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Naturalizing Morality to Unveil the Status of Violence: Coalition Enforcement, Cognitive Moral Niches, and Moral Bubbles in an Evolutionary Perspective

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Abstract: I propose that the relationship between moral and violent behavior is overlooked in current philosophical, epistemological, and cognitive studies. To the aim of clarifying the complex dynamics of this interplay, I will describe, adopting an evolutionary perspective, the concepts of *coalition enforcement*, *cognitive moral niche*, and of what I call *moral bubbles*. Showing the interesting relationships between these three basic concepts, I will explain the role of morality in causing and justifying violence. The main theoretical merit of the concept of coalition enforcement is that it permits the naturalization of morality that is the only conceptual means to unveil, in a naturalized way, the status of violence beyond the constraints generated by the so-called moral bubbles that prevent agents from seeing the potential violence generated by their own moral acts.

Keywords: morality; violence; coalition enforcement; cognitive niches; moral bubbles; Moral Niches; free-riders



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1. Can Violence Be Turned into an Autonomous Object of Philosophical Reflection?

In a previous book of mine, *Understanding Violence. The Intertwining of Morality, Religion, and Violence: A Philosophical Stance*, published by Springer, Heidelberg/Berlin, 2011 [1], I started research aiming at showing that violence can become an important object of philosophical reflection. A typical tendency of modernity leads to avoiding the analysis of violence (especially visible, strong, bloody violence), liquidating it through a sort of easy “psychiatrization”: violent people are people who “are not well”—that is, crazy people. In most cases, however, psychiatry has nothing to do with it. I remember an episode that occurred in 2013: the attacker Luigi Preiti, who had shot two policemen, was immediately classified by the media and public opinion as a lunatic, a madman¹.

The hidden causes of that terrible violence were thus obscured, taking advantage of a kind of medicalization/psychiatrization. This common way of reacting ends up attenuating and putting the violence perpetrated in the background, classifying it as the result of something “sick”. It thus evades the task of saying more about the roots of much of the violence. However, the attacker had immediately declared—showing a standard moral perspective—that he wanted to “hit” (and therefore “punish”) politicians, identified as being guilty of causing his desperate situation of being unemployed and separated, which was experienced as unfair. One can therefore interpret his behavior in moral terms: every moral rule that is adopted provides for the potential punishment of violators.

Transforming violence into an autonomous object of reflection means avoiding talking about violence using shortcuts (such as the one just mentioned of psychiatrization) and adopting, in my case, a naturalistic approach, as I will explain in this article, seeing its various facets, keeping in mind the results of various disciplines, and enucleating the indissoluble interweaving of morality and violence between evolutionism, cognitive science, mathematical catastrophe theory, cognitive niche theory, logic and informal logic, psychology, psychoanalysis, and semiophysics.

Every human cooperation, since prehistory, is based on the sharing of moral (or proto-moral) rules (even those incorporated in laws since a certain moment of the civilization process); however, the breaking of moral rules involves possible punishments that are more or less violent (or rather that are experienced as such by the affected subjects). The contact with people and communities that share different moral horizons also generates conflicts that can result in very violent outcomes (think of wars or terrorism of religion, where the conflict caused by different moral rules embedded in religious frameworks is powerful).

Everyone witnesses violence of all kinds every day and it is talked about it in the media and at home; however, social ignorance about the status of violence is great and, even among scholars and philosophers, things are not better. As I already observed, we often hear the emphasis on physical violence as the only violence worth mentioning, while it is passed over in silence and not reported as violent, for example, certain behaviors of the members of the parliament, when there is an exchange of votes and favors. We are in a society that aspired to become a “knowledge society” and instead has become an “ignorant society”, where everyone is entitled to speak their mind, which too often is the ignorant opinion of individualistic narcissists who “know” nothing or know very little, whether they are ministers, journalists, housewives, or scientists.

Even scholars and intellectuals do not shine with “open-mindedness” because they usually know only specialized areas; if they possess a broader culture and express themselves, then they are attacked with the verbal violence that for decades now has classified them as abstract and useless in various media and “socially” ignorant and boorish. This contributes to an ignorant society (too proud to be such) that, in my opinion, is the bitter fruit of thirty years of violent and obtuse stubborn neoliberalism, which is undermining the foundations of the civilization that, in many ways, we inherited from ancient Greece (and with the point of view of having seen the Greek economic catastrophe as an ominous symbol).

Fortunately, philosophy has been helping us to interpret the world for more than twenty centuries, and today it also wants to understand violence. The naturalization of morality I will describe in this article, taking advantage of a few examples, aims at producing that intelligibility of violence that only philosophy can give. For example, I will describe how human beings can ignore their own violence, thanks to what I called “moral embubblement” (so to speak, violence is never mine but always that of others because I conceal the violence I commit by never considering it as such).

Morality, and therefore also religion (which, first among all cultural creations of humanity, has played the role of “moral carrier”) and violence are strongly intertwined. It would seem a paradox, given that human beings are endowed with morality precisely to defend themselves from evil and violence and to foster cooperation. However, it is not a paradox: (1) every morality potentially conflicts in a violent way with other moralities; and (2) every morality implies, more or less, the violent punishment of transgressors. Two aspects that the analysis of the so-called coalition enforcement that I will describe in this article will explain this in a clear way².

I believe that it is necessary, first, to have “respect” for violence and to attribute to it once and for all the “moral dignity” of becoming a philosophical/knowledgeable topic, extracting it from the restricted circuit of futile daily chatter, the statistics provided by the human sciences, and easy psychiatry. Philosophers have always dealt with important topics, such as rationality, science, knowledge, and ethics, which are generally thought of by everyone as having an intellectual dignity in themselves. They have commonly thought that violence, precisely because it is such, shows itself as something trivial, bad, intolerable, confusing, inescapable, and marginal and thus not sufficiently interesting to them. Violence has therefore been considered more suitable to be studied as a fact: history, sociology, psychology, criminology, anthropology, to name a few disciplines, have always seemed more appropriate to analyze it and to provide data, explanations, and causes.

My naturalistic approach to morality moves from the conviction that, at least in our time, philosophy possesses the style of intelligence and intelligibility suitable for a new,

impertinent and profound understanding of a theme that is so intellectually neglected and disrespected. When it comes to violence, philosophy, while still remaining an abstract discipline as we know it, paradoxically acquires the mark of a sort of indispensable and irreplaceable “applied science”. I plan to attribute more philosophical dignity to violence because it is extremely important in the lives of human beings, whether we want to accept it or not.

We will see that violence is therefore usually generated by moral reasons: moral conflict is at the basis of violent outcomes. People who, at first glance, appear to be perfectly decent (as Hannah Arendt previously observed with regard to the good fathers of families who were at the same time Nazi criminals), are capable of violent and even bloody acts in the name of their morals, which they consider as safe and certain.

If one acts violently for moral reasons, to defend oneself and preserve one’s moral point of view, or to punish those who have broken the moral rules of the group one adheres to, how is it possible to think that one has been violent? One says to oneself, for example, “I am a follower of the law of honor, which I consider just and moral, and thus revenge is ‘justice’ even when it results in the extreme violence of murder”. I call this kind of inability to recognize possible violence arising from our moral beliefs a “moral bubble”, which will be illustrated in the second part of this article.

Morality and Violence Entangled—Epistemology and Ethics Entangled

The fact that morality and violence are *entangled* means that not only can morality and violence be studied together but also that doing so has advantages. Even if those two human different qualities have their own theoretical dignity, many of the actions they deal with are deeply interwoven; thus, ignoring one component or the other may produce a philosophical misconception of the topic at stake³.

Unfortunately, philosophers have a history of studying detailed problems that are firmly related to a specific profession and avoiding wider integrative commitments. This is, of course, related to the right need to deepen a specific problem, thus, mimicking science; however, we also need to move away from certain excessively negative aspects of contemporary philosophical practices, dubbed “analytic metaphysics” by Daniel Dennett, who sees it as a “naïve auto-anthropology” in which research participants appear to be convinced that their program actually gets at something true, and not only believed to be true by a “particular subclass of human beings (philosophers of the analytic metaphysics persuasion)” [5] (p. 98).

Dealing with the active critical role of reason, as suggested by the cognitive style of modern and contemporary sciences, highlights the current relevance of adopting a refurbished “openness” of philosophical research: “science instructs reason”, Gaston Bachelard once remarked. A philosophical openness also favored, following Kant’s teaching, by the attention attributed to the “constitutive” role played by intellectual creativity. An openness that is critical in the case of addressing the neglected problem of the status of violence and that can only be obtained through a process of *naturalization of morality*, in this case outside of the analytic tradition.

The entanglement between morality and violence that I introduced above takes advantage of a more fundamental one—between epistemology and ethics—that has arisen invisibly in recent years, overcoming the philosophical impasses of the past and the annoying *is/ought* debate. Clarifying the relationship and entanglement between epistemology and ethics aids in illuminating, in a naturalistic perspective, the intertwined relationship I mentioned earlier, namely the one between morality and violence. Indeed, because the four poles are related in a twofold system that I shall explore in this essay, each theoretical entanglement (epistemology–ethics and morality–violence) depends on the comprehension of the other.

To reach the envisaged these results, first, a naturalization of morality is necessary: in this article, this task will be achieved due to the adoption (and conceptual exploitation) of an evolutionary perspective that will take advantage of the concepts of *coalition enforcement*,

cognitive niche, and of what I call a *moral bubble*. After all, an evolutionary perspective possesses a kind of priority in the case of an author that aims at offering a naturalistic account of the behavior of actual human beings. No one should question that biological concepts provide a kind of privileged access to “practical” and “natural” subjects.

2. Naturalizing Morality in an Evolutionary Perspective

2.1. Coalition Enforcement: Morality and Violence

The coalition enforcement hypothesis, proposed by Bingham [6,7], aims at explaining the “human uniqueness” that is at the root of human communication and language, in a strict relationship with *Homo Sapiens*’ spectacular ecological dominance and the role of cultural heritage. In this perspective, human beings are animals that *domesticated themselves* exactly for two million years of *Homo* self-enforcement history. It is thanks to this hypothesis that *cooperation* is presented as a basic feature reached due to the effect of *moral* rules accompanied—as I will soon explain—by inescapable violent outcomes.

Following Boyd [8], individual learning in the framework of the transmission of cultural contents is responsible for the reaching of adaptive rules capable of counteracting more instinctive inclinations. In sum, morality refers to all those rules that grant cooperation and the possibility of the ownership of their destinies for human beings. It is clear that when you can expect that other human beings follow the rule of the shared morality, it is easy to predict their behavior and thus cooperation to various kinds of plans and projects is granted.

We will soon see that, in human collectives, *moral* and *violent* behaviors are interrelated, and are of course linked to the continuous construction and modification of *cognitive niches*: the key term that explains the nature of this entanglement is—as I will soon explain—“punishment”. Indeed, we can say that coalition enforcement is executed in an evolutionary sense by the establishment of social cognitive niches as a new manner of diversified human adaptability⁴.

The concept of coalition enforcement basically states that cooperation between related and unrelated animals produces considerable reciprocal advantages that outbalance the costs and are possibly adaptive for the involved individuals. It seems mandatory to take advantage of a reference to the cognitive activities of individuals as well as of groups. Indeed, by referring to the “group mind” hypothesis, whose role would be fundamental in social cognition and group adaptation, the evolutionary scientists Wilson, Timmel, and Miller [12] contended that groups play a crucial role in cooperative behaviors because they are capable of strongly improving the capabilities of individual performances as a direct fruit of Darwinian mechanisms.

In the perspective of the theory of cognitive niches, we can say that groups “socially” build cognitive niches that incorporate several kinds of rules, including, of course, the moral ones. This framework permits avoiding seeing the adaptation in a direct Darwinian way, such as in the case of Wilson’s theory. In this last case, cognitive niches substantiate a change of the environment that “can” modify selective pressure in a strict Darwinian sense, producing both adaptations and maladaptations⁵.

In hominids, group cooperation (which, unlike in non-human animals, is largely independent of kinship) arose from the need to detect, control, and punish social parasites who, for example, did not share the meat they hunted or partook of the food without joining the hunting party⁶ (those parasites are also known as “free-riders”). These social parasites were dealt with in many ways, including by killing or wounding them (as well as cooperators who refused to punish them) from afar with projectile and clubbing weapons.

In this example, harming and killing are both cooperative and remote (while of course also being “cognitive” tasks). Individual risks are reduced by avoiding proximal conflict, according to the coalition enforcement hypothesis (thus, the importance of emphasizing remote killing). Of course, cooperative morality that generates “violence” against unusually “violent” and aggressive free-riders and parasites can be carried out in weaker ways, such as denying future access to the resource, injuring a juvenile relative, gossiping to persecute

dishonest communication and manipulative in-group behaviors, or waging war against less cooperative groups, among other things⁷.

At least in the case of modern humans, it is exactly the multiplicity of the various forms of punishment that are responsible for the potential generation of violent acts. Human beings subjected to punishment can (1) share another moral framework or a slightly different one so that they see punishment as violent and unjust, and (2) they can simply feel that punishment is appropriate but excessively violent and intolerable.

Indeed, in modern human collectives, various moralities act together in an efficient way, often at the level of the same individual: imagine, to make an example among the many, the contradictory coexistence in some collectives of at least three moral frameworks, the one related to a religious system, the one embedded in the laws, and finally, the one informed by honor culture. This situation generates conflicts, for example between religious morality against abortion and the moral rule incorporated in a law that permits it.

2.2. Cooperation, Docility, and Punishment

Group cooperation has been able to evolve adaptively in this fashion, rendering parasitic behaviors no longer systematically adaptive (for instance, for effective group hunting and meat sharing thanks to the “supervision” of free-riders). The individual costs of punishment, as well as individual aggressiveness and violence, are greatly reduced through cooperation and remote killing, possibly because violence is morally “disseminated” in a more durable way: “Consistent with this view, contemporary humans are unique among top predators in being relatively placid in dealing with unrelated conspecific nonmates under a wide variety of circumstances” (cf. Bingham [6] (p. 140)). [I must add, “contrary to common sense conviction”, given to the massive quantity of violence that humans face on a daily basis!].

As a result, we can say that, in contrast to other animals, humans share a significant quantity of relatively trustworthy information with not germane conspecifics⁸. In other words, people rely on external input gathered through their senses from their social context to support their restricted decision-making abilities.

That is, docility possesses an adaptive character and can be seen as the consequence or direct outcome (that is selective pressure) of the increased quantity of available cognitive information caused by the incessant construction of the cognitive niches. To put it another way, docility allows a great amount of beneficial knowledge to be passed along while lowering the costs of (individual) learning. Docility is linked to the concepts of *socializability*, in Simon’s work, as well as altruism in the sense that when an individual is an altruist, he is also docile: docility, not altruism, is the most significant term in this perspective because docility allows—from a cognitive point of view—for the genesis of altruism.

In light of the coalition enforcement theory, I believe moral altruism may be legitimately seen as a byproduct of—or at least tied to—the violent acts necessary to “morally” sustain and enforce coalitions. The altruist is frequently generous with those who are charged with punishing free-riders, and as a result, they may inadvertently be involved in possible acts of violence. I previously stated that groups must identify, control, and punish social parasites by murdering or damaging them (and also cooperators who do not agree to perform the punishment) and that they must enlist the help of other possible punishers in order to accomplish this goal.

Punishment itself (and thus the potential violence perceived by the people subjected to it) can be classified as altruistic because it is performed to help and favor the other members of the collective (and also to the aim of correcting the behavior of the targeted person); according to research on chimp behavior, the process is also frequently combined with the activity of preserving the position of the top-ranking males, so that the entire group is inordinately subordinated to the interest of the minority that is on top (cf. Rohwer [18] (p. 805)).

As I previously stated, organizations must identify and punish parasites by murdering or hurting them (as well as the cooperators who renounce to perform punishment), and to

do so, they must enlist the help of other possible punishers. As I illustrated, this process describes altruistic behavior and those cognitive aspects that are the condition of the possibility of behavior itself: certain emotions, affectivity, empathy, that are fundamental to trigger cooperation.

Human coalitions, as the most gregarious animal groups, must take care of the individuals who cooperate in order to manage free-riders that infest a certain collective and protect them when foreign groups are aggressive and threatening. Again, it is from this perspective that we can see why modern human beings are, at the same time, certainly violent and also extremely docile and calm if compared to the top predators, as I indicated above, quoting Bingham. It is also necessary to add that in the case of modern humans the violence that originates from moral punishment is not necessarily and always perceived as such. Various degrees can occur in this case, depending on individuals' moral attitudes, emotions, preferences, biological endowments: not every child perceives as violent and offensive a slap given to punish him.

Furthermore, Lahti and Weinstein [19] described a kind of "group stability insurance" that is related to their concept of moral "viscosity", that is to the fact that moral rules can remain stable and efficacious even if more or less frequently disregarded. Morality is accompanied by an aura of absolutism; however, in reality, its flexibility is granted not only by viscosity but also by the "embublement"—I will illustrate below in Section 4—that is related to the "cancellation" of the "actual" violent results of the agent's moral actions at the level of the perpetrator's awareness⁹.

More words can be added concerning the issue of docility, which plays a fundamental role in the formation of moralities. First of all, docility explains why humans externalize a great deal of cognitive information outside, in the environment, thanks to the building of cognitive niches and in other human beings, as "biological" repositories, so to speak. Second, it also reminds us that humans tend to trust others. As I better explained in a previous book [21] (chapter three), it is only thanks to an already developed docility that human beings were able to build their *minds* as "universal machines", to adopt Turing's term.

Thus, this process was favored together by the presence of a large cortex and a rudimentary speech capacity, of small collectives minimally organized from a social point of view, and by the birth of the so-called "material culture", considered a kind of Big Bang that started the cultural evolution of *Homo*. A large cortex was not sufficient in itself as an evolutionary gain: delegating cognitions to external supports and building artifacts and the presence of "society" were fundamental. It is in this sense that docile engagement is at the heart of the development of both societies and large brains, which grew due to a clear process of co-evolution.

Docility is clearly linked to cultural growth, morality, and the status of cross-cultural intertwining. In human groups, there are various chances of taking advantage of docility: they are related to the levels of cultural transfers and their related modifications and improvements, aimed at augmenting or diminishing non-Darwinian fitness.

As I previously mentioned, the formation and vital function of cultural heritage (including morality and a sense of guilt) is a direct result of what has been called coalition enforcement: in other words, I emphasized the significance of cultural *cognitive niches* as novel ways of arriving at diverse human adaptations (not necessarily in a direct Darwinian sense, see below). The long-lived and yet abstract human sensation of guilt, in this view, is a psychological adaptation *to render it almost impossible to become the objective of violent coalitional enforcement*, thanks to *abductively* hypothesizing the assessment of a moral circumstance and thus acting consequently¹⁰.

Again, we must keep in mind that Darwinian mechanisms are working not only at the genetic level but also (albeit with less accurateness and indirectly) at the cultural level, as a result of selection pressure caused by environmental changes. The collective human coalition as a crucial cognitive niche built by human beings is destined to realize

a substantial aspect of the Darwinian selection, imposing additional limitations on its members (created by extragenetic information)¹¹.

2.3. The Role of Genetic and Extragenetic Information

The coalition enforcement concept appears to be supported by some empirical evidence (given by Bingham [7]). Selection created the human capacity to manage projectiles and clubbing weapons (thanks to motor actions favored by bipedalism and the development of the *gluteus maximus muscle* and its role in rotational acceleration, etc.) based on the examination of skeletal adaptations in *Homo* (but not in Australopithecines). When extragenetic information is sufficiently stored, used, and communicated, social cooperation grows together with brain size, as already stated above. It is important to note that biological, evolutionary, and obstetric constraints on brain dimensions suggest that humans can only absorb a limited amount of extragenetic knowledge, which must be massively stored and made available in the external environment.

Typically, Darwinian processes operating on genetic information are said to develop human minds whose qualities include the generation of innovative, complex adaptive design represented in human material products that are *sui generis*. These explanations, however, are insufficient. These explanations fall short of explaining human uniqueness. If Darwinian selection of genetic information could be used to create such minds, this adaptation would likely be commonplace. Humans appear to be the only ones who have it.

Before moving on to a possible answer to this conundrum, two further characteristics of human technical creativity should be remembered. First, humans capable of complex behaviors appeared about 40,000 years ago and rapidly exploded. Second, the velocity of the increase of the creative “abductive” capacity of modern humans is extraordinary, and it sometimes seems to overturn speeds that Darwinian classical selection at the genetic level could achieve [6].

As a result, the evolution of “non-genetic” information is extremely important. Coalition enforcement is an important factor in promoting the production of new extragenetic information—for example, due to further information transmission and exchange and thanks to both language and model-based communication between people unrelated from the genetic point of view¹². Of course, extragenetic information is also stored in artifacts of various types, which boost the communication of concepts and ideas (cultural, moral, etc.), thus, creating a real situation of availability of ecological inheritance.

This information can be, in part and occasionally, stored in brain memory—for example as a more or less permanent configuration of neural networks (that, in turn, can govern actions) and at the level of external props, devices, and artifacts (to build cognitive niches, as I said), which can be transferred endlessly and so potentially eternally and outside of groups of individuals who are genetically related.

3. The Roots of Moral/Social Norms and the Related Violence

It is critical to demonstrate how moral norms, cooperation, and social dominance hierarchies may be explained in evolutionary terms. In this field, a large amount of relevant research has lately been conducted. The evolutionary framework of cognitive niches is extremely appropriate to solve the problem of the distinction between genetic and extragenetic information. The evolutionary account of social norms in terms of cognitive niches allows us to attempt to solve the still-unsolved question of the genetic or extragenetic source of social norms: even if some norms (such as the prohibition of incest) are surely not learned, a considerable quantity of norms are clearly learned, as contended by Bandura [26].

O’Gorman, Wilson and Miller [27] see social norms as derived from a very old phylogenetic history: many animal species show various conforming behaviors—that is the creation of a multitude of individuals—to better defend themselves from predators; other researchers think that social norms come from the evolved efforts to overcome the high costs related to the necessity of updating knowledge to the aim of affording environments that are always subject to mutations; finally, other consider the role of social norms as

related to the urgent necessity of certain collectives of achieving a representative status: in this situation, being trained in a certain rule-based behavior is fundamental to being recognized as a member of the collective itself.

Recent research has also emphasized the relevance of dominance hierarchies in the establishment of social cooperation both in human and animal mammals; they are capable of affecting the evolution of both our minds and social organizations. Basic concepts and cognitive devices (which are not interpreted as innate modules but rather as favored by a kind of “biological preparedness”, a propensity to develop them in a combination of genetic and environmental circumstances) were shaped by pressures derived from behaving in hierarchical collectives.

These ideas and cognitive tools are linked to the many stages of cognitive niche development, which are critical to surviving in those hierarchical environments: (1) being able to detect and evaluate dominance relationships; (2) being quick in incorporating norms, such as permissions and prohibitions; (3) being able to recognize violations of norms, codes, and rules; and (4) reading other minds to envisage intentions and predicting related behaviors also to the aim of identifying transgressions (as well as to perform commiseration, when needed). In monkey communities, perceived infractions have already been examined as the most common source of aggression¹³. High-ranking persons cannot monopolize resources, build profitable partnerships, or keep the peace without the ability to notice violations. Violation detection is the most valuable instrument for ensuring that social norms (implicit and explicit) are respected, allowing social control, and promoting the emergence of altruism as a stable strategy, especially in human collectives.

Transgressions and Violence

I contend that transgressions are clearly commonly perceived as *moral* violations by the people that identify them but not necessarily by the transgressors themselves. Modern humans regard violence generated by detectors to limit transgression as morally legitimate, whereas transgressors frequently regard it as plain violence, as I already indicated above. Is this not what is occurring in today’s collectives when a killer believes he “did the right thing”, for instance in retaliating, in contrast to “other” individuals who believe it is moral to put them to death following the law of capital punishment? The murderer believes he has committed a “moral” killing; in turn, precise retribution (the death penalty in that case) is a part of a variety of human moral acts when seen in the light of the law.

In the field of evolutionary and cognitive studies, other elements of the relevance of cooperation (and thus of violent punishment) are also examined. A cognitive paleoanthropological study recently stressed the cognitive role of the internalization of phonemes for collaboration¹⁴. The authors show that the “enhanced working memory” (and its organizational functions) can be dated 30,000 years ago in hominids: it appeared to coevolve with the birth of a *phonological storage capacity*, as well as language and other modern reasoning abilities, such as planning, problem-solving/algorithm manipulation, analogy, modeling, holding inner representations, tool-use, and tool-making.

An improvement of phonological storage, in particular, could have favored cross-modal methods of cognition, such as abductive hypothetical cognition, as well as the social actions rendered fundamental by coalition enforcement. Increased phonological storage may have rendered language free from the more rudimentary forms, such as the mere use of present tense and rough imperatives to favor the exploitation of future tense and of the subjunctive.

Although real opponents’ activities may be predicted, phantom enemies and other intangible terrors can be brought to life. With novel views (e.g., the purpose of life, thoughts of death, life after death, etc.) great anxiety may arise. As a result, there is greater room for morality and punishment, as well as more complicated opportunities for performing violent acts.

Castro and Toro [30] suggested that the emergence of moral judgments is linked to the whole cultural evolution as an extragenetic inheritance process. They also consider

the improvement of the imitation capacities a central aspect that is able to explain the transmutation of primate collective learning in a cumulative extragenetic inheritance cultural process as it occurs during *hominization*, based on the model of dual inheritance theory and gene-culture coevolution. The authors argue that better imitation is essential but not sufficient for this shift to occur and that the key component enabling it is that some hominids gained the deontic capacity to accept or disapprove of their offspring's learned behavior¹⁵. This ability to approve or disapprove of one's offspring's conduct reduces the cost and improves the accuracy of learning, and thus changed hominid civilization into a system of cumulative extragenetic inheritance cultural process comparable to that of human beings; however, the system would still be proto-linguistic. We have to emphasize that, in this view, axiological and moral components are totally linked to the evolution of culture as a whole.

4. Moral Bubbles Protect Moral Frameworks

In 1999, Justin Kruger and David Dunning published in the *Journal of Personality and Social Psychology* the important paper "Unskilled and Unaware of It: How Difficulties in Recognizing One's Own Incompetence Lead to Inflated Self-Assessments" [32] which illustrated the so-called Dunning–Kruger effect. In the perspective of the naturalization of morality¹⁶, I stress the attention to something analogous to that effect that I call the *moral bubble effect*, related to the deficient (or very precarious) awareness of humans regarding their own violent behaviors—often human beings perform violent acts but do not detect their effects so that they ignore the imposed harm.

It is important to observe that this cognitive peculiarity of humans is central to securing moralities. The act of turning violence invisible and accepting it is based on a common psychological phenomenon known as "embubblemment". As I have already anticipated in the previous sections, human behavior is enslaved by what I called *moral bubbles*, which regularly conceal violence: this is also related to the common knowledge that, in our society, many violent behaviors are generally treated as if they were something different.

Such widespread concealed violence, which is often also excused or justified, leads to the heart of my conviction that a naturalization of morality is the only way to increase our knowledge on violence beyond the common repetitive stereotypes, such as seeing violence as something exceptional: the main example is the psychiatrization of all kinds of violent behaviors.

Indeed, in the second section of this paper, I discussed the *coalition enforcement hypothesis*, which combines a philosophical view emphasizing the inherent *moral* (and simultaneously *violent*) constitution of behaviors in a paleoanthropological and evolutionary perspective. It was through coalition enforcement, as I have illustrated, that the forefathers built groups characterized by cooperative modalities granted by the existence of proto-moral elementary rules, of course establishing as right possible violence against free-riders and groups carrying different (proto-moral/proto-religious) rules.

Let us begin by focusing on the concept of a *epistemic bubble*. Woods claims that a "cognitive agent is in an epistemic bubble with respect to proposition *a* if he is in a *k*-state with respect to *a* and the distinction between his knowing that *a* and his experiencing himself as knowing it is phenomenally inapparent to him in the there and now" [33] (p. 162). In sum, we know less than we believe we know. Of course, a related consequence is that it is impossible to discriminate between a real correction and an apparent one, from the first-person perspective. It is necessary to have a third-person perspective to detect an error.

Woods adds: "The first-person/third-person asymmetry bites hard here. For the person who brings it off, error detection is a kind of coming to their senses. He comes to their senses in recognizing the incompatibility of what he now sees to be true with what he used to think was true. However, the asymmetry is such that what is experienced in these ways may not be as those ways suggest" [33] (p. 163). As clearly indicated by Woods, when in an epistemic bubble, cognitive agents, being in the ambiguous situation in which

it is difficult to discriminate between the apparently true and the actually true, privilege the genuinely true.

Hence, truth is “fugitive”, and the process of embubblment emphasizes the need for corrigibility of our ideas, particularly those that have undesirable consequences during problem-solving and decision-making processes. Woods is correct when he asserts that the cognitive mechanism of embubblment is not reversible unless the agent abandons a bubble in order to embrace a new one. The issue of corrigibility is certainly related to the one of de-biasing that, analogously to epistemic bubble, is impermeable to correction.

Autoimmunity and Embubblment

The embubblment process is likewise self-sustaining because it supports the agent’s knowledge expansion without making the agent conscious of his self-delusion. As the agent uses the same cognitive mechanisms to acquire knowledge and control its validity, it produces a cognitive autoimmune system (cf. Arfini [34]). When Woods [33] explained the peculiar status of the so-called epistemic bubble, which I previously discussed, he coined the term autoimmunity. I am suggesting an expanded form of the expression to describe the omnipresent and self-sustaining character of the “embubblment” process. Indeed, the initial motif for presenting “autoimmunity”, a concept with apparent negative connotations, is the examination of human skills in dealing with mistakes.

The concept of “autoimmunity” is used in biomedical sciences to refer to an agent’s diminished well-being caused by a faulty immune system reaction. It is used to represent an aberrant event harming an individual’s normal health because it denotes a group of disorders. In the context of this article, however, the term does not refer to a biological disorder because human cognition is not primarily defined as “healthy”, as envisioned by the intents of the so-called “naturalization of logic” and from the eco-cognitive approach that I introduced in my research on abductive cognition [23].

The expression still refers to a troublesome and inadvertent reaction of the agent against themselves; however, it no longer denotes an abnormal state. The autoimmune processes allow the human cognizer to enter a more relaxed state, such as when it comes to adopting decisions and to emotionally responding to troubling situations. The idea of cognitive autoimmunity is based on the intertwining of the agent’s epistemological standing and their related cognitive and emotional condition.

5. The Moral Bubble Effect, Fallacies, and Moral Viscosity

Studies in logic, informal logic, and rhetoric always stress that fallacies, which are typical of human language at work especially in everyday situations, and that are prone to errors of various types, even concealed, possess what René Thom called “military intelligence” [35], in the framework of the catastrophe theory. The *softness* and *gentleness* that often accompany fallacies render them particularly efficient in intelligent strategies to protect groups, to affirm moral frameworks, and thus to generate possible more or less invisible violent effects. Moral bubbles constitute an important part of these processes of dissimulation because being unaware of our mistakes and/or violence in a fundamental and spontaneous way is often entwined with our own “certitude” that the arguments we are pushing and the related actions are absolutely not carriers of possible violent outcomes¹⁷.

We must keep in mind that people use language and the so-called fallacies buried in it to achieve positive and crucial outcomes even though they can have violent consequences at the same time; fallacious expressions frequently have a violent effect on the eventual target agent. Very often errors are eco-cognitively fruitful in the perspective of the individuals of groups that commit them. I argue that the fallacies incorporated in human discussions, dialogues, and deliberations strongly potentiate the establishment and stability of *moral bubbles*, which have to be considered completely homomorphic with the epistemic bubbles. They regard moral/violent aspects and not mere cognitive/epistemological ones. In conclusion: ignorance of our errors is frequently linked to a lack of awareness of the deceptive/aggressive nature of our speech (and behavior).

Moral bubbles, from this perspective, are a great psychological mechanism that allows humans to legitimate and dissimulate violence at the same time. A derived result is a protection of our moral convictions at the individual level and of the moral frameworks that are acting in our collectives.

I introduced above the concept of moral “viscosity”, which grants the preservation of a moral framework notwithstanding continuous transgressions. Moral bubbles are also extremely important in the light of moral viscosity because they can grant the stability of moral frameworks exactly permitting to avoid detection of the frequent violent effects that derive from their application. Viscosity describes how a moral actor might break moral laws, such as taking valuable items but still considering theft to be bad. In general, to make an example, he can commit acts of violence while preaching nonviolence as the path to happiness. This is not only the hypocritical effect of moral bubbles, it is one of the many central aspects of human moral bubbles, which provide a solution to the possible contrast and inconsistency between our moral adopted rules and subsequent actions.

In sum, thanks to moral bubbles, we value that, within our moral bubbles, even if we can be easily aware of probable real violent outcomes, this possibility is not activated and disappears from awareness. The actions that descend from serious moral convictions and rules are always endowed with a strong cognitive value because they are firmly tied to us, and we adhere to them without hesitation: possible generated violence disappears, because its cognitive value is terribly secondary and/or it is completely justified, and thus it can be disregarded and the subsequent unawareness legitimized.

6. Conclusions

In this article, I described, while exploiting the concepts of coalition enforcement, cognitive niche, and moral bubble, the important eco-cognitive aspects of moral and violent human behavior, thanks to the naturalization of morality in an evolutionary perspective. I also presented new insights on the illustration of the intertwining between morality and violence, providing a unified point of view substantiated by a naturalistic framework in which physical, biological, and cognitive processes can be concomitantly taken into account and the related naturalized role of violence unveiled. The last part addresses, in detail, the relevant problem of so-called moral bubbles, which prevent human agents from seeing the potential violence generated by their own moral acts.

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Notes

- ¹ Fox News Channel, Published 28 April 2013—Last Update 9 December 2015: <https://www.foxnews.com/world/2-police-officers-shot-outside-italian-premiers-office-in-alleged-plot-to-attack-politicians>.
- ² The reader interested in more details regarding the relationship between morality, religion, and violence and the related issue of relativism is addressed to chapter six of my book [1].
- ³ Among the philosophers, Derrida is certainly the only one to distinctly describe and analyze the link between violence and writing, offering considerations of great value on the subject [2–4]. His conclusion echoes, from a general philosophical perspective, the link between morality and violence that is at the basis of this article. The structure of the trace of writing (or difference), described by Derrida, reflects violence in the sense that the common and obvious violence is the vestige of a more fundamental and constitutive “arche-violence”. See also chapter three of my book [1]. I add that surely violence is, and has been for a long time, a subject of reflection—for example, in Plato, addressing the relationships between persuasion and violence. Other philosophers, such as Hegel, Sartre, Kant, Weber, and Benjamin, have also discussed various roles of violence: it is not my concern to treat these

results in the present article because, in these cases, the relationship between morality and violence is completely ignored, and violence is standardly considered as the opposite of morality.

Those cognitive human behaviors that change the natural environment into a cognitive one are known as delegations of cognitive representations. They are cognitive delegations to the outside world that the mind has created through the construction of so-called “cognitive niches” over the history of culture. Humans have constructed voluminous cognitive niches, hugely endowed with informational, cognitive, and, more recently, computational processes and many kinds of artifacts, as illustrated by recent research in the field of sciences of evolution by Odling-Smee, Laland, and Feldman [9–11].

On the coevolution of intelligence, sociality, and language in the perspective of cognitive niches cf. Pinker [13].

Cf. Boehm [14].

On the moral and, at the same time, violent character of gossiping and fallacious reasoning, see the contributions given by Bertolotti, Bardone, and Magnani [1,15,16].

Humans are “docile” in this way, according to Simon [17], in the sense that their fitness is boosted by the inclination to rely on suggestions, recommendations, persuasion, and information gained through social channels as a primary basis for choosing.

For much of their evolutionary history, human groups have had an innate moral character, including behavioral prescriptions, social surveillance, and punishment of deviants, cf. Boehm [14] (p. 62) and [20].

It is precisely abduction—that is reasoning to hypotheses—that can first and foremost offer the possibility of detecting some appropriate *chances* presented by the environment and that can concurrently produce the possible subsequent efficient *changes* in terms of more sophisticated or innovative niche construction. I have always emphasized the importance of abductive reasoning in human and non-human animal cognition in my research [21–23]. Abductive conjectures can arise via selection from a collection of pre-stored hypotheses (selective abduction—for example, in medical diagnosis) or from the production of new ones (creative abduction—for example, in scientific discovery) [22].

On the role of extragenetic information in the evolutionary framework of the cognitive niche theory cf. the recent article of mine [24].

Constructing and manipulating visual representations, thought experiments, analogical reasoning, and so on are examples of model-based cognition; however, it also refers to the cognition that animals can obtain through emotions and other experiences. As stated by Peirce, all inference is a form of sign activity, where the word sign encompasses multiple model-based forms of cognition: “feeling, image, conception, and other representation” ([25], 5.283).

Cf. Hall [28].

Cf. Coolidge and Wynn [29].

The authors add in [31] that social approval/disapproval of behavior is adaptive because it tends to homogenize the behaviors, beliefs, and values of groups whose members engage cooperatively and docilely for reciprocal gain. It is hypothesized that a fundamental character of the man is their status of *Homo suadens*: if behavior is lauded it is correct behavior.

I note that, with naturalization of the relationship between morality and violence, I do not aim at building a psychological/behavioral theory but rather a new philosophical “stance” on that relationship, taking advantage of various results coming from different areas of science.

I specify that, clearly, the moral bubble involves people not seeing their acts as violent as opposed to their seeing their acts as morally justified violence or, alternatively, pleasing violence. The concept of the moral bubble is important because it addresses the common amazing human habit of obliterating potential or actual violence when based on moral concerns; in this case, when violence is activated, it is not seen at all as present, or it is simply disregarded as violence because the “moral” aspect dominates the cognitive scene at stake.

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