

HEGEMONY, MORALITY AND EMOTIONS: POWER IN THE NEURAL ARCHITECTURE OF THE HUMAN MIND

Abstract. *The current debate on the crisis of democracy needs firm epistemological premises for the interpretation of election results and the manifestation of power as consent. In the article, a biopsychosocial model of hegemony is presented as a tool for the manifestation of power in the human mind. Hegemony as conceptualised by Gramsci is developed with the concept of power as both repression or spontaneous generation, as proposed by Foucault. The concept is developed with the paradigm of the embodied mind and insights from psychology and neuroscience about memory formation and meaning creation, stressing the role played by emotions in the process.*

Keywords: *hegemony, morality, emotions, elections, biopsychosocial model, mental representations, embodied mind*

Introduction

Power is the central topic of political theory (Hobbes, 1651/2011; Foucault, 1977; Clegg and Haugaard, 2009). It is manifested in everyday life as an *influence* on the thoughts and actions of members of a political community based on what is expected and accepted as right. Political anthropology (Južnič, 1987; Balandier, 1998; Lukšič, 2021) explains the human condition and the need for man to live in groups. Life in a community brings to the surface different needs and interests, beliefs and goals, antagonisms and conflicts. This creates the need for coordination and organisation, the necessity of *political action*.

As a political animal, humans construct their reality through the ideological struggle *to exert power over meaning*. Through political action, a community articulates *a contingent political structure* with power relations that determine the knowledge and behaviour of its members. The current

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form of the democratic political model based on freedom and equality is the result of political fights for *emancipation* waged over the centuries by liberal and working movements under the influence of the classic German philosophy and the liberal and Marxist traditions.

Yet, the contingencies of history mean that the hegemonic bloc existing today should not be taken for granted since it is open to development, depending on political action that will determine the future of the current political model. One should always bear in mind Althusser's warning concerning the "radical instability" of history that means any historical articulation "can be valid for a time but not eternally" and "can change without reason, that is, without an intelligible end" (2006: 195–196). Keeping democracy, as both a concept and a political practice built on the values of freedom and equality, is thus an ongoing process of political action.

The prevailing type of power manifested today is that based on consent, as best described by the concept of hegemony. People generally consent to be governed and live a moral life in line with the articulated power relations that determine meaning in everyday situations. Force applied by the state apparatus as power by coercion is rare these days and only used in exceptional circumstances. This makes it necessary for political theory to understand the ways in which power as consent works to produce and reproduce political order in a modern community.

The central mechanism for establishing a government in a democracy today is *elections*. It is thus important for political science to develop valid theories, concepts and methodology with *firm ontological and epistemological bases* to analyse this political phenomenon. In the current debate on the *crisis of democracy*, one can find scientifically valid approaches, partisan opinions, and utopian normative theories. Political science must be able to distinguish these, especially due to the responsibility that it holds in the debate about the future of democracy. Following the thinking of classic German philosophy, notably Hegel, and the Marxist tradition, the concept of democracy should be validated with the concept and historical process of human emancipation.

Democracy and populism

After the 2016 victory of Donald Trump and the successful Brexit referendum, many political scientists were striving to interpret the voters' decisions. A primary objective to help the debate on the future of democracy should accordingly be an epistemologically valid conceptual framework for analysing election results. Certain authors have instead jumped from being personally dissatisfied with certain election results to general criticism of the democratic model of today and the central role played by elections in it.

Yet, as Przeworski (2018: 3) notes: “Dissatisfaction with the results of elections is not the same as dissatisfactions with elections as a mechanism of collective decision making”. Some political scientists may not be aware of this crucial difference, which in fact is the difference between political science and politics.

Instead of moralising about populism, political theory should further develop the ontological approach presented by Laclau (2005) to describe the logic of its articulation. As he explains, the first condition for the rise of populism is the failure of the governing political elite to satisfy the expectations of the people. After individual disappointments and unfulfilled demands keep accumulating, the next step is a simplifying discourse that hegemonically chains all these singular dissatisfactions under a unifying empty signifier with the logic of equivalence. This is how a new collective political identity emerges, via populist approach.

Populism is hence not a sign of the crisis of democracy as a political model, but a sign of the crisis of governing by the traditional political elite, which has in fact prevented any deepening of the democratic process following the introduction of general elections. Instead of questioning the legitimacy of elections as the mechanism for collective decision-making, when one is disappointed with election results one should analyse the reasons, mechanisms and processes of this phenomenon. While so doing, one should apply a valid scientific approach to understand the biopsychological dimensions of populist election victories.

Schumacher et al. (2022) did so by analysing “the affective responses that populist rhetoric actually evokes” (2022: 851). While measuring arousal with skin conductance and valence with facial electromyography, they found that it is not the anti-establishment rhetoric that evokes significant affective responses, although the pro-establishment rhetoric does so for “the lower educated and those who vote for populist radical-right (PRR) parties” (2022: 853). This shows “an incongruity effect: not messages *congruent* with someone’s priors result in (negative) affective responses, but rhetoric that is *in conflict* with someone’s existing attitudes” (ibid.). Further research could prove Laclau right in pinpointing dissatisfaction as the driving force of populism.

Since human existence is nested in *mental representations*, this is also the central object of interest in the scientific analysis of voters’ decisions. To better understand *the processes of creating meaning and making decisions*, political science should adapt and embed the insights developed by psychology and neuroscience in this field. A valid political analysis should include the neural architecture of the human mind to understand political phenomena as *constructs of the embodied mind in a given context*.

Hegemony and emotions

In this article, a *biopsychosocial model of hegemony* is presented to explain how political power manifests in the brain. Hegemony as *moral leadership* is an emergent political phenomenon nested in biopsychological processes. The human mind is embodied and functions in relation to the context with which it is interacting. The most important tool for the embodiment of power is *emotions* as a biopsychosocial process defining the categorisation of things, phenomena and other people as good or bad. The biopsychosocial complex of hegemony, morality and emotions can therefore explain the functioning of power as consent.

As Heaney (2011) pointed out, political theory should better explain “the relationship between emotions and relations of power and domination” since “relations of power are emotionally valanced” (2011: 259). Understanding the role of emotions in how power is incorporated into memory formation, and how it is manifested in meaning creation, can help to achieve this goal. Emotions activate the biological mechanisms needed to form long-term memory of important events and concepts, and they filter the strongest concepts of meaning to make sense of a situation.

Emotions are hence a tool of political power in the brain, which represents a challenge for those rationalist normative theories of democracy that try to achieve “an unconvincing separation of reason and emotion” and see the “democratic space as a neutral realm of transparent communication” (Martin, 2013: 462). Meaning creation and its transfer to others by communication is determined by hegemonic power relations and emotions as their tool. Further, human reason is not only formal but mostly emotional and, instead of interpreting emotions as “distorsions of reason”, one should acknowledge that they “orient cognition” (ibid.).

Like other fields of the human sciences, political theory has long been defined by the rationalist tradition of mind–body dualism. The cartesian logic of strictly separating the rational mind from the body “is an ontological shortcut, rather than a plausible and defensible ontology of the body” (Jenkins, 2005: 2). Further, this legacy that “is accepted (mostly) unquestioningly by political analysts... has severe epistemological and methodological consequences” (ibid.: 1). This exclusion of the embodiment of the human mind leads to political analysis that lacks epistemological validity to explain election results as the product of mental representations.

Expectations that some normative theories of democracy are based on rational choice theory are an ontological misconception, since it uses “a model that replaces homo sapiens with a fictional creature called homo economicus” (Thaler, 2015: 4). As McGraw (2000: 808) noted, “rational choice

models... were rooted in assumptions that violate well-established principles of limited information processes". To analyse voters' decisions on ontologically and epistemologically sound bases, political science should therefore acknowledge the neural architecture of the human mind, and follow Machiavelli's approach to "go to the real truth of the matter, not to repeat other people's fantasies" (2009: 60).

Hegemony and morality

Political theory exposes two types of the manifestation of power as either coercion or consent (Gramsci, 1953; Hoffman, 1984; Anderson, 2017). In the project of emancipation, the starting point of the vulgar Marxism was to see the state chiefly as coercive, even though Marx stressed the ideological dimension of politics, and the importance of theory, consciousness and mind as a reflective part of the political process. The subsequent attention paid by political theory to power as consent was based on the realisation that one cannot explain how the economically dominant class retains power in a liberal democracy solely by stressing coercion (Hoffman, 1984: 1).

Gramsci was the first in the Marxist tradition to develop a comprehensive theory for the understanding of politics and the state with the conceptual separation of power as coercion, and power as consent. In so doing, he not only added "consent to an existing theory of the state as an instrument of coercion", but instead "[h]is concept of hegemony challenges the whole notion of the state as a class instrument" (ibid.: 4). With his view of hegemony as *moral and intellectual leadership*, he substantially redefined the interpretation of power in a modern political community articulated in a liberal democratic model (Lukšič and Kurnik, 2000).

Using the concept of hegemony, Gramsci describes politics and the state as an articulated historic bloc of values, meanings and behaviours that lead the people to reproduce the political structure with its relations of power. Ideological domination is hence based on "a set of descriptions of the world, and values that preside over it, that become in large measure internalised by those under its sway" (Anderson, 2017: 21). Power relations are accordingly an imminent phenomenon of life in a political community that defines the knowledge and behaviour of its members, with or without the need for physical force as coercion.

An important theoretical move was Gramsci's "conception of materiality of the ideology" that was no longer "identified with a 'system of ideas' or with the 'false consciousness' of social agents", but as "an organic and relational whole, embodied in the institutions and apparatuses, which held together a historical bloc around a number of basic articulatory principles" (Laclau and Mouffe, 1985/2001: 67). An ideological struggle is therefore

waged to achieve domination over meaning, domination over thoughts and actions in order to define what is presupposed to be right.

In this regard, Hočevar and Lukšič (2018) stress the importance of retaining the conceptual distinction between hegemony and ideology to better understand Gramsci's theory. They emphasise that "ideology is in the service of political fights, in the service of the establishment of hegemony, and as such it is a (political) precondition for the constitution of the unity of a historic bloc" (2018: 21). Ideology is thus "an instrument of the fight for hegemony, since it constitutes a real political movement on a conscious level" (ibid.: 22).

Given that hegemony as ideological domination is based on moral and intellectual leadership, it is linked to morality, a biopsychosocial tool for categorising things, phenomena, and other people as good or bad. Through political action in the life of a community, people articulate moral systems with meanings that define the expected and accepted thinking and behaviour in a certain context. Morality is thus the battlefield for the ideological fight for hegemony.

Although moral systems are a contingent creation of intersubjective relationships as an ontic articulation, Haidt (2012) proposes that morality has an ontological foundation in evolutionary needs. He states "that morality is the extraordinary human capacity that made civilization possible" as "a feature of our evolutionary design" (2012: xii–xiv). He defines moral systems as "interlocking sets of values, virtues, norms, practices, identities, institutions, technologies, and evolved psychological mechanisms that work together to suppress or regulate self-interest and make cooperative societies possible" (ibid.: 314). Haidt's description of a moral system is hence the same as Gramsci's description of a hegemonic bloc, which makes hegemony and morality a political complex that regulates life in a community.

How is morality both an evolutionary dimension of the human condition and a contingent political articulation of power relations? The environment creates survival challenges that force an organism to cope with adaptive strategies such that it detects signals which trigger adaptive behaviour and activates a specific cognitive module that responds to the challenge. Since human nature calls for life in groups, this brings specific challenges and "involves tension *within* the group linked to competition *between* different groups" (ibid.: 14).

Haidt therefore understands morality as "adaptations to long-standing threats and opportunities in social life" while "[c]ultural variations in morality can be explained in part by noting that cultures can shrink or expand the current triggers of any module" (ibid.: 144). As he puts it: "We're born to be righteous, but we have to learn what, exactly, people like us should be righteous about" (ibid.: 31). Human nature, especially the nature of life in a

political community, therefore requests basic moral pillars, e.g., care for the vulnerable or loyalty to your group¹, as answers to evolutionary challenges. These answers are contingently articulated with political solutions that form a hegemonic bloc.

Building on Gramsci's concept of hegemony explicating the "unity existing in a concrete social formation", Laclau and Mouffe (1985/2001: 7) set out to analyse the "logic of the contingent" in the process of constructing such a formation. Based on the postmodern theory of discourse, they presented the logic of the construction of a collective political identity as "a symbolic unity" in which the signified overflows the signifier (ibid.: 11). This means that an *empty signifier* (e.g., the people in current populist rhetoric) over-determines different singular meanings with the logic of *equivalence*, and thereby unifies different political positions by simplification (e.g., the common fight against the corrupt elite).

However, the logic of equivalence does not imply that the differences (e.g., particularities of individual political fights) are eliminated in this unification process since "equivalence is not a relation of identity among objects", but it makes possible that "the identity of the object is split: on the one hand, it maintains its own 'literal' sense; on the other, it symbolizes the contextual position for which it is a substitutable element" (ibid.: 63). Namely, the differences do not disappear, but are put aside and overdetermined by the common political project. This is the logic that Laclau (2005) used to describe populism as a political identity embracing accumulated singular dissatisfactions due to unfulfilled demands.

Lash (2007: 55) was critical of the interpretation of power as symbolic and of "domination through ideology and discourse" in the description of the contemporary manifestation of power, and stated that "power now... is largely post-hegemonic". He noted that power has shifted "from the hegemonic mode of 'power over' to an intensive notion of *power from within* (including domination from within) and power as generative force" (ibid.: 56). He stressed that power not only occupies the discourse, but "it penetrates your very being" (ibid.: 59).

Lash's critique is based on Foucault's concept of power. Foucault (1977: 213) highlights that power "is not in the hands of those who govern" and in fact power cannot be possessed at all, although he stated that "[e]verywhere that power exists, it is being exercised". His main point is that power is not just repression and domination, but also generation and creation. As Deleuze (1988: 70) depicted, Foucault adds to the concept of power the role

¹ Identification with a group in a modern community can be practised on different levels, whether the family, peers, neighbourhood, political party, nation etc. These differences are however not relevant to the point made.

“to incite, to induce, to seduce, to make easy or difficult, to enlarge or limit, to make more or less probable”.

Lash’s criticism of the notion of power as symbolic domination is correct since it does not describe all types of its manifestations. Yet the concept of hegemony can include Foucault’s concept of power (Lukšič and Kurnik, 2000). Moral leadership of a political community presupposes two types of power as consent, as either repression or spontaneous generation. Hegemony and morality can manifest as either deontological, based on what is right or wrong, or utilitarian, based on what is good-or-bad-for-me considering the consequences. If a meaning and action is both right and good, hegemony is manifested as power of spontaneous generation. If it is right, yet bad when considering political consequences, it is manifested as the power of repression of a generated meaning.

Still, in order to use the concept of hegemony in the most common understanding of power, one must abandon the paradigm of postmodern theory of discourse and psychoanalysis, which Laclau and Mouffe based their work on, and instead develop the concept of hegemony as part of the neural architecture of the human mind. Since mental representations are the foundation of human existence, and hence the basis of political activity, in order to understand how power as consent is manifested in contemporary democracy, political science should acknowledge the insights of psychology and neuroscience for a biopsychosocial analysis of political action, including voters’ decisions. This leads to the question: how does power manifest in the brain?

The architecture of the human mind and mental representations

The biological mechanism in which *mental representations* are nested² in the brain is the interaction between *neurons*, “the basic signaling units that transmit information throughout the nervous system” (Gazzaniga et al., 2019: 24). A neuron receives input from other connected neurons through dendrites and computes the importance of received information. Based on this computation, a neuron either continues the transmission of the signal or remains inactive. If the neuron is activated by received signals and the information is transmitted farther on, “electrical signals travel along the length of the axon” (ibid.: 27). At its end, a neuron is connected to others with *synapses*, “a specialized structure where two neurons come into close contact so that chemical or electrical signals can be passed from one cell to the next” (ibid.).

² The concept of nesting is important by stressing the fact that mental processes are an emergent phenomenon and cannot be reduced to the functioning of biological mechanisms.

Neurons thus exchange information with biochemical and bioelectrical signals, and the functioning of the brain “involves electrical-to-chemical-to-electrical coding of experience” (LeDoux, 2002: 47). At every single moment, some neurons are active and others inactive, and mental representations are nested in the configuration of *simultaneously coactivated networks of neurons*. The computation that either excites or inhibits the activation of a neuron “reflects patterns of interconnectivity between neurons” with synapses as “the main channels of information flow and storage”, which leads LeDoux to conclude that “the self is synaptic” (ibid.: 2).³

The structure of synaptic connections is therefore the basic biological mechanism determining the processes of meaning-creation and decision-making⁴ and might hence also be the neural location of embodied hegemonic power relations. The biological mechanism that allows the embodiment of experiences, and thereby the hegemonic relations of power over meaning, is *neuroplasticity*. This is the human brain’s ability to flexibly change the physical structure of synapsis, and by that to change the future conditions for the articulation of the coactivated configurations of neurons in which mental processes are nested.

Neuroplasticity is the feature of human nature that allows the brain to be open to and adapt to experience in interactions with the environment. Moreover, since humans have to live in groups, an important factor of their environment is intersubjective relations that are politically mediated. Political power is namely an emergent phenomenon also nested in the synaptic structures of the brains of members of a political community.

Yet how should political science approach the analysis of the embodiment of power? Like any other scientific discipline, political science is a battlefield of different competing paradigms as “recognized scientific achievements that for a time provide model problems and solutions to a community of practitioners” (Kuhn, 1962/1996: x). In the last decades of the twentieth century, dissatisfaction with the conventional approach to the study of human activity brought a paradigm shift in many fields of science, because when “[c]onfronted with anomaly or crisis, scientists take a different attitude toward existing paradigms, and the nature of their research changes accordingly” (ibid.: 90–91).

In his book on the history of *the cognitive revolution*, Gardner (1987: 10) underscores the importance of the conference on “*Cerebral Mechanisms in Behavior*” held in 1948 as the turning point in the paradigm shift following the dissatisfaction with behaviourism as the prevailing paradigm in human

³ We are aware that mechanical or biological reductionism cannot describe a mental process, but would like to stress the biological foundation of this process that is usually neglected by political science.

⁴ Nikolić (2023) has recently proposed an alternative mechanism that determines the information transmission in the brain, but currently the prevailing theory in neuroscience remains the synaptic one.

sciences. The most important feature of the cognitive paradigm became “the belief that, in talking about human cognitive activities, it is necessary to speak about mental representations” (ibid.: 6).

A similar paradigm shift appeared in the field of economics following the accumulation of cases seen as anomalies, since “behavior was inconsistent with the idealized model of behavior” according to the dominant economic theory (Thaler, 2015: 4). As Thaler stressed, those deviations from expected behaviour showed “that economic models make a lot of bad predictions” due to the “misconception of human behavior” (ibid.: 4–5). At first, “many economists strongly resisted the call to base their models on more accurate characterizations of human behavior”, but eventually the paradigm of *behavioural economics* prevailed “with strong injections of good psychology and other social sciences” (ibid.: 9).

Another important area of the paradigm shift was medicine where Engel (1977/2012: 377) criticised biomedicine for being based on “a model of disease no longer adequate for the scientific tasks and social responsibilities of either medicine or psychiatry”. The problem he exposed was the mirrored ontological misconception based on the cartesian mind-body dualism. While the human sciences have excluded the body from the analysis of human phenomena, medicine has excluded psychosocial factors and focused solely on the body. Engel (ibid.: 386) thus highlighted the need for a “biopsychosocial model” that would take all the factors and their interrelationships into account to holistically understand and explain the human condition.

The concept that emerged in human sciences after the paradigm shift described above was that of the *embodied cognition that interacts with the context*. Lakoff (2012: 773) summarises the central ideas of the concept as follows:

(a) we think with our brains, that is, thought is physical and is carried out by functional neural circuitry; (b) what makes thought meaningful are the ways those neural circuits are connected to the body and characterize embodied experience; (c) so-called abstract ideas are embodied in this way as well, as is language.

The focal point of embodied cognition is thus the finding that reason cannot be disembodied, yet depends on and is mediated by motor and sensory neural circuits. Not only do these neural circuits provide information for creating meaning, but they also contribute conceptual structures for the interpretation of a context and for scenarios constructed in the mind. Thus, wo/man can only think in relation to her/his perception and body movement. Further, an important principle of *conceptual blandings* in the process

of meaning-creation is the adjustment of the elements of meaning with a view “to anchor the integration networks in blends at human scale, using the vital relations that are employed in perception and action” (Fauconnier and Turner, 2002: 319).

Among the methodological challenges in the study of emotions in politics, Lynggaard (2019:1205) raises the distinction concerned with “whether political emotions are approached as the property of individuals or a collective phenomenon”. This dilemma is related to the presented question of how political science should approach the analysis of the embodiment of power. Lynggaard presents the object of analysis as “the relation between political agency and structure” (ibid.).

The biopsychosocial approach can solve this problem because it explains the relations between individual biopsychological processes in the context of a political community. As Lynggaard (ibid.) notes, “[n]euroscience has shown how emotions as a biological phenomenon are both associated with individuals and collectives in the sense that individuals’ emotions are, at least in part, a function of group interactions”. The paradigm shift based on the concept of the embodied mind functioning in a context exposes the process and mechanisms that make emotions a biopsychosocial tool for an individual’s cognitive and behavioural orientation in the political community. This means the hegemonic political structure is the context in which a political agent functions. Through experiences in a political community, one embodies moral systems and the relations of power, and emotions play an important role in this process.

A valid political science should accordingly acknowledge the embodiment of the human mind, and adapt and embed the findings of psychology and neuroscience in the analysis of political phenomena. *A biopsychosocial approach to political analysis* includes all relevant factors regarding the body, the mind, and the political context in which mental processes lead to meaning and decisions. To understand the functioning of political power in these mental processes, it is important to look at the conceptualisation of emotions as constructs in an event.

Emotions as constructs in an event

Like other scientific disciplines, psychology was concerned with developing a paradigm that would connect psychological phenomena with neural phenomena, while avoiding reductionism in the process. As Barrett (2009: 326) noted: “Psychological states such as thought and feelings are real. Brain states are real. The problem is that the two are not real in the same way, creating the mind-brain correspondence problem”. Connecting psychological phenomena to neural activity thus poses an epistemological

challenge, the same as how political science must connect voters' decisions to the functioning of the embodied mind.

The solution Barrett proposed to overcome this challenge was to look at psychological phenomena as *complex constructs composed of basic primitives*. Even though one cannot reduce a psychological, or political, phenomenon to the functioning of biological mechanisms of the body, an epistemologically valid analysis of this phenomenon can describe the primitives that do “correspond closely to distributed networks in the brain” (ibid.: 331). Moreover, “all mental states (however categorised) can be mapped to these more basic psychological primitives” (ibid.).

Voters' decisions are thus an emergent phenomenon created in a mental process that can be mapped onto basic primitives that correspond to the functioning of bodily and neural mechanisms. Psychology and political science thereby retain the separate scientific object they analyse, albeit they do it on sound epistemological bases with the acknowledgment of human nature and the embodiment of the mind.

Combining constructivism and the concept of the embodied mind that interacts with the context in a biopsychosocial model of analysis can assist political science to better understand political action and the manifestation of power. The centrality of mental representations as the object of analysis of any human activity leads to the need to include the body in political analysis, and to abandon the theory of rational choice or any other ontological misconception based on the rationalist tradition of mind-body dualism that separates reason from emotions.

In his analysis of patients with “damage to brain regions necessary for the deployment of certain classes of emotions and feelings”, the neuroscientist Damasio found that “[t]heir ability to make appropriate decisions is compromised in situations in which the outcomes are uncertain, such as making a financial investment or entering an important relationship” (2004: 140). Since other brain functions were not affected, Damasio concluded that the patients' reasoning defect was “due to the impairment of an emotion-related signal” because in the construction of mental representations “they failed to activate an emotion-related memory that would have helped them choose more advantageously among competing options” (ibid.: 144).

This means that the conventional rationalist idea that one must suppress one's emotions in order to make a reasonable decision is ontologically wrong. The indispensable function that emotions play in decision-making is the consideration of “the *future outcome* of the actions” (ibid.: 145). As Martin (2013: 462) stated, emotions “orient cognition”. Taking account of the consequences of an action means taking account of the relations of power that determine what is expected and accepted as right in a political community.

Emotions are hence an important feature of human reason and political science should acknowledge this in descriptive analysis and normative theories. Further, emotions are not a biological mechanism that reacts to the context since man is “not a passive receiver of sensory input but an active constructor of [his] emotions” (Barrett, 2017: 31). Rationalist normative theories of democracy accordingly hold a wrong view on emotions as they “are not temporary deviations from rationality” and are instead man’s “constructions of the world” (ibid.: 225).

Besides, emotions are *a biopsychosocial tool of power* because they not only participate in meaning-creation and action-prescription, but are also a tool for influence. As Barrett states regarding the function of emotions in relations with others: “We are a bunch of brains regulating each other’s body budgets, building concepts and social reality together, and thereby helping to construct each other’s minds and determine each other’s outcomes” (ibid.: 291).

Emotions are a tool for orientating humans in a given context, which includes living with others in a political community. This makes emotions a tool for the embodiment of morality since both emotions and morality are tools for categorising things, phenomena, and other people as good or bad. Given that morality is determined by hegemonic relations of power, *the biopsychosocial complex of hegemony, morality and emotions* can explain how political power works in the neural architecture of the human mind.

The process of forming memories

The first element in understanding the embodiment of power is memory formation. As explained, neuroplasticity enables flexible changes of synaptic structures to make learning from experience possible. Like other biological mechanisms, memory’s function is the preservation of life. Memory creates a bias in the interpretation of future bodily and sensory information and thereby alters the probability of the simultaneous coactivation of a certain neural network. Regarding life in a political community, memory thus embodies power of different meanings according to the articulated political structure. Hegemony consequently determines the probability and acceptability of a certain meaning in a politically relevant context.

Memory formation is hence *learning from experience*, and can occur in two ways. Either by repetition of a pattern of experience due to frequent coactivation of a certain neural network, after which the synaptic structure strengthens the connection between the neurons involved, which is known as Hebbian learning (Hebb, 1949). Alternatively, the same effect is achieved by a single experience with *emotional intensity*. Emotions are thus an important tool for embodying an experience into the synaptic structure.

Following a series of experiments, Cahill and McGaugh (1995) uncovered the process and mechanisms via which an emotionally intensive experience is memorised. They presented a set of visual stimuli to two different groups and created “two different stories by varying the narration that accompanied each slide”, a neutral and an emotional one (1995: 410). The subjects who were emotionally aroused “subsequently exhibited enhanced memory for the story” (ibid.).

While later analysing the process and mechanisms involved, Cahill and McGaugh discovered that emotional arousal after an experience activates the stress mechanism which releases neurochemicals such as adrenaline, noradrenaline and cortisol. Since “[l]ong-term memories are not made instantaneously” but “consolidate over time after learning”, they stressed the importance of “neurobiological systems that regulate, or modulate, long-term memory storage” (1998: 294). Accordingly, emotions as a biopsychosocial tool activate the biological mechanism for the embodiment of an experience for its future role in the interpretation of a context.⁵

Cahill and McGaugh explain this process as a survival strategy “from an evolutionary and functional perspective” since man “would appear to benefit little from having memories for trivial events that are as strong as memories for more important events” (1996: 237). This explains why the role of emotions in memory formation is to “reflect the degree to which the information is worth storing” (ibid.). The process and mechanisms involved in forming memory of emotionally intense experiences are then a tool by which political power is also embodied in the synaptic structure. Emotions add intensity and valence to concepts in memory to make sure of their future activation in appropriate contexts, whether it be to avoid danger or grasp an opportunity.

The process of meaning creation

The second element for understanding the embodiment of power is *memory retrieval in meaning creation*. A distinction is to be made “between memories that are formed and stored in a way that can be consciously retrieved, and memories that are stored implicitly, and hence are not consciously experienced when retrieved” (LeDoux and Lau, 2020: 1019). Another distinction is between episodic memories and “semantic memories of factual and conceptual information about what things are and are not” (ibid.). In any case, “[m]emory is necessary to turn meaningless sensations into meaningful perceptions” (LeDoux, 2020: 197).

⁵ For a presentation of the process of memory consolidation with sharp wave ripples, Buzsáki (2019: 199–217).

Semantic conceptual knowledge is the structure of meaning that includes the hegemonic relations of power and emotionally stamped intensity and valence. Concepts are ready to be activated to make sense of a situation in the process of creating meaning. The creation of mental representations, including voters' decisions, is embodied and nested in the synaptic structures that determine the simultaneous coactivation of neurons. In the process of meaning creation, the brain integrates bodily and sensory information with emotional information and semantic concepts.

This means that when one is faced with a given context, the mental representation for its interpretation and subsequent action are created through the integration of different features. As mentioned in the section on the architecture of the human mind, mental representations are nested in the configuration of simultaneously coactivated neurons. The integration of signals and concepts in the process of meaning creation is unconscious and only some mental representations enter the mental space of consciousness in the "working memory, a mental workspace involved in the control of thought and action" (ibid.: 198). In the process of creating meaning, "[w]orking memory uses executive control functions, like attention, to select, monitor, temporarily maintain, and integrate diverse kinds of information from specialized processors" (ibid.).

To understand *how power functions* in meaning creation, it is necessary to look at *how neurons are activated* to form configurations of simultaneously coactivated networks in which mental representations are nested. As explained, the activation of a neuron depends on the computation of the importance of the input information that is defined by the structure of the connections between neurons. Peruš (2001) states that the logic of computation and subsequent activation of a neuron is *energy efficiency*, a general logic of nature. Hence, in competition between alternative concepts, the winner is usually the one that takes less energy to coactivate a network of neurons, which chiefly depends on the synaptic structure and formed patterns as a result of experiential learning. Meanings that have hegemonic power and an intense emotional stamp have an advantage.

Yet, just like history is contingent and depends on the encounter of political action with the conjuncture, the same goes for meaning creation. As Kahneman (2011: 22) described, there are *two systems of decision-making*, an automatic and quick one, that operates unconsciously, and a deliberative and slow one, that "allocates attention to the effortful mental activities that demand it, including complex computations".

The automatic and unconscious processes of meaning creation are effortless because they are based on energy efficiency and use shortcuts like *heuristics and biases* to make sense of a situation with the meaning that takes less energy to arrive at. On the other hand, the effortful deliberative

system, that consumes more energy and is thus limited, can nevertheless suppress the meaning proposed by the first system. This means that it can also reject the hegemonic meaning offered, reject the political structure articulated, and not consent to power.

Emotions are an important ingredient in the process of meaning creation. As Barrett (2017) explained, emotions are not a biological mechanism that reacts to environmental triggers, but a mental construct in an event. LeDoux (2012) also emphasises that when thinking about emotions one should distinguish between basic neural survival mechanisms and constructed feelings as mental representations. Survival mechanisms, such as that for detecting threats in the environment, are only the starting point of the process, and these “[g]lobal organismic states are part of the raw material from which certain classes of feelings are constructed” (2012: 664). Organismic states are hence the ingredients, yet they are not the same as the constructed emotions.

Although the activation of survival biological mechanisms is one source of bodily information that is integrated into the process of meaning creation, the constructed mental representation that makes sense of this information includes semantic concepts, together with attributed emotional intensity and valence, and hegemonic power relations. Man thus creates his reality as an actor, and this mentally created reality is partly constructed with intersubjective concepts as the results of life in a political community. Mutual experience creates concepts, whose “validity, and their very existence, in fact, comes from consensual agreement” (Barrett, 2009: 327).

The factors involved in the process of meaning creation are accordingly bodily and sensory information about the situation, and emotional information and semantic concepts as part of the learned knowledge. When one is making sense of the situation and deciding on the appropriate action, the brain is “categorizing to best fit the entire situation and your internal sensations, based on past experience” for “selecting a winning instance that becomes your perception and guides your action” (Barrett, 2017: 113). If hegemony and emotions win in this selection, power as consent is manifested in the event.

Conclusion

Mental representations are the central object of analysis for understanding political phenomena, e.g., voters’ decisions. An ontologically and epistemologically valid political analysis should acknowledge the neural architecture of the human mind and its embodiment, and thus embed the insights that psychology and neuroscience can add to political science. The biopsychosocial analysis of power includes all pertinent factors and their

interrelationships. Even though political phenomena should of course not be reduced to biology, they are certainly nested in the functioning of biological mechanisms.

The biopsychosocial model explains how the mind interacts with the context, and both how the body affects the mind, and respectively the mind affects the body. Life in a political community leads to antagonisms and conflicts due to different needs and interests, varying beliefs and goals. Hegemony is articulated through political struggles, yet it is not just a symbolic dimension. On one hand, it is defined by the human body, which with its motor and perceptual systems poses conceptual frameworks for a possible meaning, and poses biological limitations, such as the capacity for deliberative reasoning. On the other hand, through emotional intensity of a political experience hegemony enters the body, and activates and orients biological mechanisms.

Human existence, together with political power, is the interplay of the body, the mind, and the context with which one is interacting. A biopsychosocial political science can help to place the debate about the future of democracy on sound ontological and epistemological foundations. Understanding the complex of hegemony, morality and emotions as a tool for the manifestation of power as consent, and hence the prevailing political phenomenon in the modern liberal democracy, can help to distinguish between partisan opinions, utopian normative theories, and valid political science.

The process of human emancipation is linked to the democratic political model based on the values of freedom and equality. Due to the contingency of history, every period in the crisis of democracy can lead either to the strengthening and deepening of the democratic process and participation or to it breaking. The current rise of populism is a sign of people's deep dissatisfaction with the traditional political elite. In order to orient the political process to the road of emancipation, political science has the responsibility of understanding the moment and current phenomena, which can only happen with valid ontological and epistemological bases of the human mind and action.

The biopsychosocial model that understands mental representations as constructs of the embodied mind functioning in a context can help analyse populism and orient the political action to strengthen democracy, which cannot be done without avoiding misconceptions, such as mind-body dualism, and utopian theories, such as rational choice theory. This means it is important to acknowledge that humans are emotionally rational and to understand that emotions are an important biopsychosocial tool for the embodiment of power over meaning and for political orientation within a community. These premises can help to build an efficient architecture of

deliberative practices and government politics that will satisfy people and prevent the democratic model and the process of emancipation from breaking.

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