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Shkliarevsky, Gennady

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THE ORIGIN OF MORALITY AND THE MAKING OF THE MORAL PREDICAMENT

Gennady Shkliarevsky

Abstract: Moral dimension is a characteristic feature of most transformative developments that have occurred in the course of human history. Moral outrage has fueled numerous upheavals, uprisings, and revolutions. Researchers have recognized the important role of moral outrage during periods of social and political change. However, they usually tend to explain it by social, political, or economic factors. They rarely trace this phenomenon to purely moral factors.

This article argues that the primary source of moral outrage lies in the moral sphere—specifically, in the discrepancy between the widely recognized moral principles and the actual practice. The imperative of equality is arguably the most important and fundamental principle that underpins the existence of morality. The appeal of the imperative of equality transcends temporal and cultural boundaries. Yet despite this broad appeal, our social practice accepts, tolerates, and perpetuates inequality. This article calls this discrepancy the moral predicament.

The article will analyze the factors that are involved in the making of the moral predicament. It will identify the source of the imperative of equality and will explain why this imperative has not been realized in practice. The article will also consider several relevant issues, such as the rise of consciousness and morality. Finally, the article will offer a perspective on how the problem of the moral predicament can be solved.

Key words: the moral predicament, morality, the process of creation, consciousness, and the imperative of equality.

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Introduction

Morality has been integral to all major periods of change in the history of human civilization. Moral inspiration was an important contributor to the radical agenda for transforming the world that was put forward by Christianity. Moral indignation fueled the great revolutions that ushered in the Modern Age—the American Revolution of the 18th century, the 19th century revolutions in Europe, and the Russian Revolution of 1917. Appeals to morality galvanized and mobilized the Civil Rights and protest movements during the 1960s. The current turmoil in the United States and around the world also has a strong moral component.

The source of moral outrage in all these transforming developments has been an all-too-obvious discrepancy—one might call it predicament--between the imperative of equality widely recognized as the most fundamental moral principle and the social practice that tolerates and perpetuates inequality. We find this discrepancy offensive to our human dignity and self-respect. It has no justification in our eyes. There seems to be

no reason why this moral predicament should continue to exist, particularly given the wide recognition of the imperative of equality; and yet it continues to exist. The persistence of the moral predicament raises many questions related to the broad subject of morality and its role in our life.

Morality has been and continues to be the focus of numerous studies in widely ranging fields and disciplines: from religion and ethics to sociology, anthropology, biology, and neurophysiology, to name just a few. Researchers raise important questions about the origin of morality, its importance in our social life, and the prospects for building a moral society. Yet despite the intense interest in the subject and its widely recognized enormous importance, despite the existence of numerous perspectives on the subject that have been formulated over the years, definitive answers to the most important problems related to morality remain elusive; and of all these problems, the problem of the moral predicament is arguably the most important.

The problem of the moral predicament challenges our understanding of the origin of morality and its evolution; it also touches on many cognate issues related to mind, thinking, and consciousness. This article will focus on the moral predicament and will explain its origin. It will also try to offer a perspective on how this problem can be solved. In addressing the problem of the moral predicament, the article will also deal with such relevant issue as the origin of morality.

The problem of the moral predicament is complex. Its solution will require addressing several issues related to it. One such issue is the existence of the widely recognized and accepted moral imperative of equality. In order to solve the problem of the moral predicament, we have to understand the roots of the imperative of equality and the reasons for our enduring commitment to this principle. The problem of the moral predicament is essentially the problem of the discrepancy between the imperative of equality and the existing social practice that accepts, tolerates, and perpetuates inequality. This discrepancy has been and remains the source of moral outrage that persistently fuels tensions and conflicts in our society. We need to understand the cause of this discrepancy. Finally, the article will outline a path towards the solution of the problem of the moral predicament. Should we abandon the imperative of equality or should we change our social practice? An answer to this question requires understanding the reason why our social practice fails to realize the widely accepted and compelling moral imperative.

Current Perspectives on the Origin of Morality

As has been indicated in the introduction, one important issue related to the problem of the moral predicament is the issue of the origin of morality. There are numerous perspectives that try to explain the origin of morality. Their detailed and exhaustive examination is a formidable task that is certainly beyond the scope of the current article. A brief overview will be quite sufficient for its purposes of this article.

A brief discussion of definition is a good way to start this overview. Needless to say, there are quite a few definitions that are used in the current discourse on morality and its origin. The complexity of the subject defies attempts to capture the meaning of morality in formulations that would be sufficiently clear and comprehensive at the same

time. Naturally, differences are rampant as researchers try to provide definitions that would satisfy these conditions and, at the same time, capture the most essential aspects of morality. There are two fundamental aspects that most researchers find relevant in defining morality. One emphasizes the inner sense of what is right and what is wrong that we have as individuals; the other focuses on morality as a set of shared values and norms. Most definitions combine these two important aspects, even if their emphasis may vary. Jean Decety's definition, for example, emphasizes the inner sense of right and wrong that humans have about their behavior and that of others.¹ Although this definition is perfectly acceptable, it could emphasize a common and inter-subjective nature of morality more than it actually does. The definition offered by Melanie Killen and her co-authors is more comprehensive as it emphasizes both the individual and social aspect of morality. In their view, morality is "a set of principles regarding fairness, equality, and justice that are held by individuals."²

There are many perspectives on morality and its origin. They differ from each other in methodologies, epistemological approaches, and the kind of evidence they use. The explanations they offer are often interrelated and overlap with each other, which makes a categorization of these perspectives a challenge. Some see these perspectives falling into two major groups: those that see morality as having an origin that is independent of human mind and those that regard moral precepts as human constructions. Another popular subdivision is between explanations that emphasize religion and those that seek explanations in nature and biology.

None of these categorizations is really satisfactory even if some appear to be more suitable than others. Edward O. Wilson, for example, divides the existing perspectives on morality and its origin into two basic groups: transcendentalists and empiricists. The former, in his view, see morality as existing outside the human mind; by contrast the latter group considers moral guidelines to be "contrivances of the mind."³ Although Wilson's categorization makes more sense than many others, it is not unproblematic: contrivances of human mind are not always readily accessible to empirical observation, which raises questions about designating this group as empiricists.

Considering the difficulties in categorizing the current perspectives, this article proposes its own common sense approach that divides the current explanations according to the principle of accessibility: those that see morality and its origin as accessible to human understanding and those that do not. Again, this categorization, like many others, may not be perfect but in my opinion it captures an important aspect of the debates on morality.

Religion has traditionally played the dominant role in the discourse on morality. Most, if not all, religious explanations come to one basic answer: God is the source of all moral truths. Even prominent secular thinkers subscribe to this view. John Locke is one of them. One of the pillars of the European Enlightenment, Locke writes in his *Essay Concerning Human Understanding* that the "true ground of morality ... can only be the will and law of God."⁴

Since the rise of modern scientific approaches to the study of morality, religious interpretations have faced steep competition. However, religion has still retained its appeal among contemporary thinkers. William Lane Craig, for instance, holds that "moral values cannot exist without God," and complains that "Atheistic moral realists seem to lack any adequate foundation in reality for moral values, but just leave them floating in

an unintelligible way.”⁵ Even those who embrace the role of science, biology, and evolution in the study of morality may still recognize the primacy of God and religion in the moral domain. Despite her acknowledgement that much of morality can have an evolutionary origin, Paulina Sanchez, for example, still affirms her belief that God and religion are fundamental to moral decisions. She writes:

I hold God accountable for creation and thus I see that God’s creations, when deciding to do the “right” versus “wrong” thing, experience a third thought process, which knows that the “right” thing to do is what should be done even though it is the harder of the choices.⁶

The emphasis on the transcendent source of morality constitutes both the strength and the main weakness of the religious perspective. The strength of this perspective is in its relative simplicity. However, although the appeal of the religious perspective remains strong, its emphasis that on inaccessibility of the source of morality to human understanding conflicts with the general spirit of our time that privileges rational understanding over acceptance on faith. For this reason, contemporary approaches based on scientific theories and facts attract a growing number of researchers.

The approaches that seek to make the domain of morality and its origin accessible to human understanding have their roots in the Enlightenment tradition. David Hume was one of the earliest thinkers of the Enlightenment who drew the line between morality and religion. He grounded morality in human nature, rather than in divine disposition. He considered human sympathy for others and for the common good to be the source of moral sentiment and attitudes; and this sympathy, in his view, had a natural, not divine origin.⁷

The evolutionary approach in understanding morality and its origin includes many perspectives. Their number is constantly growing as different disciplines—for example, biology, neuroscience, anthropology, sociology, and others—enter the field and try to offer their insights and interpretations on the subject. Although they greatly differ from each other, their basic pattern is similar. They all see morality as a product of adaptation to the conditions of life of early humans. Charles Darwin was the founder of this trend.⁸ In *The Descent of Man*, Darwin wrote: “I fully subscribe to the judgment of those writers who maintain that of all the differences between man and the lower animals, the moral sense or conscience is by far the most important.” He regarded the enhanced ability to cooperate to be the most significant distinction between humans and their closest evolutionary relatives.⁹

Most of these interpretations follow the basic Darwinian model. Even though they may differ in their emphasis, they claim that the origin of morality is in random variations and adaptations. Judith Burkhardt and her co-authors clearly articulate this view when they write:

Human morality can be understood as a straightforward adaptation to this hunter-gatherer life-style, in that it enables and stabilizes interdependence (see also van Schaik et al., 2014). According to this hypothesis, one key

element of morality, a prosocial predisposition, is crucial to maintain food sharing with immatures and adults.¹⁰

Perhaps the dominant perspective in the evolutionary approach is the one that focuses on sociality as the principal condition for the emergence of morality. The proponents of this perspective argue that human morality and its key elements owe their existence to an adaptation of early humans to the hunter-gatherer lifestyle. In his article “Morality after Myth” James Hemming forcefully argues that that social and moral values are generated by conditions of communal life.¹¹

Michael Tomasello is one of the most prolific contributors to this vein of thought. According to Tomasello, the sense of obligation that humans feel toward each other is a result of the evolution that “forced humans into ever more cooperative ways of life, especially when they are acquiring food and other basic resources.”¹² In his book *A Natural History of Human Morality* Tomasello emphasizes what he thinks is a crucial difference between humans and animals. While animals procure their food through largely solitary efforts, the evolution conditioned humans—even early humans—to cooperate and collaborate with each other in obtaining nutrition in ways that no other animals—even the great apes—can do.¹³ In a similar vein, Dennis Krebs—another researcher who emphasizes the role of sociality—thus summarizes his view on the origin of morality:

I submit that the mechanisms that give rise to moral behaviors evolved to solve the social problems that inevitably arise when individuals band together to foster their interests. When individuals are able to satisfy their needs, to survive, to reproduce and to rear their offspring on their own, there is no need for them to interact with other members of their species, and therefore no need for morality. Mechanisms that induce individuals to form groups and socialize with others were selected because such social behaviors were adaptive in ancestral environments.¹⁴

Interpretations that emphasize the role of culture in generating and transmitting moral values form a distinct subset in the perspective that focuses on sociality. The proponents of such interpretations recognize that social conditions form the background for the rise of moral systems. However, they believe that human morality is not simply a response to social conditions. Rather, they stress the role of culture and learning in fostering empathy in human society that they see as the foundation for the development of morality. In his book *The War for Kindness: Building Empathy in a Fractured World* Jamil Zaki uses a vast array of empirical evidence to make the point that empathy and morale attitudes are more like a teachable skill than a hardwired trait. Training in empathy, he argues, even brings growth in empathy-related parts of the brain.¹⁵

Albert Johnston expands this principle of sociality well beyond human society. In his view, human morality originates in the “perception of preciousness.” Johnston argues that this “morality of preciousness” can be applied well beyond the boundaries of human society to animals, plants, and nature more generally. He writes:

As with the preciousness of humans, the awareness of preciousness is what grounds an obligation to honor, protect, and foster. When kept salient, that awareness, like love, makes easy any sacrifice involved, and is its own reward. Even a dead leaf with its fascinating intricacy has the power to delight, to console, and to make one appreciative of one's brief sojourn in the world.¹⁶

Contractarians represent yet another noticeable variation of the social perspective on the origin of morality. They agree that in some way morality is grounded in humans. However, they do not evoke human nature or some other biological factor. Rather they emphasize moral obligations that derive from the agreements humans make in socially cohesive groups.¹⁷

There is also a growing number of perspectives that use psychology and neuroscience as their explanatory tools. Patricia S. Churchland offers an interpretation based on neuroscience and focuses on neural networks and their operations as key to understanding the emergence of moral sentiments and attitudes in humans. Conscience, in her view, "is a brain construct rooted in our neural circuitry, not a theological entity thoughtfully parked in us by a divine being." Human moral responses, Churchland argues, are rooted in the cortex, supported by more ancient brain structures and neurochemicals.¹⁸ Jean Decety is another researcher that offers a similar view. He maintains that humans develop their moral sense as a result of the hardwiring of their brain.¹⁹

Although interpretations of morality that originate in neuroscience, the study of the architecture of the brain, and psychology form a distinct group of their own, just like the interpretations that emphasize sociality, they remain firmly embedded within the evolutionary approach. Ian Morris summarizes the views of many who contribute to this line of thinking when he writes:

Although psychological models of morality are equipped to account for some aspects and some functions of morality, the only theoretical perspective that is equipped to integrate these accounts under one overriding framework and supply a basis for refining them in gainful ways is the theory of evolution.²⁰

Jean Decety reiterates this point when he writes: "Psychological and neuroscience research both tell us that morality, our mental ability to tell right from wrong in our behaviors and the behaviors of others, is a product of evolution."²¹

The appeal of the evolutionary approach is growing. The principal attraction of this approach is its focus on rational understanding. More and more disciplines enter the evolutionary approach and enrich it with their insights. As a result, the evolutionary approach now represents a vast and rich aggregation of a variety of perspectives and interpretations. Differentiation rather than integration remains the prevalent trend and it tends to grow. Many contributors accept this pluralist state and advocate the continued attendance to all underpinnings of human moral codes-- biological, psychological, anthropological, sociological and others—that have been theorized in the field. Robert

Hinde's book *Why Good is Good: The Sources of Morality* is one example of such pluralist eclectic advocacy.²²

The eclectic character of the current evolutionary approach and the fact that it has not congealed into a synthetic and comprehensive perspective are not the only weaknesses of this approach. It is susceptible to other cogent criticisms. One of them goes back to Hume who has pointed out a fundamental flaw among writers on the subject of morality.²³ Hume has noted that they often display a tendency to shift their reasoning from statements of fact to statements of moral obligation. In other words, Hume argues that the domain of facts, or nature, is very different from the moral domain that deals with what ought to be, rather than is. Hume's argument became familiar to contemporary researchers as the problem of OUGHT vs. IS.

The evolutionary approach that tries to explain morality by physical facts is certainly vulnerable to Hume's criticism. Several modern critics point out that although the evolutionary approach brings up facts that may very well be pertinent to the origin of morality, they do not demonstrate how these physical facts have been translated into moral facts. In other words, they do not demonstrate the connection between the facts of nature and the facts of morality.

Philip Pettit points out that many contemporary moral philosophers argue that moral concepts, or more broadly normative terms, cannot be translated into non-normative terms. Moral concepts simply cannot be reduced to the naturalistic terms of science. "Most of these thinkers," Pettit writes, "treat one particular normative concept as more basic than others, especially in the realm of morality, but then insist that that concept itself defies further analysis, in particular analysis in non-normative terms."²⁴ As Richard Joyce, among others, has argued, OUGHT simply does not obtain from IS.²⁵

There is yet another problem with the evolutionary approach. Although there is a broad agreement that evolutionary processes are relevant to the emergence of morality, there are serious reservations as to whether the biological evolution and the evolution of culture have much in common.²⁶ However, the application of the Darwinian model of the evolution in social sciences has, for a variety of reasons, encountered a great deal of skepticism. As Stefan Linquist notes in his Introduction to *The Evolution of Culture*, "Darwinian theories of cultural evolution are relative newcomers to the intellectual landscape and their reception, especially within the social sciences, hasn't been overly enthusiastic."²⁷ Social scientists have had and continue to have reservations about the fit between the Darwinian model and the evolution of culture and society.

Many perspectives on cultural evolution share some common features that are not present in the Darwinian model. In contrast to the Darwinian model, they are not "genetic" or "atomistic." The Darwinian model ascribes a very important role to random variations at the level of genes as the source of novelty in the biological evolution. Attempts to explain cultural evolution by genetic variations or by variations of some entities equivalent to genes—for example, memes—have not been successful.²⁸

The evolution of culture and society just does not seem to work on random variations and selection.²⁹ Liana Gabora and Dean Keith Simonton are two good examples of different views on the cultural evolution that prevail in social sciences. While Simonton sees the evolution of culture in terms of variability and selection,³⁰ Gabora views it in terms of self-organization and horizontal transmissions.³¹ Finally, in contrast to the Darwinian model that ascribes primary importance to the vertical

transmission of variations (from parents to children), theoretical perspectives on cultural evolution emphasize horizontal transmissions of traits among members of the group, rather than vertical—from parents to children.³²

The objections of social scientists to the adoption of the Darwinian model of the evolution have no easy solutions. These objections suggest that we might have to accept two distinct modes of evolution—one for nature and another for culture and society. In this case the evolution no longer appears to be a unitary and continuous process. Indeed, in this sense the evolution of life appears to be an exception rather than the rule since the evolution of reality before the emergence of life also does not conform to the Darwinian model. The obvious question why nature would make such exception is not easy to answer.

The persistence of deep divisions is another problem that continues to plague the evolutionary approach. One of the most important of these divisions is the gap that separates the perspectives that emphasize social conditions and the perspectives that emphasize emotions. Neither side has sufficient explanatory power to provide a definitive interpretation. Many argue in favor of producing a synthesis that would unite the two sides. Yet despite decades of hard work, this inner dualism remains unresolved, which is perhaps the main reason why the evolutionary approach has so far failed to produce a definitive theory of morality and its origin.

Finally, the evolutionary approach has yet another unresolved issue that remains a source of controversy. The approach has not established a clear demarcation of the moral domain. The lack of clear demarcation creates ambiguity that goes back to Darwin himself. In *The Descent of Man*, Darwin writes: “I fully subscribe to the judgment of those writers who maintain that of all the differences between man and the lower animals, the moral sense or conscience is by far the most important.”³³ Yet, in the same volume Darwin suggests that the difference between humans and animals is one of degree, not kind and that even self-consciousness may not be exclusively a human property. He also sees in animals such human features as social instinct, parental and filial affection, and others. Based on these characteristics, Darwin concludes that “any animal whatever, endowed with well marked social instincts, the parental and filial affections being here included, would inevitably acquire a moral sense or conscience, as soon as its intellectual powers had become as well, or nearly as well developed, as in man.”³⁴

Darwin’s ambiguity with regard to morality and animals is not a fluke or a fortuitous turn of phrase. The source of this ambiguity is Darwin’s very model of evolution that has not solve the problem of the relationship between continuity and discontinuity in the evolutionary process.³⁵ Issues related to this problem reoccur in theories based on Darwin’s teaching. They made their way into the debates about the moral standing of animals. The questions relevant to morality in animals keep popping up in the debates on the origin of morality. Geoffrey Hodgson, for example, emphasizes in his article the more exclusive approach to morality as a human phenomenon. “A moral being,” he argues

... is one who is capable of comparing his past and future actions or motives and of approving or disapproving of them. We have no reason to suppose that any of the lower animals have this capacity.... Man ... alone can, with certainty, be ranked as a moral being.³⁶

By contrast, Judith Burkart and her co-authors, express a dissenting view when they write:

The ultimate function of human morality and its key elements can thus readily be understood as an adaptation to the hunter-gatherer lifestyle. But are these elements unique to humans, or can some of them, or perhaps their precursors, also be found in other primates, and if so, why?³⁷

As they also point out, the questions about the phylogenetic origin of morality in non-human species are very important for evaluating the functional hypotheses on the origin of morality.

The view that at least some species of animals are moral subjects is currently an established trend in the study of the phylogenetic origin of morality. Mark Rowlands has made it the main theme of his book *Can Animals Be Moral?* that has provoked heated debates. In this book, Rowlands argues that animals

. . . can act for moral reasons—at least there are no compelling reasons for supposing that they can't. Animals can act on the basis of moral emotions—emotions that possess moral content—and these emotions provide reasons for their actions. Animals can, in this sense, be moral subjects.³⁸

The exchanges that followed the publication of this book have not resulted in a conclusive verdict.³⁹

While pursuing explanations that seek to firmly embed human morality in the evolution of nature, some researchers are so eager to plant the roots of morality in the evolution of nature that they end up making arguments that extend the domain of morality deep inside the animal kingdom. Irina Mikhalevich and Russell Powell, for example, argue that the exclusion of the vast majority of arthropods from moral standing is unwarranted, particularly given the purported evidence for cognition and sentience in these organisms.⁴⁰

The Origin of Morality

The brief overview of the current perspectives on morality and its origin shows that the field remains very much in flux. The approach that views this subject as largely inaccessible to human understanding and relegates it to the domain of faith and religion remains influential. However, this approach runs against the dominant trend in the contemporary culture that seeks to expand the sphere of rational understanding and, as a result, loses its appeal. By contrast, the approach that seeks to make the subject of morality more accessible to human understanding is becoming increasingly attractive for new generations of secular thinkers and scientists. However, the mere multiplication of

theoretical perspectives as a result of decades of research has not led to a productive synthesis and has left the field in a fragmented state.

There are two principal problems that plague the evolutionary approach. One is the problem of grounding. Many researchers have reached a conclusion that the study of morality should be based on facts and these facts should be located “outside the proper domain of morality”; in other words, morality should be grounded in factual truths, or the domain of IS.⁴¹ The second unsolved problem is how to connect the non-moral to the moral; in other words how to bridge the domain of facts, or IS, with the domain of OUGHT.⁴²

The two problems are obviously interrelated. Their interrelationship raises a question. Morality is the domain of obligation and duty. Where does this sense of duty and obligation come from and why?

The domain of morality belongs to the general sphere of consciousness. Therefore, we have to start with consciousness in tracing the origin of the sense of duty and obligation. Consciousness represents the level of mental organization that regulates unconscious mental operations. It emerges from interactions of mental images that are the extension of sensory-motor operations into the mental sphere. Jean Piaget has left us a credible description of the process that gives rise to mental images.⁴³ According to his description, the process that leads to the emergence of mental images has roots in conservation. Sensory-motor operations conserve themselves by interacting with each other: the more they interact and activate each other, the better they are conserved. Interactions of different sensory-motor operations combine their differences, which creates a new and more powerful level of organization that gives rise to mental images. Manipulations and interactions conserve mental images and open the path that leads to the emergence of consciousness.

Thus conservation plays an essential role in the emergence of consciousness. Conservation is a transcendent function. It transcends the realm of mental operations or even biological operations and the domain of life. Conservation is ubiquitous in our universe. It is a truly universal function that operates on the cosmic scale.

As has been mentioned, conservation of sensory-motor operations creates a new and more powerful level of organization. Therefore, conservation leads to creation. Conservation and creation are intimately related. Conservation requires the creation of new and increasingly more powerful levels of organization and, thus, to evolution. The interrelationship between conservation, creation, and evolution sustains the universe and is the source of all that exists in this universe.⁴⁴

Since consciousness is a product of the transcendent process that creates it, consciousness naturally inherits the properties of this process. Also, consciousness regulates mental operations. Regulation is a reflective function. Since consciousness is a reflective function, it reflects the general properties of the process that has created it. Consciousness expresses these properties in ways and forms that are characteristic for the level of mental organization that sustains consciousness. In other words, consciousness expresses them in the form of concepts and ideas. Therefore, in order to understand the source of the sense of obligation and duty, we have to understand the properties of the process of creation.

As has already been explained, the process of creation is absolutely essential for sustaining our universe. The universe simply cannot exist without the process of

creation. In other words, the process of creation is absolutely necessary. This essential and necessary character of the process of creation is its very important property. Consciousness inherits this property and expresses it in the form of the sense of obligation and duty.

The necessary nature of the process of creation is not the only property of this process reflected in consciousness. The good and goodness are two important concepts that are integral to morality. The meaning of these two concepts is very broad. They are notoriously difficult to define in specific terms. However, they do convey the general sense of what we regard as something that is universally beneficial—a sense of universality. Universality is another property that characterizes the process of creation as this process sustains the universe and all in it. The concepts of the good and goodness are the forms in which consciousness captures and reflects this important aspect of the process of creation—its universality.

Moral codes also include the concept of individual responsibility. This concept reflects the awareness of autonomy and the sense of obligation associated with autonomy. As has been explained elsewhere,⁴⁵ the process of creation works on inclusion. Inclusion is no mere aggregation of entities. Inclusion involves the creation of combinations that conserve the properties of entities involved in these combinations. In other words, the capacity to conserve autonomy is also an important feature of the process of creation. Consciousness and morality capture and reflect this feature in the concept of individual and personal responsibility.

Sociality is another important feature that is relevant to the domain of morality. The capacity to interact with other individuals has played an essential role in the emergence and evolution of consciousness and morality. In the course of social interactions humans externalize their inner mental constructs and create combinations that give rise to new and increasingly more powerful levels of organization. The capacity to create new levels of organization plays a crucial role in the evolution of the human mind, the emergence of consciousness, language, and culture more generally, including moral values. Numerous studies emphasize the role of sociality in the emergence of both consciousness and morality. Human sociality embodies an important aspect of the process of creation.

The capacity to create new and increasingly more powerful levels of organization certainly pre-existed the rise of human consciousness and morality. This capacity has roots in the process of creation that works on inclusion. The moral imperative of equality is the reflection of this feature of the process of creation on the level of consciousness and morality.

Many researchers point out the important role that emotions—empathy, sympathy, and compassion—play in the moral domain. However, neither consciousness nor morality is the source of emotional responses. As the most powerful level of mental organization, consciousness can only regulate emotions. Emotions originate in the realm of the unconscious.

Emotional responses are associated with gratification; and gratification has its roots in conservation. When we exercise our sensory-motor functions (visual, audio, gustatory, olfactory, and tactile), we gratify and thus conserve them. Infants, for example, smile when they see a familiar face that activates their visual function.

Conversely, an unfamiliar face will produce a negative reaction since its sight does not affirm the familiar visual schema.

As has been emphasized, the process of creation and conservation are intimately related. The process that creates new and increasingly more powerful level of organization conserves the very action that constitutes this process. The act of conservation takes the form of gratification in living organisms and in the course of the biological evolution enters the sphere of neural interactions, or mental operations. Since consciousness regulates mental operations, it is capable of reflecting on emotional responses; through consciousness emotional responses enter the domain of morality.

The perspective on the origin of morality outlined in this study shows that morality is part of the broader sphere of consciousness. Therefore, the origin of morality is integrally related to the origin and evolution of consciousness. Consciousness inherits and reflects the principal features of the process that has led to its emergence. Through consciousness these features acquire forms that enter the domain of morality. Our moral norms and values are reflections of these fundamental features. Although these forms may differ in different cultural environments, they all have their source in the process of creation that led to the emergence of consciousness and morality.

The Making of the Moral Predicament

The moral imperative of equality that is widely recognized as the fundamental moral principle presupposes an obligation to treat all humans as equals. As one can see, this principle is about inclusion of all humans in the community of equals. The connection between this imperative and the process of creation is clear. The process of creation works on inclusion.

As has been pointed out, inclusion is no mere aggregation. Inclusion involves combination of properties and their conservation. Thus one can see that the moral imperative of equality realizes inclusion—this important property of the process of creation—on the level of mental organization that sustains consciousness and morality. It is an equivalent of inclusion manifested in consciousness.

Despite the importance of the imperative of equality, our practice does not realize this fundamental moral principle. There is a glaring discrepancy between this widely recognized moral principle and the dominant social practice. This section will explain why this discrepancy, or the moral predicament, persists.

Few people, if any, dispute the importance of the principle of equality. Yet the fact that the existing practice does not conform to this principle is also indisputable. Since this discrepancy occurs in the domain of practical application, one can only conclude that its source is in practice.

Consciousness and morality are ultimately evolutionary products of the process of creation. This process is transcendent; it transcends the level of mental organization that sustains consciousness and morality. In fact, this process transcends all other levels of organization that preceded the emergence of consciousness and even the realm of life. As this study has indicated the process of creation sustains the entire universe and all that is in it.

The level of mental organization that gives rise to consciousness and morality has its ultimate source in the process of creation. However, this level of organization also has its immediate source of origin in the level of mental organization that sustains sensory-motor operations. Interactions among sensory-motor functional operations (visual, audio, olfactory, tactile, and gustatory) create combinations that constitute mental images. The emergence of mental images takes the evolution of the mind onto the path toward the emergence of consciousness.

The level of organization that sustains consciousness is the most powerful level of mental organization. As such, it regulates the mental operations that preceded its emergence. Regulation is essentially a reflective function. Thus, consciousness emerges as a capacity to reflect on sensory-motor operations and their products. When consciousness emerges, it is focused primarily on these objects and engages in their manipulation. The transcendent process that was involved in the creation of mental objects escapes the immediate attention of consciousness. In other words, when consciousness emerges, it has no awareness of the process of creation; it is only aware of those operations that led to its emergence and the products of these operations, or mental images.

The emergent consciousness takes mental images for granted, totally unaware of internal operations that have created them and the process that was involved in their creation. The mind relates these mental constructs to reality; it takes these representations of reality for reality. To the emergent consciousness, mental images appear as reflections of external reality. As a result, the mind sees external reality as the source of its mental representations. The entire process of creation of these mental objects remains largely outside the main focus of conscious awareness. Consciousness does not “see” this process and does not reflect on it. Thus consciousness finds itself in a double bind: it reflects the features of the process of creation to which it ultimately owes its existence, but it does not reflect on this process. It does not relate this process to its immediate apprehensions of reality and to mental representations.

Consciousness can only be views the process of creation in the same way it views any other mental object as a creation of external forces that are not accessible to human understanding. As long as the mind does not understand the way this process operates, it has and cannot have any control over it. Like all other mental objects, the process of creation appears to the mind as part of the external reality, not something performed in its own inner workings.

Early humans recognized the existence of the process of creation but they largely regarded it as inaccessible to human understanding. They spontaneously and uncritically projected their own representations of reality on reality. Nature looked to them very anthropomorphic.

This early experience established a pattern whereby the process we use in creating our views of reality, while in plain view, remained largely inaccessible to human understanding. For example, many pagan cultures acknowledged and venerated the creative powers of nature. However, they viewed them as largely inaccessible to human understanding. These powers were in the domain of gods. The creative power of God is central to the Judeo-Christian tradition. Like pagan religions, the Judeo-Christian tradition recognizes God the Creator, but it also deems the process God and divine actions as inaccessible to human understanding. Creation in Christianity is a mystery that

humans can approach only through faith, not reason. Thus, all pre-modern cultures recognized the centrality of creation in the cosmic order, but they placed it outside the boundaries of human understanding.

The secular culture of modernity has marginalized religion. Creation has largely lost its appeal in the context of secularism and science with its emphasis on reason and rational analysis. The lack of interest in creation has perpetuated the pre-modern attitude toward creation as largely inaccessible to human understanding. For all practical purposes, modern civilization has ignored the process of creation and relegated it to the domain of the arts and literature.

As a result, human understanding of the process of creation has been and remains very limited.⁴⁶ Despite the fact that this process plays the central role in human relationship with reality, humans have paid relatively little attention to it. It is peripheral to all major theoretical perspectives. We know little about it and study it even less.⁴⁷ Margaret Boden, one of the pre-eminent researchers in the field of creativity, draws the following conclusion in her influential book:

Our ignorance of our own creativity is very great. We are not aware of all the structural constraints involved in particular domains, still less of the ways in which they can be creatively transformed. We use creative heuristics, but know very little about what they are or how they work. If we do have any sense of these matters, it is very likely tacit rather than explicit: many people can be surprised by a novel harmony, but relatively few can explicitly predict even a plagal cadence.⁴⁸

As has already been explained, the imperative of equality is the representation of inclusion—an essential feature of the process of creation. The process of creation and inclusion are integral to each other. The process of creation requires inclusion; it simply will not work without inclusion. The converse is also true: inclusion also requires the process of creation; there is no inclusion without the process of creation. When the process of creation is ignored, when we do not understand the way it works, the implementation of the moral imperative of equality becomes impossible

Since the process of creation is universal, the inclusion it requires must also be universal. Partial or selective inclusion is simply a form of exclusion. The practicing of universal inclusion is the only way to realize the imperative of equality. In order to practice inclusion, we have to understand what inclusion involves. Inclusion is no mere aggregation of differences. Inclusion involves combination of properties, not their addition. Combinations of properties creates a new and more powerful level of organization that includes all properties as its particular cases—that is, cases that are valid under specific conditions or assumptions.

If we do not practice universal inclusion, we create a discrepancy between the principle we recognize as essential for moral behavior and the practice that fails to implement this principle. Our failure to practice universal inclusion is not a product of ill will. We simply cannot practice it and realize the moral imperative of equality if we do

not understand how the process of creation works. This discrepancy is the source of the moral predicament.

Solving the Problem of the Moral Predicament

This article has argued that the moral predicament—the discrepancy between the widely accepted moral imperative for equality and the social practice that tolerates, condones, and perpetuates inequality—has been and remains the source of moral outrage that fuels discontent, tensions, and disruptions in our civilization. The article has also explained that the moral predicament is an inevitable outcome of the failure to recognize, embrace, and understand the process of creation that is fundamental to human existence.

As has been explained in the preceding section, the moral predicament is the discrepancy between the widely recognized moral imperative of equality and the social practice that dominates our civilization. The imperative of equality is a reflection of the essential character of the process of creation—its inclusionary nature. From early history, humans did not deem this process to be accessible to human understanding. Even today, our knowledge of the process of creation that plays a very important role in our relationship with reality and our understanding of the way this process works remain very limited. Due to limited understanding of this process, we could not apply it in our practice. As a result, could not practice inclusion, which means that our commitment of the imperative of equality remained largely theoretical, having little practical application. The result is the discrepancy between the imperative of equality and our social practice that has plagued and continues to plague human civilization.

History shows that although people can tolerate this double standard for some time, they will not tolerate it indefinitely. They have strong antipathy to uncertainty and ambivalence of such duality. They aspire to wholeness and integrity and find the persistence of contradictions emotionally tortuous and unacceptable. Humans can live for some time with the moral predicament, but they cannot tolerate it forever. At some point, they rise and demand a solution that would end this predicament.

One can see two ways to end the moral predicament. One way would be to abandon the moral imperative of equality and accept the existing practice. Another way would be to change our social practice so that it conforms to the requirements of the moral imperative of equality. The first way is not a real possibility, not as a permanent solution. The imperative of equality originates in the process of creation that sustains more than just our personal lives or even the life of humanity; this process sustains our entire universe and all that is in it. We can use this process for our benefit or we can continue to shun it at our peril, but we cannot change it. The only realistic path toward solving the problem of the moral predicament is to change our social practice and bring it into conformity with our deeply felt commitment to the imperative of equality and the process of creation.

The process of creation is fundamental to our existence. It is essential for our survival. It is the source of our morality. There is no morality without the process of creation. Ignoring this process is not a viable choice. Therefore, we must reshape our social practice in accordance with the main features of the process of creation.

The process of creation works on inclusion—not selective inclusion that is a form of exclusion, but inclusion that is universal. The imperative of equality is the reflection of this important property of the process of creation in our consciousness and the domain of morality. Therefore, we must reform our social practice on the basis of the process of creation as its main organizing principle. The moral imperative of equality, or the principle of universal inclusion, should be integral to the foundation of our social practice.

Inclusion is not a mere aggregation. Inclusion requires the creation of combinations. Equilibration is the operation that generates combinations. Since equilibration creates new and more powerful levels of organization, it produces disequilibrium that requires re-equilibration. The process of creation maintains a balance between equilibration and the production of disequilibrium, or between equilibrium and disequilibrium. This balance is essential for the functioning of the process of creation; it is what makes this process work.

The balance between hierarchical and non-hierarchical interactions is another important aspect of the process of creation. As this article has demonstrated, both types of interactions are important for the operation of the process of creation: non-hierarchical interactions create new and increasingly more powerful levels of organization and hierarchical interactions conserve and optimize these creations. Our moral practice should embody this important feature of the process of creation.

As has already been explained, our current practice is largely exclusive. The failure to embrace the process of creation leads to rivalry as differences engage in competition for dominance. The process of creation is not about competition and neither is it about cooperation. This process is about the creation of new and increasingly more powerful levels of organization. The process subsumes both competition and cooperation among differences as aspects that are integral to this process. Although this process requires inclusion of all differences, it also requires that these differences should retain their autonomy as particular cases on the created whole. Our moral practice should not pursue the elimination of differences; on the contrary, it should conserve them as particulars of a new and more comprehensive whole. Such practice will realize the imperative of equality and thus will solve the problem of the moral predicament.

Conclusion

Morality is among the most powerful motivators of human behavior. Moral sentiments and convictions are not merely subjective experiences, although they are this too; they also have their source in objective facts. They originate in fundamental processes that transcend our individual life; these processes sustain our entire universe. That is the reason why people often see instances of injustice and unfairness as more than simply a personal offense but as violations of the cosmic order and harmony.

As history shows, the reaction to such perceptions can be and often is powerful. It can cause intense moral outrage. History provides numerous examples when moral outrage led to upheavals against social and political order that was perceived as unjust and unfair. Moral outrage is an important contributor to the current turmoil in the United States and elsewhere.

This article has argued, perceptions of injustice and unfairness are not merely a result of subjective experience. They have an objective source in the existence of the moral predicament. This article shows that the moral predicament is not a fancy or a figment of imagination. It is a result of real objective conditions. The cause of the moral predicament is the discrepancy between the widely accepted imperative of equality and the actual social practice that accepts, tolerates, and perpetuates unequal treatment.

It is beyond the scope of this article to provide details and specifics as to what the new moral practice should look like. The purpose of this article is to bring attention to the problem of the moral predicament, reveal its source, and show the path to its solution. The practical implementation of the solution requires more discussions and more experimental work. My hope is that this article will lead to the recognition of the need to solve the problem of the moral predicament and will stimulate efforts to reform our current moral practice.

The article offers no prescriptions and does not describe specific forms that the new practice should embody. It is important to approach the creation of new practice with an open mind. The very nature of this new practice demands universal inclusion. There is only one condition that this author deems inescapable: the process of creation should serve as the foundation for all these efforts. The commitment to this process should not be merely in the form of theoretical acceptance of its validity. Those who will devote their minds, time, and energy to this transformation should use this process in their own practical interactions with each other. They should not view this process as merely a theoretical possibility. This process should be firmly imbedded in their own actions.

The very process of transforming the social practice should be the arena in which the process of creation will be applied in interactions among those who will be involved in this effort. Only under such conditions the process of creation will not be merely a vision for the future to which we will periodically bow in ritualistic obeisance. Rather, the understanding of this process should be the manual for practical interactions of all creators involved in transforming our social practice. Only under such condition our efforts will be successful.

ENDNOTES

¹ Jean Decety and Jason M. Cowell, "Our Brains Are Wired for Morality: Evolution, Development, and Neuroscience," *Frontiers for Young Minds*, March 9, 2016, <https://kids.frontiersin.org/articles/10.3389/frm.2016.00003>.

² Melanie Killen, Aline Hitti, Shelby Cooley, and Laura Elenbaas. "Morality, Development, and Culture," in *Handbook of Advances in Culture and Psychology, Vol. 5* (New York: Oxford University Press, 2015), pp. 161-220, p. 162, <https://doi.org/10.1093/acprof:oso/9780190218966.003.0004>.

³ Edward O. Wilson, "The Biological Basis of Morality," *The Atlantic*, April 1, 1998. <https://www.theatlantic.com/magazine/archive/1998/04/the-biological-basis-of-morality/377087/>.

-
- ⁴ John Locke, *An Essay Concerning Human Understanding* (New York: Penguin, 1997), I.III.6.
- ⁵ Chris Heathwood, “Could Morality Have a Source?” *Journal of Ethics & Social Philosophy*, vol. 6, no. 2 (2012), p. 1; William Lane Craig and Walter Sinnott-Armstrong, *God?: A Debate Between a Christian and an Atheist* (Oxford: Oxford University Press, 2004), pp. 18-19.
- ⁶ Pauline Sanchez, “The Origins of Morality,” *Dialogue & Nexus*, vol. 4, article 6 (2017), p. 5.
- ⁷ David Hume, *A Treatise on Human Nature* (New York: Penguin, 1989), Book III, Part I; also Hume, *An Enquiry Concerning the Principles of Morals* (New York: Trade Paperback, 1983).
- ⁸ Geoffrey M. Hodgson, “The Enduring Relevance of Darwin’s Theory of Morality,” *BioScience*, vol. 63, no. 7 (July 2013), pp. 513–14, <https://doi.org/10.1525/bio.2013.63.7.2>.
- ⁹ Emily Esfahani Smith, “Is Human Morality a Product of Evolution?” *The Atlantic*, December 2, 2015. <https://www.theatlantic.com/health/archive/2015/12/evolution-of-morality-social-humans-and-apes/418371/>.
- ¹⁰ Judith M. Burkart, Rahel K. Brügger, and Carel P. van Schaik, “Evolutionary Origins of Morality: Insights From Non-Human Primates,” *Frontiers in Sociology*, vol. 3 (2018), p. 3, <https://doi.org/10.3389/fsoc.2018.00017>.
- ¹¹ James Hemming, “Morality after Myth,” *Journal of Moral Education*, vol. 25, no. 1 (2006), pp. 39-45, p. 39, <https://doi.org/10.1080/0305724960250104>.
- ¹² Michael Tomasello, “The Origin of Morality,” *Scientific American*, September 2018, p. 72; also Michael A. Tomasello, *Natural History of Human Morality* (Cambridge: Harvard University Press, 2016) <https://doi.org/10.5860/choice.197473>.
- ¹³ Tomasello, *Natural History of Human Morality*.
- ¹⁴ Dennis Krebs, “The Evolution of Morality,” in D. Buss, ed., *Evolutionary Psychology Handbook* (London: John Wiley & Sons, 2005), pp. 747-71, <http://www.sfu.ca/psyc/faculty/krebs/publications/Buss7.pdf>.
- ¹⁵ Jamil Zaki, *The War for Kindness: Building Empathy in a Fractured World* (Crown, 2019); Sissela Bok, “What Makes Us Better: Two Books Explore Whether Morality Is Innate or Learned,” *American Scholar*, vol. 88, no. 3 (Summer 2019), pp. 120–21.
- ¹⁶ Albert A. Johnstone, “Why Morality?” *Humanistic Psychologist*, vol. 46, no. 2 (June 2018), pp. 188–203, p. 191, <https://doi.org/10.1037/hum0000090>.

-
- ¹⁷ Heathwood, Chris. “Could Morality Have a Source?” p. 2.
- ¹⁸ Patricia S. Churchland, *Conscience: The Origin of Moral Intuition* (New York: Norton, 2019).
- ¹⁹ Decety, “Our Brains Are Wired for Morality.”
- ²⁰ Ian Morris, “The Unexpected Origin of Human Values.” *New Scientist* 226, no. 3017 (April 18, 2015), p. 1. [https://doi.org/10.1016/S0262-4079\(15\)30170-6](https://doi.org/10.1016/S0262-4079(15)30170-6).
- ²¹ Decety, “Our Brains Are Wired for Morality.”
- ²² Robert A. Hinde, *Why Good Is Good: The Sources of Morality* (London: Routledge, 2002).
- ²³ David Hume, *A Treatise of Human Nature*, Book III, Part I.
- ²⁴ Philip Pettit, “Naturalizing Tomasello’s History of Morality,” *Philosophical Psychology*, vol. 31, no. 5 (July 2018), pp. 722–35, <https://doi.org/10.1080/09515089.2018.1486609>.
- ²⁵ Richard Joyce, “The Origins of Moral Judgment,” *Behaviour. Evolved Morality: The Biology and Philosophy of Human Conscience*, vol. 151, no. 2/3 (February 2014); see also Johnstone, “Why Morality?” p. 191.
- ²⁶ Gennady Shkliarevsky, “The Evolution of Civilization as a Process of Creation,” Rochester, *SSRN Scholarly Papers*, January 28, 2020.
- ²⁷ Stefan Linquist, ed., *The Evolution of Culture* (New York: Routledge, 2016), p. xiii.
- ²⁸ Richard Dawkins, *The Selfish Gene* (New York: Oxford University Press, 1990).
- ²⁹ Gennady Shkliarevsky, “The Evolution of Civilization as a Process of Creation.”
- ³⁰ Dean Keith Simonton, “Creativity as Blind Variation and Selective Retention: Is the Creative Process Darwinian?” *Psychological Inquiry*, vol. 10, no. 4 (1999) pp. 309–28, p. 322.
- ³¹ Liane Gabora, “Creativity: Linchpin in the Quest for a Viable Theory of Cultural Evolution,” *Current Opinion in Behavioral Sciences and Creativity*, vol. 27 (June 1, 2019), pp. 77–83, p. 77. <https://doi.org/10.1016/j.cobeha.2018.09.013>.
- ³² Albert Bandura, *Social Learning Theory* (Englewood Cliffs: Prentice Hall, 1977).

³³ Emily Esfahani Smith, “Is Human Morality a Product of Evolution?” *The Atlantic*, December 2, 2015. <https://www.theatlantic.com/health/archive/2015/12/evolution-of-morality-social-humans-and-apes/418371/>.

³⁴ As quoted in Catherine Wilson, “Darwinian Morality,” *Evolution: Education and Outreach*, vol. 3, no. 2 (June 2010), pp. 275–87, <https://doi.org/10.1007/s12052-009-0162-z>; also Charles Darwin, *The Descent of Man*. 2nd ed. (London: Murray. 1882), p. 98.

³⁵ Gennady Shkliarevsky, “Conservation, Creation, and Evolution: Revising the Darwinian Project,” *Journal of Evolutionary Science*, vol. 1, issue 2 (2019), pp. 1-30,

³⁶ Geoffrey M. Hodgson, “The Enduring Relevance of Darwin’s Theory of Morality,” *BioScience*, vol. 63, no. 7 (July 2013), pp. 513–14, <https://doi.org/10.1525/bio.2013.63.7.2>.

³⁷ Judith M. Burkart, Rahel K. Brügger, and Carel P. van Schaik, “Evolutionary Origins of Morality: Insights From Non-Human Primates,” *Frontiers in Sociology* 3 (2018), p. 3, <https://doi.org/10.3389/fsoc.2018.00017>.

³⁸ Mark Rowlands. *Can Animals Be Moral?* (New York: Oxford University Press, 2012), <https://doi.org/10.1093/acprof:oso/9780199842001.001.0001>.

³⁹ Simon Fitzpatrick, “Animal Morality: What Is the Debate About?” *Biology & Philosophy*, vol. 32, no. 6 (December 1, 2017), pp. 1151–83, <https://doi.org/10.1007/s10539-017-9599-6>.

⁴⁰ Irina Mikhalevich, and Russell Powell, “Minds without spines: Evolutionarily inclusive animal ethics,” *Animal Sentience*, vol. 29, no. 1 (2020).

⁴¹ Johnstone, “Why Morality?”

⁴² Heathwood, “Could Morality Have a Source?”; Ian Morris, “The Unexpected Origin of Human Values,” *New Scientist*, vol. 226, no. 3017 (April 18, 2015), [https://doi.org/10.1016/S0262-4079\(15\)30170-6](https://doi.org/10.1016/S0262-4079(15)30170-6).

⁴³ Jean Piaget, *The Origins of Intelligence in Children* (Madison: International University Press, 1998).

⁴⁴ Gennady Shkliarevsky, “The Paradox of Observing, Autopoiesis, and the Future of Social Sciences.” *Systems Research and Behavioral Science* 24, no. 3 (2007), pp. 323–32, <https://doi.org/10.1002/sres.811>; also Gennady Shkliarevsky, *The Civilization at a Crossroads: Constructing the New Paradigm* (Raleigh, NC: Glasstree Publishing, 2017).

⁴⁵ Gennady Shkliarevsky, “In Quest for Justice: Solving the Problem of Inclusion and Equality,” Rochester, *SSRN Scholarly Papers*, June 6, 2021.

⁴⁶ Gennady Shkliarevsky, “Understanding the Process of Creation: A New Approach,” *Management: Journal of Sustainable Business and Management Solutions in Emerging Economies* 22, no. 3 (October 31, 2017): 1–13.
<https://doi.org/10.7595/management.fon.2017.0021>.

⁴⁷ Gennady Shkliarevsky, “Understanding the Process of Creation.”

⁴⁸ Margaret Boden, *The Creative Mind: Myths and Mechanisms*, 2nd ed. (London, New York: Routledge, 2004), p. 246.

REFERENCES

- Bandura, Albert. *Social Learning Theory*. Prentice Hall, 1977. Englewood Cliffs
- Boden, Margaret. *The Creative Mind: Myths and Mechanisms*, 2nd ed. (London, New York: Routledge, 2004), p. 246.
- Bok, Sissela. “What Makes Us Better: Two Books Explore Whether Morality Is Innate or Learned.” *American Scholar* 88, no. 3 (Summer 2019), pp. 120–21.
- Buchanan, Allen, and Russell Powell. “Toward a Naturalistic Theory of Moral Progress.” *Ethics*, vol. 126, no. 4 (July 2016), pp. 983–1014.
- Burkart, Judith M., Rahel K. Brügger, and Carel P. van Schaik. “Evolutionary Origins of Morality: Insights From Non-Human Primates.” *Frontiers in Sociology*, vol. 3 (2018), pp. 1-17, <https://doi.org/10.3389/fsoc.2018.00017>.
- Churchland, Patricia S. *Conscience: The Origin of Moral Intuition*. New York: Norton, 2019.
- Craig, William Lane and Sinnott-Armstrong, Walter. *God?: A Debate Between a Christian and an Atheist*. Oxford: Oxford University Press, 2004.

-
- Darwin, Charles. *The Descent of Man*. 2nd ed. London: Murray, 1882.
- Dawkins, Richard. *The Selfish Gene*. New York: Oxford University Press, 1990.
- Decety, Jean, and Jason M. Cowell. “Our Brains Are Wired for Morality: Evolution, Development, and Neuroscience.” *Frontiers for Young Minds*, March 9, 2016, <https://kids.frontiersin.org/articles/10.3389/frym.2016.00003>.
- Fitzpatrick, Simon. “Animal Morality: What Is the Debate About?” *Biology & Philosophy* 32, no. 6 (December 1, 2017), pp. 1151–83. <https://doi.org/10.1007/s10539-017-9599-6>.
- Gabora, Liane. “Creativity: Linchpin in the Quest for a Viable Theory of Cultural Evolution.” *Current Opinion in Behavioral Sciences*, Creativity, 27 (June 1, 2019), pp. 77–83, <https://doi.org/10.1016/j.cobeha.2018.09.013>.
- Heathwood, Chris. “Could Morality Have a Source?” *Journal of Ethics & Social Philosophy*, vol. 6, no. 2 (April 2012), pp. 1–19.
- Hemming, James. “Morality after Myth.” *Journal of Moral Education*, vol. 25, no. 1 (March 1996), pp. 1-39, <https://doi.org/10.1080/0305724960250104>.
- Hinde, Robert A. *Why Good Is Good: The Sources of Morality*. London: Routledge, 2002.
- Hodgson, Geoffrey M. “The Enduring Relevance of Darwin’s Theory of Morality.” *BioScience*, vol. 63, no. 7 (July 2013), pp. 513–14, <https://doi.org/10.1525/bio.2013.63.7.2>.
- Hume, David. *A Treatise on Human Nature*. New York: Penguin, 1989.
- Hume, David. *An Enquiry Concerning the Principles of Morals*. New York: Trade Paperback, 1983.
- Johnstone, Albert A. “Why Morality?” *Humanistic Psychologist*, vol. 46, no. 2 (June 2018), pp. 188–203, <https://doi.org/10.1037/hum0000090>.
- Joyce, Richard. “The Origins of Moral Judgment.” *Behaviour. Evolved Morality: The Biology and Philosophy of Human Conscience*, vol. 151, no. 2/3 (February 2014).
- Killen, Melanie, Aline Hitti, Shelby Cooley, and Laura Elenbaas. “Morality, Development, and Culture.” In *Handbook of Advances in Culture and Psychology, Vol. 5*. New York: Oxford University Press, 2015. Pp. 161-220, <https://doi.org/10.1093/acprof:oso/9780190218966.003.0004>.
- Krebs, Dennis. “The Evolution of Morality.” In *Buss, D. (Ed.) Evolutionary Psychology Handbook*. London: John Wiley & Sons., 2005, <http://www.sfu.ca/psyc/faculty/krebs/publications/Buss7.pdf>.

-
- Linguist, Stefan. Ed. *The Evolution of Culture*. New York: Routledge, 2016.
- Locke, John. *An Essay Concerning Human Understanding*. New York: Penguin, 1997.
- Mikhalevich, Irina & Powell, Russell. “Minds without spines: Evolutionarily inclusive animal ethics.” *Animal Sentience*, vol. 29, no. 1
- Morris, Ian. “The Unexpected Origin of Human Values.” *New Scientist* 226, no. 3017 (April 18, 2015): 1–1. [https://doi.org/10.1016/S0262-4079\(15\)30170-6](https://doi.org/10.1016/S0262-4079(15)30170-6).
- Pettit, Philip. “Naturalizing Tomasello’s History of Morality.” *Philosophical Psychology* 31, no. 5 (July 2018): 722–35. <https://doi.org/10.1080/09515089.2018.1486609>.
- Piaget, Jean. *The Origins of Intelligence in Children*. Madison: International University Press, 1998.
- Rowlands, Mark. *Can Animals Be Moral?* New York: Oxford University Press, 2012. <https://doi.org/10.1093/acprof:oso/9780199842001.001.0001>.
- Sanchez, Paulina. “The Origins of Morality.” *Dialogue & Nexus*, volume 4, article 6, 2017.
- Shkliarevsky, Gennady. “Conservation, Creation, and Evolution: Revising the Darwinian Project.” *Journal of Evolutionary Science*, vol. 1, no. 2 (2019), pp. 1-30.
- Shkliarevsky, Gennady. “The Evolution of Civilization as a Process of Creation.” Rochester: *SSRN Scholarly Papers*, January 1, 2020.
- Shkliarevsky, Gennady. “In Quest for Justice: Solving the Problem of Inclusion and Equality,” Rochester, *SSRN Scholarly Papers*, June 6, 2021.
- Shkliarevsky, Gennady. “The Paradox of Observing, Autopoiesis, and the Future of Social Sciences.” *Systems Research and Behavioral Science* 24, no. 3 (2007), pp. 323–32, <https://doi.org/10.1002/sres.811>.
- Shkliarevsky, Gennady. “Understanding the Process of Creation: A New Approach.” *Management: Journal of Sustainable Business and Management Solutions in Emerging Economies*, vol. 22, no. 3 (October 31, 2017), pp. 1–13. <https://doi.org/10.7595/management.fon.2017.0021>.
- Shkliarevsky, Gennady. *The Civilization at a Crossroads: Constructing the New Paradigm* (Raleigh, NC: Glasstree Publishing, 2017).
- Simonton, Dean Keith. “Creativity as Blind Variation and Selective Retention: Is the Creative Process Darwinian?” *Psychological Inquiry* 10, no. 4 (1999): 309–28; p. 322.

-
- Smith, Emily Esfahani. “Is Human Morality a Product of Evolution?” *The Atlantic*, December 2, 2015, <https://www.theatlantic.com/health/archive/2015/12/evolution-of-morality-social-humans-and-apes/418371/>.
- Tomasello, Michael. “The Origin of Morality.” *Scientific American*, September 2018.
- Tomasello, Michael. *A Natural History of Human Morality*. Cambridge: Harvard University Press, 2016, <https://doi.org/10.5860/choice.197473>.
- Wilson, Catherine. “Darwinian Morality.” *Evolution: Education and Outreach* 3, no. 2 (June 2010): 275–87. <https://doi.org/10.1007/s12052-009-0162-z>.
- Wilson, Edward O. “The Biological Basis of Morality.” *The Atlantic*, April 1, 1998. <https://www.theatlantic.com/magazine/archive/1998/04/the-biological-basis-of-morality/377087/>.
- Zaki, Jamil. *The War for Kindness: Building Empathy in a Fractured World*. Crown, 2019.