), and a sense of getting what one deserves, i.e. justice (it refers solely to humans).

It is believed that people developed moral behaviour in effect of a peculiar extension of biological systems, which resulted in recognising others and taking care of offspring, partners and others in a group (Churchland 2012). These systems are evolutionary old. They are coded in our genome and “printed” in our brains. They are related with human capacity to predict future effects of actions and to make choices. Although moral decision-making results from biological relations, it is regulated by more general principles of decision taking. It does not merely mean looking for a right choice but subjectively the best one while considering various limitations and priorities. Hence, morality is not inherent; it is only a capability since it results from very ancient (evolutionarily) nervous systems connected with emotions, particularly those related to self-imagined effects of one’s potential actions. Furthermore, it also implies a more complex mechanism created in result of a long process of evolution, which involves attribution of importance to our place/position in social network and success achieved by our social group. The history of human development proves that our survival, and certainly our well-being, most of all depend on co-operation and ensuing relations and interactions. Moral behaviour is a systemic adaptation.

Mirror neurons discovered in monkeys by Italian scientists at the turn of the 1980s and 1990s are a very interesting discovery in the context of behaviour and the brain. It concerned groups of motoneurons. The researchers noticed that when a monkey was doing a specific, quite complex action, a certain group of nerve cells became active, which also became active when the monkey was observing the same movement made by another monkey. Similar neurons were also discovered in humans. It means that the interpretation of observed behaviour occurs in the recipient’s brain through specific simulation. Neurons enable mental “reading” and “reproduce” behaviour of the other brain. Discovery of mirror neurons was a great achievement in the field of neurophysiology and psychology even though the discovery of these cells itself was accidental. A general principle of mirror neurons functioning in humans and monkeys is the same. When we see that someone is picking up a ball, our brain generates such

reactions as if we were actually doing it. Mirror neurons' activity in people has been confirmed empirically.

In social life, noticing intentions is as important as understanding other people's emotions; they are often a key element of the context indicating the intentions of an action. Researchers have checked whether humans can feel empathy thanks to the system of mirror neurons. Scientists noticed that mirror neurons are the most active in people who have a high level of empathy. The word compassion acquires a very literal physical meaning. Moreover, many experiments have been performed which proved that we often unconsciously imitate movements of other people because this type of "motor empathy" facilitates contacts and assures mutual acceptance. Additionally, mirror neurons allow for mimicry and understanding other people's lips and tongue movement. Combining these two skills – reading (understanding) intentions and imitating – developed into speech (Ramachandran 2000). Perhaps mirror neurons help us understand the spread of innovative skills and inventions such as, e.g., advanced tools, art or mathematics. This, in turn, enhances the ability to imitate and learn (and teach), leading to fast cultural changes. *Homo sapiens*' "genetic outfit" is a product of the very specific brain which, however, would not have proper "fuel" without cultural and social background.

Emotions, emotions!

Here is another wonder – emotions are a crucial catalyst of our conduct. It is estimated that 95% of our reactions is unconsciously powered by amygdale while "the governing centre" – cerebral cortex – exerts slight impact. Although our brain is commonly deemed to be rational, it is actually the emotional brain. Emotions go first. The human brain is capable of creating a symbolic language and strategic thinking. The latter one embraces memories from distant past and imaginations of possible distant futures. We are able to imagine our own future state with accompanying emotions, and choose a proper strategy. What is more, people are able to feel empathy, i.e. read other people's psychological condition and emotions, which helps predict their behaviour and thus enhances the quality of strategic thinking. A "side effect" of empathy is the fact it encourages cooperation and altruistic conduct. Empathy appears to be evolutionarily related to *Homo sapiens*. There emerge more and more evidence proving that it is a result of a very sophisticated genetic regulation which, however, occurred in

effect of accidental genetic mutation and eventually changed the brain's structure (new connections). It was dormant but when climate conditions changed, it was activated in order to handle the situation, as claimed, among others, by Colin Blakemore, a British neurobiologist (2010).

Since cooperation is related to trust, what should be done to trigger cooperation in order to solve some collective problem even if it does not necessarily pay for individuals? Is it connected with evolution, the brain and hormone production as well? Generally, it is an important question from the evolutionary perspective as cooperation does not seem to match competition and natural selection.

In social science, classic theories of games and rational choice assume the existence of universal rationale, i.e. such a feature of human nature that is permanent and unchangeable in time and space, and which allows for making the best choice regardless of emotions. Moreover, it does not depend on the complexity of a problem – human is always capable of choosing an optimal solution. The most popular game is the “Prisoner’s Dilemma”. Another version of this game is “tit for tat”, which is based on the pure principle of reciprocation. In the first move, there is cooperation and next you do the same what your partner in a previous move. If your opponent is nice, each manifestation of cooperation evokes reciprocation, and opposite: the slightest manifestation of betrayal is punished with betrayal. It sounds like some Shakespearian play. An experiment was carried out where a game was adapted to uncertainty of our world. In every round, players had one chance out of eight that their move will be changed into something opposite than they intended. Cooperation will change into betrayal, and vice versa. The idea was to create a state of disturbance and wrong decisions (a mistake is something very humane, yet it is also not uncommon in nature). It turned out that the best strategy was conciliatory behaviour: “turning a blind eye” to betrayals that occasionally, yet unintentionally, occurred (Zolli, Healy 2012: p. 161–162).

At this point, we part with rationality. Even though many concepts and theories assume rationality of individual subjects as well as aggregate rationality of collective subjects, it is not necessarily so. It is claimed that rationality in a social community is described by a process rather than the effects of this process (Harrison, Singer 2006: p. 29). Moreover, human and his survival is connected with a group. Hence, thinking when to cooperate and when not does not depend on the assessment of our behaviour's impact on the group. Other primates behave in a similar way: they observe one another. The following reaction appears – “my friend’s enemy is my enemy” (with regard to pe-

ople, this mechanism is even more complicated). Besides, we like to possess the same what others have. This feeling is called “aversion to inequitable outcomes”; yet social theories more often assume conduct consistent with one’s interest rather than a sense of justice. Nevertheless, there is a lot of evidence proving that when we deal with limited resources, we do not act in our interest. Having even quite “a tasty chunk” in a hand, humans have developed an inclination to desire “a tastier thing” that is possessed by someone else (Zolli, Healy 2012: p. 162–163).

The research has recently started to explain the neural basis of social terms of higher rank such as mechanisms connected with intergroup relations and moral judgments. Most theories focused on higher-order emotions such as a sense of guilt, shame or empathy. It has recently been acknowledged, however, that the most basic emotions such as fear and anger may also play a significant role. Neurological research indicates that oxytocin – a neuropeptide which plays a key role in behaviour connected with trust and is released exclusively by mammals, may be of crucial importance. It is released by our body when we feel safety and connection to others¹. Oxytocin is a positive side of social relations. Yet, there is also a negative side. In the situation of “a lack of trust”, “chemistry of distrust” is activated. We become upset, but mainly men. It is connected with the release of noradrenalin (neurotransmitter) which mobilises the brain and body to action (Zak, Kurzban, Matzner 2004). In men, the level of DHT (dihydrotestosterone), testosterone derivate, increases and readiness for confrontation is higher (thus, aggression intensifies). It is also interesting that the more men win, their level of testosterone becomes higher, resulting in a cascade of cellular reactions – hormonal changes (the brain), eventually leading to aggressive and confrontational behaviours (Zak, Barraza 2013). A phenomenon of negative asymmetry occurs – a pattern of conduct repeats and thus strengthens. Women do not become aggressive in the situations of a lack of trust.

Physiological and environmental signals stimulate our social cooperation. Life experience may “retouch” mechanisms of oxytocin release. Safe and caring environment stimulates oxytocin release. A level of trust rises because mechanisms of reciprocity occur. On the other hand, stress, uncertainty and isolation do not conduce to a sense of trust. And one more important statement (in political categories as well): women release more oxytocin and they have easier contact with others (it is also the

¹ In result of research on neurology of trust, Paul J. Zak claimed that oxytocin is responsible for many human behaviors. A series of experiments proved that human brains appear to have a function of regulating balance between egotistic conduct and pro-social tendencies. His discoveries proved a relation between empathy and a release of oxytocin (Barraza, Zak 2009).

effect of evolution). There is a significant relation between genes that affect aggressive behaviour (in 50%) and the environment (another 50%). Stress, fear and food exert a considerable impact on social as well as political behaviour. Hunger, violence and war experienced in prenatal period affect aggressive behaviour later in life (Neugebauer, Hoek, Susser 1999).

Finally, trust and “our group”. Similarities and “ourness” make us willing to cooperate. We treat “others” cautiously; most often, however, conflicts arise. Tribalism is so strongly embedded in human history and it gives so much pleasure that even though we do not live now in tribal groups, we create them. Our brain is flexible and although we love our kin, we can quite flexibly determine who belongs to “our” group. Humans can variably set group boundaries; it is apparently a matter of processing information. Interestingly enough, research shows that differences in processing information also occur prior to the formation of political beliefs. Of course, it is about children. As far as adults are concerned, research on political orientations assumes the easiest division into liberal/left-wing and conservative/right-wing views, which appears to have the widest and firmest application. Interesting research reveals that we can notice differences in the brains of children of liberal, moderate and conservative parents (Dennis, Amodio, O’Toole, 2015).

This basic attitude-oriented division may also be characterised in the following way: there are people who advocate for the vulnerable and persecuted, want changes and can even risk chaos once they believe the change is good. Opposite to them, there are people for whom institutions, traditions and order are important even for the price of someone’s suffering. Obviously, it is a slightly simplified division (there are certainly a lot of intricacies, greyness, etc.), but it illustrates the issue well. It is true that we can, may and do change opinions and groups, but there are also certain obstacles that hinder this. People are inclined to hold quite explicit views and they are not always open to other/new ideologies. People can even feel anxiety when confronted with opposite views – amygdale and emotions are activated. It is followed by rationalisation and justification of one’s point of view – increased activity in the ventral striatum, which is a centre of reward and motivation. Controversy and reservation may obviously arise here but it may well explain why so many people stick to their beliefs and what consequences this could imply, particularly with regard to groups that are politically involved. Perhaps a sense of ideological congruence or cohesion as well as belonging provides a sense of satisfaction and pleasure. It is also possible that it balances (and sometimes counterba-

lances) another feeling bringing a reward – curiosity. Our organism is composed of the following systems: the system of wanting/desiring (an intensive desire – a high level of wanting), and the system of liking (a high level of liking – a feeling of great pleasure). A sense of pleasure is related to the activation of the opioid system (a release of endorphins in pituitary and hypothalamus).

Fortunately, however, one more human feature overlaps with this – a tendency to be altruistic, which for some may seem surprising from the perspective of natural selection, but which is likely to have evolved in human beings quite early. Altruistic behaviour is a natural, neurological phenomenon regulated by universal mechanisms in the brain. The term of reciprocation describes this very well. Yet, of course, we should use the term of altruism in this context very cautiously because there is a difference between psychological altruism (related to intentions) and biological altruism determined by the result of behaviour. What is more, a boundary between egoism and altruism is slim since one results from another and the opposite. Yet, it is not important because it is the result that matters. Altruism, especially compassion, is related to the above mentioned mirror neurons which create virtual reality – simulated thinking of another person. Empathy is a base of compassion. As said by Vilayanur Subramanian Ramachandran in the conversation with Dalai Lama: “a barrier between unreal and real co-feeling of pain and suffering of another person is our skin” (2012).

Fear, angst and anxiety

“Personal safety is not able to handle such a great burden as anxiety; that is why new spheres of fear have to be created. Not so long ago, a popular topic among West European societies was paedophilia; recently, terrorists have emerged... Today, we live according to the rule of mutually assured vulnerability, i.e. a guaranteed sense of uncertainty and lack of safety... thirst for fear is much deeper. It turns out that mutually assured vulnerability is something bigger today – it is a strategy of power” (Bauman 14.01.2017).

If anything may happen, if uncertainty, risk and danger appear to accompany our every step, if structures show symptoms of deterioration; then, we feel anxiety, fear, despair, anger, and sometimes powerlessness. Today, we are living in a state of permanent and “normalised” anxiety (Evans, Reid 2014: p. 92). Hence, a question about responses – individual and collective – arises. It is a reasonable question in the context

of politics because group emanations of dealing with anxiety appear to be a core (foundation) of politics. Our reactions may take a form of resentment, intensifying claims (pretence) converting into anger. Noradrenalin is released by the brainstem and people feel they must defend themselves (their thoughts) against the impact of others. In such a state, confrontation with opposite opinions releases the same chemical substances as in the situation of threatened survival; the limbic system is active and something called “narrow-mindedness” is created – the brain does not process information. In this situation, when we notice that our opinion is approved of, defence mechanism weakens and dopamine is released – we feel better and stronger. Instinctive frustration explains waves of collective populism to a large degree.

Changes in our surroundings, especially those referring to traditional hierarchical structures, may evoke an illusion of emptiness. However, it is merely a delusion because ephemeral political movements appear in it. It somehow resembles the spread of cancer. Things which happen are “subcutaneous”, “underground” or, in other words, local or internal (Chandler 2014: p. 84–85). It reminds a fairy-tale about The Emperor’s New Clothes. We have become used to seeing an emperor (i.e. elites) in an armour of power and authority, and suddenly it is all gone – the ruler is exposed. Surprise and commotion occur when a child screams he is naked. It is a manifestation of the eruption of social rebellion (unrest) in its very distinct forms, including populism. “Trembles” of underground politics, “piling up” of political powers and their penetration into the mainstream may ensue that, for example in Europe, populist parties appealing to the “upset ones” will win². At the same time, a trans-European movement of democratic transformation is likely to emerge out of grassroots initiatives and protests (Kaldor, Selchow, Murray-Leach 2012). Hidden “boiling” rebellion is perceived as resistance to the top-imposed external and “alien” solutions for the sake of peculiar locality. In systemic categories, this is an impact of the structure and its composition on disturbances.

Ulrich Beck has once called an entity we live in “a risk society” (2007: p. 22–47). We all share (and create) risk. It is omnipresent; yet, it may be deeply “dormant” for a long time. Risk is inevitable because everything is totally “mixed” (Ramo 2009: p. 130), i.e. everything is interconnected and intertwined. Living in a state of constant threat changes the relations between trust and risk. “Active trust”, typical of democracy and free market, transforms into “active lack of trust” (Beck 2007: p. 34–35). A spiral of anxiety,

² Literally – victory in elections, but most of all, establishment parties will add to their election programs some postulates (which can already be noticed), which is an effect of adaptation and imitation – political parties “feed” on citizens’ votes, no wonder they dash for “fertile pastures”.

fear and social angst is winding up. It also evokes (apparently natural) will to defend, to resist threats and be prepared for every possibility. We want to control, tighten and close. Resistance is a responsive behaviour – we are anticipating a blow, attack or strike. It is exhausting and sometimes also unreliable. Fear and anxiety increase; we feel simply physically fragile while a sense of powerlessness is intensifying too. We stare in disbelief that the policy of inhibition, prevention, and pre-emption of attack did not work. Perhaps it would be better to build a wall and get separated from danger? We will even fail to notice how unexpectedly danger has dug in and peers at us (Ramo, 2009: p. 190–191).

The end – co-evolution and ant colony

In his fascinating book *Gödel, Escher, Bach: An Eternal Golden Braid*, Douglas Hofstadter combines simplicity and complexity, analysis and images full of imagination. “Ant fugue” is something like that. Anteater proves that anthill is not merely a set of individual ants; the same as a bee swarm and beehive, ant colony is an intelligent organism. An anthill (*Aunt Hillary* in original) is surprisingly smart even though single ants are usually simply stupid. How is it possible? The same as the fact that a mind emerges from the brain. Mental activity forms from (“stupid”) cells connected into neuron nets. Intelligent ant behaviour is a result of their unity. Communication is a key here; as well as adaptation because Anteater sometimes brings in destruction and disturbance – he liquidates single ants. Confusion and demolition lead to healing reorganisation. Flexibility and adaptation to variable/changing circumstances allow for survival. Externality and interiority coexist in a close relation of interdependence (1980: p. 311–336).

Apparently, not everything can or should be explained by the biological evolution. We can use this term metaphorically, which is obviously justifiable in social and humanistic sciences. Nevertheless, we can also refer to the concept of gene-culture co-evolution, which permits to notice quite simple and apparent, and in my opinion very important, co-dependence between humans and environment. Both genes and culture are subject to similar dynamics whereas human society is a creation of culture that forms the environment providing for genetic changes to increase individual adaptation. An emerging social system is complex, non-linear and dynamic. Such systems have emergent features such as, among others, social norms and morality (Gintis 2011).

Politics is a result of co-evolution as well. It is a process of constant creation of social connections to control limited tangible and non-tangible resources. The evolu-

tion of political system’s complexity is noticeable in the development of such political institutions as parties, interest groups, and government competing with each other for votes, influence, assets and funds. Everything happens in a symbiotic environment where individual actors respond and adapt to the actions of others within the context of stabilised norms and repetitiveness of behaviour (elections, legal rules, and political practice). Survival and success depend on the circumstances and environment. However, the same organisational and institutional principles may bring in very different results in distinct local contexts. For instance, such features as social trust, civil conduct and action, or a nature of social relations provide a significant context for existing institutions (Ostrom 2005).

Our instincts, emotions and rational processing of information are embodied in the social and political structure – relations between power and inequality. Competition for various resources and co-operation between different social sectors are shaped by the paths of development and evolution of certain social and political order. It is both a matter of the model of competition, conflict and consensus that have formed historically in a given territory (e.g. a region, or country) as well as normative and distributive order. Politics has its own structural dimension emerging from a long process of social interactions; and the same as architectural buildings, it has its specific, peculiar and distinct character.

Gene-culture co-evolution designates a path of interdependence between humans and environment. Nevertheless, even though certain analogies between natural evolution and social change may occur, they are still only analogies. However, if we adopt the perspective of co-evolution, a lot (if not majority) of phenomena and features we know well from political analyses appear to be easier to understand. Each thing undergoing a change, transformation or transmutation must have some degree of temporary stability. Obviously, it has nothing in common with biological reproduction and natural good but with cultural attractiveness of certain social conduct, models and norms in a given environment (community). At the same time, repetition inevitably contains something new; renewal is a form of restitution, it is a shadow from the past. Yet, every repeated history modifies its renewed content.

“Ant fugue” and co-evolution remind us of our feeling of community (an ironic and reflective “tribe called Europe” from the title). It may well happen that “our colony” will fix itself, “the system will bounce back” – it will prove resistant to tremors, crises and shocks. On the other hand, however, it may also be completely annihilated, or else

“the tribe Europe” will be entirely replaced by other tribes. Research on the relation between natural disasters and deep social and political changes (Büntgen et al 2016) as well as genetic history of Europe connected with great migrations is very interesting within the above context. This is just a relation between interiority and externality. What is more, human genetic history in general (I mean the explored trail of “Mitochondrial Eve”) reminds us that WE ALL derive from the same small group (tribe) that left Africa a long time ago and started to colonise the entire globe. Human evolution is, in fact, the history of a core of our humanity – a developing ability to cooperate.

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