THE PERPETUAL STRUGGLE: HOW THE COEVOLUTION OF HIERARCHY AND RESISTANCE DRIVES THE EVOLUTION OF MORALITY AND INSTITUTIONS

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Abstract: *Since the earliest human societies, there has been an ongoing struggle between hierarchy and resistance to hierarchy,* ***and this struggle is a major driver of the evolution of moralities and of institutions****. Attempts to initiate or sustain hierarchies are often met with resistance; hierarchs then adopt new strategies, which in turn prompt new strategies of resistance; and so on. The key point is that the struggle is typically conducted using moral concepts in justifications for or against unequal power and involves the stimulation of the moral emotions. Both parties to the struggle treat morality as a valuable strategic resource; and the dynamic of interaction between hierarchs and resisters generates changes in that resource. The hierarch/resister struggle is in part a competition between moral concepts and justifications, and that competition drives the emergence of new moral concepts and justifications, just as competition in other contexts generates innovations. Among the moral concepts generated by the struggle are the following: authority, legitimacy, aristocracy, the divine right of kings, the mandate of heaven, natural rights, civil and political rights, constitutionalism, the rule of law, sovereignty, collective self-determination, exploitation, oppression, and domination.*

KEY WORDS: hierarchs, resisters, strategic weapons, evolution of moral concepts

I. Introduction

The theme of this issue is "science, technology, and values." People often think of the relation between values and technologies as external: they see morality as providing an independent constraint on how technologies should be developed and deployed. I want to suggest, instead, that morality can be seen as a technology—a systematically connected set of skills or techniques for producing some practical outcome. Although evolutionary thinkers use the term "function" more often than "technology," they regard morality as a technology for achieving and sustaining cooperation. They argue that humans are "ultra-cooperators" because they evolved a technology for cooperation superior to that of other animals—namely, a more flexible and powerful morality. My suggestion is that we can think of some important parts of morality as an increasingly sophisticated technology for managing hierarchy.

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doi:10.1017/S0265052522000139

I will argue for the following thesis: since the earliest human societies, there has been *an ongoing struggle between hierarchy and resistance to hierarchy, **and this struggle is a major driver of the evolution of moralities and of institutions***. By "hierarchy" I mean relations of unequal power, typically embodied in social practices and institutions, that allow some to have control over others.[1] Attempts to initiate or sustain hierarchies are often met with resistance; hierarchs then adopt new strategies, which in turn prompt new strategies of resistance; and so on. The key point is that the struggle is typically conducted using moral concepts in justifications for or against unequal power and involves the stimulation of the moral emotions. Both parties to the struggle treat morality as a valuable strategic resource; and the dynamic of interaction between hierarchs and resisters generates changes in that resource. The hierarch/resister struggle is in part a competition between moral concepts and justifications, and that competition drives the emergence of new moral concepts and justifications, just as competition in other contexts generates innovations.

Among the moral concepts generated by the struggle are the following: authority, legitimacy, aristocracy, the divine right of kings, the mandate of heaven, natural rights, civil and political rights, constitutionalism, the rule of law, sovereignty, collective self-determination, exploitation, oppression, and domination. These concepts are aptly characterized as moral because, although, as with other moral concepts, they include a descriptive element, they also have an evaluative element that is either explicitly moral or has moral implications. Institutions generated by the struggle include legal regimes specifying individual and group rights, constitutions articulating limitations on political power, institutions of democratic governance, and international law and global governance institutions that specify the rights, privileges, and duties of sovereign states and the rights of collective self-determination of other entities, such as indigenous communities and national minorities. The thesis that the ongoing struggle between hierarchs and resisters generates moral change has an important implication: *explaining changes in moralities requires, inter alia, an understanding of the co-evolution of hierarchy and resistance to hierarchy*.

Before proceeding with the analysis, I want to emphasize that my claim is about one kind of moral change, not about the origins of morality. Further, I am not saying that the struggle between hierarchs and resisters generates all moral concepts—only that it generates a surprising number of important moral concepts.

The term "hierarchy" as I am using it is nonevaluative. Unfortunately, evolutionary thinkers often use the terms "hierarchy" and "domination" as

[1] Sometimes any social order that exhibits different statuses is considered hierarchical. The relationship between status and power is complex. One might argue that a person can have high status without having significantly greater power. In this essay, I am interested in hierarchies as involving unequal power. That is compatible with the recognition that what might be called a "status hierarchy" does not always accord those with higher status significantly more power than others.

if they were interchangeable, in spite of the fact that "domination" is frequently used pejoratively to characterize hierarchy that is exploitive, unjustified, illegitimate, oppressive, excessive in proportion to whatever benefits it brings, or otherwise morally defective. The term "domination" is also sometimes used merely to mean decisive control (which may not be wrongful). I will only use the term "domination" to characterize hierarchies that are regarded as clearly wrongful from the perspective of a wide range of moral views, keeping open the possibility of morally permissible hierarchies.

Evolutionary anthropologists and biologists have had much to say about the *origins* of human moralities, but they have done little to explain *moral change*. Historians of ideas have *described* changes in moral concepts and justifications, but have not provided plausible *explanations* of these phenomena because they have not supplied a systematic, empirically supported account of how changing cultural environments influence moral change. In this essay, I pursue the project of explaining moral change in a naturalistic fashion, utilizing principles from evolutionary science.

I argue that the hierarch/resister struggle can be understood in terms of cultural evolution, more specifically, as a process in which the objects of cultural selection are *moralized strategies*, whether for hierarchy or for resistance. Focusing on strategies as the objects of selection allows me to utilize evolutionary principles without making two problematic assumptions that critics of group-level cultural selection reject: the assumption that the struggle is conducted between groups that can be clearly differentiated from each other and that persist over time, and the assumption that the object of selection is traits of groups.

My ultimate aim, however, is normative, not explanatory. I proceed on the assumption that a sound understanding of the coevolutionary struggle between hierarchs and resisters may yield resources for designing more-effective strategies for curbing hierarchies that qualify as domination—strategies that do not merely substitute one form of domination for another. It is worth emphasizing that although the explanatory portion of my project can be described as a kind of "genealogy of morals," it is quite different from Nietzsche's project. I do not argue that once we understand the origins of certain concepts we thereby have debunked their supposed moral validity.

My focus will be on cases where the following conditions obtain:

1. A relatively comprehensive hierarchy exists—that is, there is a persisting structure of unequal power relations that enables a subset of the population to exercise unilateral decisive control over major dimensions of economic, social, and political life.
2. Some who are subject to that unequal power seek to resist it.
3. Those who resist frame their rationale for resisting, at least in part, in moral terms, typically claiming that the hierarchy is oppressive, exploitive, unjust, illegitimate, and so forth—an instance of domination in the pejorative sense.

4. Those at the top of the hierarchy strive to maintain their ascendancy in the face of the resisters' challenge, and in doing so do not rely solely on brute force but also on moral justifications for their superior power.

I will attempt to identify patterns of strategic behavior in the struggle between those who seek to establish or sustain hierarchy, on the one hand, and those who resist it and who characterize it as oppressive, as domination, or in some other way as wrongful or unjustified hierarchy, on the other.

The key to understanding why the hierarch/resister struggle features competing moral concepts and justifications is the fact that both successful hierarchy and successful resistance to hierarchy require cooperation—that is, the forming and sustaining of coalitions, groups of individuals who coordinate in their beliefs and attitudes toward unequal power and engage in concerted action accordingly. For human beings, *successful cooperation is cooperation structured by moral norms that are made behaviorally effective by moral emotions.* That is why it is useful to think of morality as (inter alia) a technology for cooperation.

Evolutionary explanations of the fact that humans are "ultra-cooperators" as compared with all other animals, as well as experimental evidence revealing the role of moral commitments in solving collective action problems and in achieving agreement on the division of goods, have established the fundamental role of morality in the distinctively robust and flexible cooperation that humans manifest.[2] Motivationally potent, internalized moral norms facilitate cooperation in a number of ways: by discouraging free riding, by requiring sometimes-costly punishment of norm violators, by providing coordination points when there is more than one effective way to deal with a problem, by helping to inhibit divisive sexual behavior and violence, and more generally by providing constraints on the pursuit of self-interest and partiality that disrupt cooperation.

Of special importance for understanding the hierarch/resister dynamic is the fact that moral commitments can facilitate collective action, in at least three ways. First, moral commitments (as expressed in fairness norms, for example) can motivate individuals to contribute to collective action directly, as it were, without even engaging in the cost-benefit calculations that, according to the logic of collective action characterized by Mancur Olson[3] and others, lead the rational individual to abstain from participation in the production of non-excludable goods. Second, even if the individual

[2] Joseph Henrich, *The Secret of Our Success: How Culture is Driving Human Evolution, Domesticating our Species, and Making Us Smarter* (Princeton, NJ: Princeton University Press, 2015).

[3] Mancur Olson, *The Logic of Collective Action: Public Goods and the Theory of Groups* (Cambridge, MA: Harvard University Press, 1971).

performs the cost-benefit calculation and concludes that her interests are best served by refraining from participation, she may view her moral commitments, including her promise to others that she will participate if they do, as taking priority. Finally, moral norms can provide needed coordination points, by prescribing particular ways of achieving the collective good when there is more than one way to do so.

A. Moral cooperators

Evolutionary scientists who study human beings tend to agree on two points: first, that the fact that humans are ultra-cooperators is due in large part to their moral capacities; and second, that early humans, unlike other great apes, achieved impressive success in preventing the simplest form of hierarchy: purely predatory behavior by aggressive males. Hierarchies of this simple sort are the fundamental principle of social organization in the other great apes. In contrast, as numerous anthropological studies attest, contemporary forager groups exhibit effective techniques for suppressing hierarchs; and it is reasonable to assume that the earliest human groups did so as well.[4] My hypothesis is that these two points of agreement are intimately related: humans (initially) succeeded in resisting hierarchy and thus domination *because* they possessed moralities that enabled them to cooperate more effectively in anti-hierarchy coalitions than other great apes. In brief, *the explanation of why early humans suppressed those who sought to exert control over them and why they are ultra-cooperators is the same: they have moralities whose power to facilitate cooperation surpasses that of the moralities or proto-moralities of other great apes.*

In the forager case, the struggle is typically between a single male attempting to exercise decisive control over others in order to further his own interests and a group who resists him. Such an individual can be characterized as a *purely predatory hierarch.* The interaction between a purely predatory hierarch and those upon whom he preys is strictly zero-sum: he is a taker, expropriating food from others, monopolizing sexual access to females, and excluding others from prime foraging areas. In large-scale, complex societies, the struggle is between opposing cooperative groups, that is, hierarch coalitions, and resister coalitions.

B. Morality as a strategic asset

Distinctively human cooperation in the struggle between hierarchy and resistance, as elsewhere, involves the application of moral concepts in making moral judgments and in moral reasoning, as well as the activation of moral emotions (such as sympathy and indignation). In brief, *morality is an*

[4] Christopher Boehm, *Hierarchy in the Forest: The Evolution of Egalitarian Behavior* (Cambridge, MA: Harvard University Press, 2000).

important strategic asset for both sides in the struggle, because morality facilitates the formation and sustaining of the competing coalitions.

Groups on either side in the struggle can also appeal to moral concepts in order to undermine their opponent's ability to engage in effective collective action. This would be the case, for example if those over whom decisive control is being exercised, due to the inculcation of an ideologically distorted portrayal of the facts of social life, believe that their disadvantages are not the result of injustices, but instead are deserved. Given these beliefs, they may be subject to domination yet not even consider collective action to overthrow the existing order to be a reasonable option. They will not judge the hierarchy to be an instance of domination. Similarly, moral appeals can lead individuals who would otherwise engage in collective action in support of a dominating hierarchy to refrain from doing so and even to join the effort to overthrow or reform it. This might occur if they became convinced that the hierarchs were simply pursuing their own interests and culpably disregarding the interests of those over whom they exercise control or were perpetrating other injustices. So, strategy in the struggle involves both solving collective action problems in one's own coalition and exacerbating collective action problems in the competing group; and in both cases morality is a strategic asset. To say that the interaction between hierarchs and resisters is strategic means that the behavior of each of the opposing groups is not only goal-directed, but also based in part on anticipation of how the other group will behave.

Those who employ moral concepts and justifications in the struggle may not view them as purely instrumental. On the contrary, their employment may be sincere because the individuals in question have internalized the moral concepts and rules in question. In some cases, however, individuals may view the moral justifications they invoke in purely instrumental terms, while expecting or hoping that others will take them at face value and act accordingly. Whether those who employ moral justifications do so for solely instrumental reasons or are committed to the values they express, the appeal to morality is an important weapon in the perpetual struggle between hierarchs and resisters.

C. Why hierarchs and resisters both rely on "normative power"

To achieve durable success, hierarchs often must convince those they seek to control that their exercise of power is beneficial all things considered and that they are not simply using their power to further their own interests. In addition, those who seek to maintain their status as hierarchs typically must credibly present themselves as having certain moral virtues—stable character traits that make them fit to exercise unequal power. These virtues include generosity and impartiality.

Similarly, those who seek to resist a hierarch coalition typically must make the case that it is exercising power in morally unacceptable ways or

that it lacks the proper authority to exercise power or that those possessing power are morally deficient in some relevant way. For both hierarchs and resisters, then, moral judgments and the application of moral concepts are strategically valuable. To be motivationally effective, moral justifications must connect in the right way with moral emotions. Sound strategies deploy moral norms that resonate with powerful moral emotions. Hierarchs and resisters alike must cooperate in order to compete with their opponents.

D. Strategic interaction, not disinterested reasoning

The thesis that, due to its crucial role in facilitating cooperation-for-competition, morality is a potent strategic resource in the hierarch/resister struggle has an important implication: moral concepts such as aristocracy, the divine right of kings, the mandate of heaven, oppression, legitimate authority, the rule of law, rights, constitutionalism, and exploitation, are *not* the fruits of a disinterested exercise of moral reasoning understood as a sufficient, autonomous cause; nor are they latent in our evolved basic moral psychology; nor are they unilaterally invented and imposed on the masses by religious or secular authorities. They are weapons, strategic resources that have evolved in the coevolutionary struggle between hierarchy and resistance; and they first emerge and spread at least in part *because* of their strategic value, even when those who wield them do not think of them in strategic—that is, in purely instrumental—terms.

The strategic interaction framework for explaining changes in moral concepts and justifications differs sharply from traditional history of ideas approaches. The latter sometimes do take cultural milieu into account, but not in a systematic, empirically informed fashion. In other words, they lack an explanatory *theory* that offers empirically testable hypotheses as to how particular cultural factors affect the emergence of new concepts and, just as importantly, the timing of their emergence. My account aims to provide a systematic explanation of how the cultural environment shapes the hierarch/resister struggle by emphasizing that the moral changes generated in the struggle are the result of strategic behavior that profoundly effects how and when moral reasoning occurs. In cultural evolutionary terms, the basic idea is that competition between rival coalitions results in selection, and that *the objects of cultural selection are competing moralized strategies.*

The competition between moralized strategies produces winners and losers—some moral concepts and justifications are filtered out while others persist and spread, both "vertically," through cultural transmission over generations within particular societies, and "horizontally," through social learning mechanisms, to other societies. For example, beginning in the late seventeenth century in Europe, justifications of political authority that relied on the notion of the divine right of kings and other, related views that identified legitimacy with biological pedigree were eventually driven to virtual cultural extinction (except in Japan and a few other places).

They lost out to conceptions of legitimacy that relied on the idea that political power is conditional upon the provision of certain goods, including peace, the protection of natural rights, and the promotion of the general welfare.

The competition does not operate with a stock of moral assets that changes only through depletion, by some items being filtered out. It also produces innovations in moralizing strategies. Although the struggle is conducted by agents acting intentionally, the dynamic is often that of "blind" evolutionary selection: consequences merge that were not anyone's intention and there is no overall plan or design. In that sense, the process overall is not rational, even though agents operating in it may behave rationally, given the constraints under which they labor.

There is a second respect in which the strategic interaction explanation I offer avoids the excessive rationalism characteristic of many traditional history of ideas accounts: the initial stimulus for the development of moral concepts and justifications in the perpetual struggle are most likely evolved predispositions—whether to try to control others or to resist being controlled by them—that are not the result of reasoning. These dispositions are most readily explained as adaptations—traits that evolved to become important elements of human moral psychology because they enhanced reproductive fitness in the environment in which the moral mind was forged. Both the disposition to exert decisive control over others and the disposition to resist being controlled—as well as the capacity to determine when to submit to being controlled and when not to—were the products of "blind" selective forces, not the fruits of moral reasoning. Because these dispositions are also found in our nearest primate relatives and presumably evolved in a recent common primate ancestor, it is highly probable that they existed in the *homo* genus before the emergence of the capacity for moral reasoning of the developed sort deployed in forming hierarch and resister coalitions.

E. The reflexive character of the struggle

Those who challenge a hierarchy often characterize it as domination (in a pejorative sense), but what is regarded as domination changes as the struggle proceeds. More specifically, there is contestation over what counts as the hierarchs acting with due regard to the interests of those over whom they exercise control, with more demanding criteria for due regard emerging over time. A striking feature of the struggle, then, is that it is reflexive: it is, inter alia, *a competition between rival understandings of what constitutes domination*—a contest to determine which understandings of when power over others *is* domination will come to prevail in society. Put positively, the struggle is a contest to determine what counts as the rightful or legitimate or justifiable power of some members of society over others.

Winning the contest over whose conception of domination will become socially prevalent is critical for both parties to the struggle. If hierarchs can

convince those over whom they exercise power that this power is rightful and not excessive—that it is not domination—they can economize on the use of force and have a better chance of maintaining their power. If resisters can convince enough people that they are being subjected to domination—that the existing power disparity is wrong, excessive, or illegitimate—they will have an advantage in mobilizing resistance. Whoever is able to shape the prevailing social understanding of domination in a way that favors their cause will have a distinct strategic advantage in the contest. In other words, one of the most powerful weapons a party to the coevolutionary arms race between hierarchy and resistance can wield is a hegemonic conception of domination.

II. The Structure of the Hierarchy/Resistance Dynamic

An analogy with arms races sheds light on the structure of the struggle. The escalation in armaments produced by the strategic behavior of rival states generates innovations, which in turn generate further innovations, in a runaway process that exceeds the control of either party. The same is true in the hierarch/resister struggle: the process of adaptation and counter-adaptation produces innovations in moral concepts, moral justifications for unequal power, and in institutions, as well as new expressions of the moral emotions, innovations that neither party can squelch.

The arms race analogy is also helpful in another respect: arms races produce results—sometimes very costly ones—that neither party intended. Likewise, the strategic interaction between hierarchs and resisters frequently results in consequences that no one either intended or foresaw. In some cases, the unintended consequences are morally progressive (as when dominators make strategic concessions that put them on a slippery slope toward loss of their power or significant constraints upon it), in other cases they are not (as when successful resistance to hierarchy spawns new dominating hierarchies, as in the Russian and Chinese revolutions).

Another analogy also illuminates the struggle: the co-evolution of parasites and the immune systems of the organisms they prey on. A parasite attacks an organism, the organism's immune system responds, and the parasite develops new traits that overcome the defenses of the immune system, which then adapts to the new threat, and so on. The parasite analogy is especially apt in cases where the hierarchs are social parasites, exploiting those over whom they exercise control, harmfully using them as a mere means to realize their own interests, violating basic norms of reciprocity and mutual benefit.

A. Moral technologies for managing hierarchy

There is yet another way to frame the hierarch/resister dynamic: as the evolution through cultural selection of *moral technologies for managing*

hierarchy—whether for purposes of creating and sustaining hierarchy or for preventing or curbing it. This framing has three important advantages. First, it emphasizes the fact that the deployment of moral concepts in the struggle is not a theoretical enterprise, but an eminently practical one ("techne" means skill or craft). Second, it invokes the familiar idea that technologies generally develop most rapidly under the pressure of competition. Third, and most important, if an adequate explanation of how the domination/resistance struggle has unfolded in various contexts so far can be developed, it may be possible to devise more effective resistance strategies and, in particular, strategies that do not spawn new forms of domination, as has occurred all too often in the past. In other words, framing the struggle as a competition between *moral technologies for hierarchy management*, makes salient the possibility of a transition from the largely "blind" selection of such technologies, to deliberately designing them on the basis of the best scientific information. Fourth, this framing is a specification of a highly plausible more general idea, namely, that morality originated as a social technology for cooperation and continues to play a major role in cooperation. In the final section of this essay, I will begin to make the case for a more self-conscious and scientifically informed technology for managing hierarchy that recognizes the strategic importance of morality: a practically useful theory of "moral institutional design" to guide the development of institutions that are not only effective against existing domination strategies, but also flexible enough to adapt to new ones.

III. The Evolved Moral Psychology of the Perpetual Struggle

A plausible theory of the evolution of the hierarch/resister dynamic must include an account of the motivation that energizes the strategic behavior. In terms of moral psychology, my framing assumption is as follows: individuals, have *a disposition to try to exert control over others and a disposition to resist being controlled by others, along with an ability to determine when efforts to try to control others are likely to be successful and when it is better either to refrain from attempting to exert control or to submit to the control of others.*

A. Hierarchy and reproductive fitness

My hypothesis is that this complex is an adaptation: a trait that was selected for in our remote primate past (at least as far back as the most recent common ancestor of humans, chimps, bonobos, and gorillas), because it enhanced the individual's reproductive fitness. Control over others enables an individual to expropriate resources needed for survival and reproduction. Successful resistance to being controlled by others enables the individual to prevent the controller from reducing one's own fitness. And the ability to discern when to resist and when to submit is also fitness enhancing. In circumstances in which there is competition for resources needed for

survival and reproduction, an individual who refrained from controlling others when he could do so, or was unable to determine when to resist and when to submit, would be at a reproductive disadvantage.

There are two reasons to believe that this suite of dispositions is an important and enduring component of human moral psychology. The first is that it has obvious fitness advantages over a simple disposition to try to control others under all circumstances or to submit under all circumstances. The second is that assuming that it is an adaptation that became part of normal human psychology helps explain the cross-cultural and transhistorical ubiquity of the struggle between hierarchy and resistance.

IV. The Beginning of the Struggle Between Hierarchy and Resistance

In forager bands that have been studied by anthropologists, simple, direct domination—what I refer earlier as purely predatory hierarchy—is a serious problem. Hierarchy here is directly coercive and zero sum: through physical force the dominator expropriates the assets of others without bestowing any benefits on them. Such individuals use their greater power in violation of norms of reciprocity, pursuing their own interests without constraint at the expense of others. Because they expropriate the benefits that others produce cooperatively, they reduce incentives for cooperation. Many evolutionary anthropologists believe that the emergence of pair bonding among our ancestors and the family-based cooperation it facilitated, was an important step toward humans becoming ultra-cooperators. Where social order is structured by purely predatory hierarchy, pair bonding is not viable. Purely predatory hierarchy, then, is a serious obstacle to cooperation and hence a detriment to reproductive fitness, both for individuals and groups.

A. Selection for traits that facilitate suppression of dominators

Assuming that cooperation has large effects on reproductive fitness, there would have been selective pressures, both at the level of individuals and at the group level, in the earliest human societies for the emergence of strategies for resisting purely predatory hierarchs and for the psychological capacities necessary for them to be devised and executed. Where there was success in preventing or curbing such hierarchs, individuals would have greater reproductive fitness because their access to valuable resources and their attempts to cooperate would not be hindered by the depredations of purely predatory hierarchs. So, there would have been individual-level selection for traits that facilitated resistance to domination.

Groups that developed effective domination suppression measures would be able to cooperate more effectively than groups that did not, and this in turn would give the former groups a reproductive advantage over the latter. Although the object of selection was strategies, not group traits,

groups that adopted successful strategies thereby gained a fitness advantage over those that did not.

B. Early techniques for resisting hierarchy

Contemporary forager and tribal groups across a wide variety of environments employ the same techniques for suppressing purely predatory hierarchs within the group: ridicule, shunning, exile, and, as a last resort, homicide.[5] A reasonable implication of this research is that the first forager groups in which a distinctively human morality arose exhibited similar patterns of hierarch resistance.

Even in the simple setting of forager bands, successful resistance to hierarchy typically requires the exercise of distinctively human moral capacities. Those who seek to form dominance suppression coalitions typically reason together to decide when an individual has crossed the line, and when and with what degree of severity various sanctions should be imposed on him. Moral consistency reasoning plays an important role in these deliberations. For example, to persuade others to cooperate in a dominance suppression coalition, individuals may find it necessary to argue that (i) the current case is like a previous one in which a particular decision was made and that (ii) that decision has been regarded as the right one. In addition, moral persuasion to form dominance suppression coalitions may require appeals to shared interests and efforts to show that the proposed sanctions are being administered impartially rather than in the pursuit of a personal grudge. Finally, moral judgment and justifications may be deployed to convince potential dominance suppression coalition members that everyone will participate and that no one will bear unacceptable risks in the effort to sanction the dominator. In all of these ways and more, cooperation to suppress dominators in hunter-gatherer groups typically relies on morality. *Other things being equal, resister coalitions based on moral norms effectively linked to moral emotions are less vulnerable to failure due to discoordination, defection, and free-riding.*

My hypothesis, then, is that it was the fact that humans are robustly *moral* cooperators that enabled them to solve the initial problem of domination—to suppress purely predatory hierarchs—more effectively than chimps, gorillas, and bonobos have done. Those primates sometimes form coalitions against purely predatory hierarchs, but they are much less durable and effective.[6] They do not achieve stable and effective social practices of dominance suppression, pass them on to succeeding generations, and embody

[5] Boehm, *Hierarchy in the Forest*.

[6] Ryne Palombit *et al.*, "Male Infanticide and Defence of Infants in Chacma Baboons," in *Infanticide by Males and its Implications*, ed. Carel van Schaik (Cambridge: Cambridge University Press, 2000); R. I. M. Dunbar, "Bridging the Bonding Gap: The Transition from Primates to Humans," *Philosophical Transactions of the Royal Society* 367 (2010): 1596.

them in institutions as humans do. Instead, with these species, purely predatory hierarchies are a central component of the social order.

V. A Revisionist Account of the History of Hierarchy and Resistance

The prevailing view among anthropologists is that foragers succeeded in curbing hierarchy in the form of pure predation. But then, so the standard story goes, as societies became more complex, the battle against hierarchy was lost: human societies became deeply inegalitarian; extreme hierarchy became a prominent and enduring feature of human life. According to this narrative, the transition from foraging to agriculture and the domestication of animals was regressive, from the standpoint of equality.

A. A flawed framing

This account is flawed. First, it defines "hierarchy" too narrowly, as one individual exercising power over all other members of the group, including other males. That overlooks the fact that even when such individuals were suppressed, in many cases males continued to dominate females. In other words, there is considerable evidence that many forager and tribal societies, like most if not all modern ones, are not egalitarian in their gender relationships. So the claim that early human societies solved the problem of hierarchy is extremely misleading: gender hierarchy remained. Second, evolutionary thinkers tend to use the terms "hierarchy," "domination," and "inequality" as if they were synonyms, failing to distinguish between a bully who exerts arbitrary coercive power over others solely to serve his own interests and a conscientious official who exercises proper authority, within institutional constraints, in the effective pursuit of the common good. A more fruitful approach is to define hierarchy as I have done—as persisting, significant inequalities of power—and then to explore the question of whether and under what conditions, hierarchy is morally objectionable or otherwise suboptimal—and in particular, when it qualifies for being labeled pejoratively as "domination."

Further, characterizing the hierarchy of complex societies as regression from a supposedly egalitarian pre-modern golden era uncritically assumes that equality of power is both desirable and feasible under modern conditions, overlooking the possibility that some form of hierarchy may be necessary for efficient social cooperation under these circumstances. It also overlooks the fact that some complex, large-scale societies have developed rather effective, though far from perfect, institutions for curbing domination.

B. Reframing the problem

The ongoing cultural coevolutionary arms race, then, is better characterized as follows: *at a certain point in the development of human societies, hierarchy (that is not gender-restricted) became valuable, if not necessary, for effective social*

coordination. In other words, in these much larger, more complex societies, hierarchy facilitated cooperation, which in turn enhanced reproductive fitness at the individual and group levels. From that crucial juncture onward, the problem for humanity was *not* how to restore the so-called egalitarianism of the first societies. *The problem was not to eliminate hierarchy; rather it was to prevent hierarchy from being domination—that is, to ensure that hierarchy is not exploitative, oppressive, or otherwise seriously morally defective, and to prevent concentrations of power in excess of what is necessary for successful social cooperation.*

VI. The Evolution of Dominance

The next step in my argument is to begin to explain why dominance suppression techniques that work quite well in forager bands failed to suppress the more sophisticated types of dominance that characterized the quite different human societies that emerged several thousand years after the onset of the Neolithic Revolution, the transition to large-scale, sedentary societies based on agriculture and the domestication of animals that began around 12,000 years ago. The earliest societies of this kind, which appeared between 5,000 and 6,000 years ago and are sometimes called archaic kingdoms, exhibited extreme hierarchy; rulers often possessed near absolute power and successfully claimed the status of gods by relying on (though sometimes modifying) prevailing religious beliefs and the moral commitments these beliefs foster.[7] On any reasonable conception of domination, these hierarchies were instances of domination: god-kings were free to pursue their own interests with little regard for the welfare or rights of those over whom they exercised unchecked decisive control—and there is good reason to believe that they generally did pursue their interests in just this way. But the existence of extremely hierarchical tribal societies (for example, in Polynesia) suggests that failure to suppress dominating hierarchs began even earlier (on the reasonable assumption that tribal societies preceded the archaic kingdoms).[8]

Whereas in forager bands the purely predatory hierarch *thwarts cooperation*, in larger-scale, more complex *societies, hierarchs facilitate cooperation*, but often in ways that systematically favor their own interests at the expense of those over whom they exercise control. In other words, with the transition from forager bands to much larger-scale, more complex societies, a new form of domination evolved: the dominator was no longer a pure parasite or pure predator, and the relationship between the dominator and the dominated was no longer zero sum. Instead, the dominating hierarch is a hybrid: part parasite and part symbiote. To repeat: once humans moved beyond the

[7] Peter Turchin, *Ultrasociety: How 10,000 Years of War Made Humans the Greatest Cooperators on Earth* (Chaplin, CT: Beresta Books, 2015).

[8] Kent Flannery and Joyce Marcus, *The Creation of Inequality: How our Prehistoric Ancestors Set the Stage for Monarchy, Slavery, and Empire* (Cambridge, MA: Harvard University Press, 2014).

forager context, certain individuals came to possess decisive control over others because their having that power facilitated cooperation. This adaptive change makes domination suppression more difficult and more costly.

A. The inadequacy of early forms of dominance suppression

Most contemporary societies have curbed the more extreme forms of domination exhibited in archaic kingdoms, but many still feature significant domination nonetheless. That is to say, they feature hierarchies that are reasonably criticized as being exploitive, illegitimate, unjustified, and so forth—unequal power relations in which those with greater power do not show proper regard for the interests of those they control. In that sense, modern humans have not been as successful as hunter-gatherers.

This discrepancy requires an explanation. There are two main reasons dominance suppression techniques that worked well in forager bands proved inadequate for suppressing domination in complex, large-scale societies. The first, more obvious reason is that in large-scale, complex societies, hierarchies are institutionalized; and institutionalized inequality of power is more durable, harder to combat. When hierarchies are institutionalized, dominators occupy social roles that confer extraordinary power —roles that are embedded in institutions and social practices that create incentives for compliance with the dominators' will.

The second, equally important reason is this: resisters in complex, large-scale societies *face serious obstacles to collective action that either did not exist or were easily solved in the earliest human societies.*

B. Crucial differences in the environments in which the collective action problem occurs

In forager bands, those who are threatened by a dominating male have already built up trust through repeated interactions over time and communicate easily with each other. They know that they will continue to interact with each other in the future and that they will remain in a condition of deep interdependence; and this knowledge influences their willingness to commit sincerely to cooperative dominance suppression. More specifically, each individual knows that if he defects from cooperation to suppress a dominator, his defection will be known and that his reputation and his viability as a partner in other cooperative enterprises will suffer accordingly. Furthermore, all the males in the group are skilled in the use of projectile weapons capable of killing large mammals; and that lowers the risk of confronting a dominator. (Due to the lack of projectile weapons, violent suppression of dominance behavior among chimps, gorillas, and bonobos requires direct contact with the dominator, and that means that extraordinarily powerful or aggressive individuals will be both harder to suppress and more likely to inflict injuries on those who seek to suppress them).

In contrast, none of these conditions obtains in large-scale societies. Most people only interact regularly and intensively with a small proportion of the total number of people needed for successful resistance to a dominating ruler; and sufficient trust and communication for achieving collective action are likely to be lacking, because any given individual only interacts repeatedly and intensively with a relatively small subset of the population. Further, in large-scale societies, dominators typically have exclusive access to the most effective weaponry and can rely on a cadre of followers who have the special skills required for their use. Large-scale societies also tend to be ethnically and culturally pluralistic, and that erects obstacles to trust and communication that were not present in more homogeneous, much smaller-scale societies.

Further, in large-scale societies, reputational effects are usually much less robust, because individuals only interact repeatedly with a small portion of the population and can escape the negative consequences of having a bad reputation in one social milieu by exiting it and joining other social groups that are unaware of his misbehavior. In other words, the anonymity of large-scale societies greatly limits the positive effects of the desire to maintain a good reputation on cooperation to suppress domination.

Nevertheless, there are many historical cases where people in large-scale, complex societies have cooperated successfully to constrain institutionalized dominators. The question, then, is this: Under what conditions are those who seek to resist or prevent domination able to cooperate to do so effectively? How are collective action problems solved? Shortly, I will argue that the employment of moral concepts and of moral justifications typically plays an important role in solving the resisters' collective action problems.

C. The collective action problem for dominators

Dominance coalitions also face collective action problems. As Douglass North, John Wallis, and Barry Weingast[9] have argued, domination coalitions are frequently forced to make concessions that limit their power, in order to sustain their own cohesion in the face of resistance—that is, to prevent some of their own members from defecting and joining the resistance coalition or seeking to form a new dominance coalition of their own that they believe will more effectively counter attempts to resist. Appeals to morality play a role in the solution of collective action problems that domination coalitions face. For example, ruling groups often possess an ideology that ascribes to their members special moral excellence: a superior moral status in a natural hierarchy of moral worth, as the original meaning of the term "aristocracy" indicates. Such moral views can promote and sustain

[9] Douglass C. North, John Joseph Wallis, and Barry R. Weingast, *Violence and Social Orders: A Conceptual Framework for Interpreting Recorded Human History* (Cambridge: Cambridge University Press, 2012).

solidarity among the rulers and to that extent enhance their ability to act collectively so as to sustain or expand their domination over others.

VII. Path-Dependency and Cultural Variations in the Character of the Struggle

Collective action problems are common to the struggle in all its manifold manifestations. But the strategic options for solving these problems vary widely, depending upon the particular historical and cultural context.

Which strategies will emerge and spread (and when) in a given context depends on a number of factors. How a given group of human beings initially responds to the problem of domination will be affected by various contingencies peculiar to their situation. Further, even under the same environmental conditions more than one strategy for curbing dominance may be available, and which strategy is adopted may be the result of various contingencies. Consequently, the dominance/resistance dynamic exhibits *path-dependency*: events that occur earlier can have a disproportionate effect on the possibilities for later developments. This means, among other things, that certain strategies may not be feasible, simply because of the nature of the path that the dynamic has taken in a particular society and because of other contingencies in the society's development.

A. Cultural variations in the resources for dominance suppression

Here is one possible example of how contingencies with powerful path-dependency effects can shape the hierarchy/resistance dynamic. Schultz et al.[10] argue that the religious dominance of the Western Christian Church influenced the development of a Western European moral psychology that differs significantly from the moral psychologies of people in regions where this particular religious influence was absent or weak. More specifically, the Church's influence resulted in weaker kinship ties, through serious limitations on consanguineous marriage. These authors then go on to document that in societies in which kinship ties are strong, there is less cooperation among strangers. This suggests that where kinship ties are strong, highly "inclusive" moralities will be less common.

B. How path-dependent differences in moralities affect the struggle

Societies with intensive kinship ties tend to exhibit moralities that are more parochial or "tribalistic"—less cosmopolitan. In contrast, where kinship ties are weaker, individuals tend to engage in more robust cooperation with nonkin, including individuals with whom they do not share ethnic or cultural identities. When taken together with other cultural factors, the

[10] Jonathan F. Schulz, Duman Bahrami-Rad, Jonathan P. Beauchamp, and Joseph Henrich, "The Church, Intensive Kinship, and Global Psychological Variation," *Science* 366 (2019): 6466.

experience of cooperating with strangers and extending the minimal moral regard to them that such cooperation requires can pave the way for the extensive development of markets; markets in turn both reward, and therefore reinforce, cooperation with strangers and contribute to material abundance and other conditions that produce "surplus reproductive success." These effects, then, ultimately lower the costs of extending moral regard to a wider circle of human beings, while increasing the benefits of doing so. Under the right conditions, this tendency can lead to the emergence of more-inclusive moral orientations, including the recognition that all persons have certain basic rights.[11]

If Schultz et al.[12] are right, then two consequences follow that are of great significance for the project of understanding the struggle between hierarchy and resistance, and in particular for understanding cross-cultural variations in it. First, one would expect that, other things being equal, societies in which there are strong kinship ties would experience relatively greater difficulties in achieving collective action involving large numbers of people; consequently resistance strategies requiring such collective action would be less successful, other things being equal. The more general point is that for path-dependent reasons (for example, whether or not a particular religious orientation becomes pervasive in a society), different social groups may have different psychological traits—traits that may influence not only the effectiveness of various strategies that might be invoked in the hierarchy/resistance struggle, but even how the exercise of power is understood and hence whether there is a perception that domination is occurring.

Second, one would also expect that appeals to *human rights* as a strategic resource for mobilizing resistance to domination would be more effective in societies in which kinship ties are weak and market interactions with strangers are an important form of cooperation. If human rights culture is less likely to take root in societies with intensive kinship ties and less developed markets, then in those societies appeals to human rights will be less effective in curbing the powers of rulers, other things being equal. And if that is so, then such societies will either have to develop alternative resources for dominance suppression or suffer a significant disadvantage in the struggle; or they will have to undergo cultural changes, such as the weakening of kinship ties, that will make appeals to human rights more effective in mobilizing resistance to domination. In fact, there is considerable evidence that human rights culture is comparatively weak—at least so far as its institutional embodiment is concerned—in societies that feature strong kinship ties and weak markets.[13]

[11] Allen Buchanan and Russell Powell, *The Evolution of Moral Progress: A Biocultural Theory* (Oxford: Oxford University Press, 2018); Allen Buchanan, *Our Moral Fate: Evolution and the Escape from Tribalism* (Cambridge, MA: MIT Press, 2020).

[12] Schulz et al., "The Church, Intensive Kinship, and Global Psychological Variation,"

[13] Jan Delhey, Klaus Boehnke, Georgi Dragolov, Zsofia S. Ignacz, Mandi Marie Larsen, Jan Lorenz, Michael Koch, "Social Cohesion and its Correlates: A Comparison of Western and Asian Societies," *Comparative Sociology* 17, no. 3 (2018).

C. Cultural variation in the strategic value of appeals to human rights

More specifically, if a society's moral culture is not friendly to the idea of rights possessed by all persons, and instead regards the most important moral relations as being limited to kin, then attempts to invoke human rights in struggle to liberate women from domination by men will be less successful, other things being equal. In this regard, it is interesting to note that the most effective strategies for ending female genital cutting—a practice that almost exclusively occurs in groups whose culture features strong kinship ties—have *not* employed the discourse of human rights, but instead have relied on the concept of health and on reinterpretations of notions of purity.[14] Those who have employed this winning strategy have recognized that female genital cutting both expresses and helps to perpetuate male dominance over females, and they have also implicitly recognized that effective strategies for combatting this aspect of domination must adapt to cultural variations.

D. Cultural variations as to whether hierarchy is perceived as domination

There is another, more profound way in which path-dependent differences among moralities affect the character of the struggle between domination and resistance: these cultural differences can determine whether particular instances of hierarchy are even regarded as domination or otherwise morally defective. In some cultures, the prevalent moralities tend to view some rather pronounced hierarchies as not only necessary, but also as rightful and essential to a good society; this includes hierarchies that are regarded as instances of domination in other cultures or from other moral points of view. Further, in some societies, and according to some ideologies that exist in quite different societies, including some versions of conservatism, hierarchies in which some individuals enjoy much greater power than the rest of society simply by virtue of their ancestry or because of "tradition" are seen as not only legitimate but optimal. Where these sorts of attitudes toward hierarchy exist, there is in effect a presumption in favor of hierarchy and an assumption that those who question existing hierarchies must bear the burden of justification.

In contrast, egalitarian or "progressive," as opposed to conservative or traditional moralities or ideologies, tend to include a kind of default presumption against hierarchy, assuming that the burden of justification lies on those who endorse any form of hierarchy. In the most extreme case, this would mean that every instance of unequal power is regarded as wrongful, unless proved otherwise.

[14] Christina Bicchieri and Annalisa Marini, "Female Genital Mutilation: Fundamentals, Social Expectations, and Change" (2015), online at: https://mpra.ub.uni-muenchen.de/67523/.

The implication of these reflections on path-dependent cultural variations is that even though the ubiquity of the struggle between hierarchs and resistors is due to the existence of a shared human moral psychology, the way in which the struggle proceeds in various locales is importantly influenced by path-dependent historical contingencies, with different cultural contexts providing different constraints and different opportunities for the parties to the competition. Path-dependent, highly contingent factors help determine the set of viable strategic options of both parties to the struggle between domination and resistance. Such factors not only shape the moral weaponry deployed in the struggle; they also can determine whether serious resistance to existing hierarchies even occurs.

VIII: The Creative Destruction of the Struggle

The hierarch/resister struggle produces *new* moral resources in part because of a remarkable human trait: the capacity for *critical, open-ended moral thinking*.[15] This is the ability to articulate the moral norms one follows and the moral concepts and justifications one employs, subject them to critical scrutiny, and modify or jettison them accordingly. It includes moral consistency reasoning and thereby facilitates reinterpretations of the scope of moral concepts (such as that of natural or human rights), extending them beyond their initial, arbitrary restriction to certain subgroups of persons, such as men or white men. Critical, open-ended moral thinking can also contribute to alterations in the expression of moral sentiments and new understandings of one's moral identity, as I have argued in *Our Moral Fate: Evolution and the Escape From Tribalism*.[16]

A. Changes in the inventory of the moral arsenal

The critical point here is that human beings have not continued to operate with the same repertoire of moral concepts and moral justifications that characterized the moralities of the first human groups; nor are the objects of the moral sentiments fixed. Instead, the hierarch/resister coevolutionary dynamic has stimulated humans to be moral innovators. The distinctively human capacity for critical, open-ended moral thinking can contribute to innovations in strategic appeals to morality by both parties to the struggle. Understanding the power—and limitations—of this capacity is important for explaining why the coevolution of hierarchy and resistance is an engine for moral change.

The coevolutionary arms race results in some moral concepts being discarded, as was the case with the concept of the divine right of kings and other notions of legitimacy that rely heavily on biological pedigree. This generative and at the same time destructive process will continue as long as

[15] Buchanan and Powell, *The Evolution of Moral Progress.*
[16] Buchanan, *Our Moral Fate.*

our species survives, because it is rooted in our remarkably flexible evolved moral psychology, which includes both a disposition to exert control over others and a disposition to resist being controlled.

IX. The Unexpected Consequences of Strategic Behavior

In addition to the centrality of collective action problems, there are other structural features of the struggle that are invariant across widely differing cultural contexts. One of the most important of these is the tendency for strategic behavior to produce unintended consequences, including consequences that thwart the strategy that produced them. There are many documented cases where dominators respond to resistance strategies by making what they mistakenly believe are only minor concessions, thereby unwittingly unleashing forces that eventually lead to significant diminutions of their power. Here I will merely sketch the main outlines of a few instances of this phenomenon, only for purposes of illustration.

A. Strategic concessions that backfire

Consider first the following case from European history. When the mounted, armored warrior aristocracy in Europe came to rely on loans and currency from the rising middle class, they were forced to make concessions that reduced their domination, in particular, by granting chartered liberties to towns.[17] Two unintended consequences followed: first, the chartered liberties unleashed the power of markets, with the result that the rising bourgeoisie became even wealthier and enjoyed a corresponding increase in their bargaining power vis à vis the aristocracy, thereby achieving greater freedom and a corresponding diminution of the power of aristocratic power. Second, the "free" towns increasingly became a refuge for runaway serfs, which not only reduced the pool of exploitable labor for the aristocracy, thereby reducing the material base for their domination, but also created a threat of exit that improved the bargaining power of the serfs who remained on the aristocrats' estates.

A more recent example is the Soviet leadership's ratification of the Helsinki Accords of 1975. Those at the apex of the Soviet dominance hierarchy thought they were gaining something valuable (official recognition of the territorial gains and expanded sphere of influence achieved by the successes of the Red Army in World War II) in exchange for merely signing a piece of paper that would have little effect. But the Helsinki Agreement had two significant consequences they failed to anticipate. First, it provided a politically effective resource for dissidents within the Soviet Union, allowing them to frame their complaints in human rights language that the regime had publicly endorsed and facilitating cooperation with human rights

[17] Norman Cantor, *The Civilization of the Middle Ages: A Completely Revised and Expanded Edition of Medieval History* (New York: Harper Perennial, 1994).

activists abroad. Second, it opened channels of communication and travel to democratic countries that put in stark relief the political oppression and economic underdevelopment of the Soviet Union.[18] Along with other factors, including the unsuccessful and unpopular war in Afghanistan and the strain on the Soviet economy produced by President Reagan's reactivation of the arms race, these unanticipated results played a role in the legitimation crisis that eventually toppled the regime. Similarly, scholars have documented the fact that a number of other authoritarian regimes have signed human rights treaties, thinking they would reap the reputational benefits of a "low cost signal," when it turned out that the cost to their power became quite considerable.[19]

B. How self-interested resistance strategies can produce more-inclusive liberation

Another recurrent pattern of behavior in the struggle also produces unanticipated consequences that shape the future path the struggle will take. A group whose only aim is to reduce the power that some other group exercises over *them*, not to achieve a broader liberation, will sometimes adopt strategies that eventually produce wider effects, including a diminution of their own power. For example, when the English barons forced King John to sign the Magna Carta at Runnymede in 1215, their goal was to limit the monarch's power over *them*, not to liberate the population as a whole from excessive monarchical power; but to do so they deployed the notion that the King was not above the law, and this principle also limited monarchical control over the masses.[20] The barons executed a resistance strategy that benefitted others—and reduced their own power.

The concept of equality before the law provides a clear instance of how new moral concepts emerge in the struggle and also of how their strategic deployment produces unanticipated consequences. North et al.[21] make the case that legal systems typically originate as efforts by elites to define *their* privileges—something they need to do to prevent violence among themselves from undermining their cooperation in dominating the masses. When a legal system first emerges, the concept of equality before the law may be applied only to relations among the elite, with the law solidifying or even exacerbating systematic disadvantages for the general population. But as moral reasoning about the nature and value of the principle of equality

[18] David Shipler, "Helsinki Accord and Soviet Union: Effects on Human Rights Seem Mixed," *The New York Times* CXXV: 43, 289 (1976).

[19] Thomas Risse, Stephen Ropp, and Kathryn Sikkink, eds., *The Power of Human Rights: International Norms and Domestic Exchange* (Cambridge: Cambridge University Press, 1999); Kathryn Sikkink, *Justice Cascade: How Human Rights Prosecutions are Changing World Politics* (New York: W.W. Norton and Co., 2011); Beth Simmons, *Mobilizing for Human Rights: International Law in Domestic Politics* (Cambridge: Cambridge University Press, 2009).

[20] William McKechnie, *Magna Carta: Commentary on the Great Charter of King John* (New York: Bert Franklin, 2015); W. L. Warren, *King John* (Berkley, CA: University of California Press, 1978).

[21] North, Wallis, and Weingast, *Violence and Social Orders.*

before the law unfolds over time in the context of the strategic interaction between hierarchs and those who resist them, earlier restrictions on the scope of the concept can come to be seen as arbitrary. The principle of equality before the law was first expanded to include all free males who owned property, whether noble or not, and later to other groups of individuals, including people of color, national minorities, indentured servants, women, and foreigners.

The same is true of the concept of natural rights. In the context of the struggle for supremacy between Parliament and the King in seventeenth-century England, Locke deployed the notion of natural rights to argue for a new concept of legitimate political power, rejecting views of legitimacy like Filmer's that relied on genealogy and supposed authorization by God.[22] For Locke and many others, natural rights are grounded in rationality, but not all human beings (women and Africans, and "New World" natives) were initially regarded as sufficiently rational to possess these rights. When thinkers like Locke invoked the concept of natural rights, the goal was to gain an advantage in what they conceived of as struggle against monarchical domination against people like themselves; they did not envision the use of this concept in the struggle for a wider liberation that included the abolition of slavery and the reduction of gender discrimination.

A biological analogy may be helpful to bring this point home: evolution, operating through natural selection on genes, produces new traits in response to *current* environmental challenges, *without consideration of long-term consequences.* In that sense, evolution is *not* "*intelligent* design without a designer." Similarly, the deployment of moral concepts and justifications in the perpetual struggle is rational, but only in a local, synchronic way, whereas the trends the struggle exhibits over considerable stretches of time are intended by no one.

XI. Progressive Moral Change (Sometimes)

Ironically, concepts that are invoked to support or to resist hierarchy come to exert power over their creators and in some cases could even be said to achieve a position of dominance in the sense of decisive control over everyone engaged in the struggle. To the extent that the coevolutionary struggle has sometimes produced morally progressive results it is because *attempts to exercise power*, whether for dominance or resistance to dominance, *have resulted in principled, effectively institutionally embodied constraints on power.*

[22] John Locke, *Two Treatises on Government*, ed. Peter Laslett (Cambridge: Cambridge University Press, 1988).

A. How the hierarch/resister struggle contributes to the emergence of more-inclusive moralities

The hierarch/resister dynamic often, but not always, exhibits a tendency by both parties to expand the audience to whom their moral appeals are made—and this tendency plays an important role in the development of moral concepts and moral justifications that make moralities more inclusive, less "tribalistic." (Recall here Marx's claim that a rising class—one that challenges the existing hierarchy—always presents its interests as universal interests).

Although hierarchs may initially only provide benefits to some subgroup of the population over whom they exercise power, they often eventually find it beneficial to profess to provide wider benefits—and in some cases actually to do so. This occurs, for example, when resistance forces deploy rhetoric that emphasizes how limited the benefits the hierarchs supply really are, as part of their strategy of building a broadly based resistance coalition. In response, the hierarchs are forced to claim that the benefits are in fact widely distributed; and to make this claim credible they may actually have to provide benefits to groups that were previously excluded from them. When it is strategically advantageous for both hierarchs and resisters to appeal to broader interests, the result can be the emergence of more-inclusive moral concepts (including the rule of law as applying to everyone, equal basic rights for all, and the idea of the general welfare, as well as various conceptions of impartiality that require removing arbitrary restrictions from the generalizability of moral judgments. In this way, the perpetual struggle sometimes can contribute to one important form of large-scale moral change that is now widely regarded as progressive: the emergence of more-inclusive moralities and the development of the concept of impartiality.

B. The uncontainability of strategies with limited goals

Due to the capacity for critical, open-ended moral thinking, strategies that invoke more-inclusive moral concepts and thereby enable the mobilization of larger numbers of people in collective action sometimes have an unintended result: moral concepts are reinterpreted in an even more expansive fashion. Here, in brief, is one possible example of this phenomenon. Suppose that the best explanation of the emergence of the concept of natural rights is that it was developed as a strategic resource in the struggle against unconstrained monarchical power. Suppose that one reason for the successful diffusion of this concept was that it facilitated the mobilization of diverse individuals to resist absolutism—natural rights were ascribed to all fully rational humans (initially presumed to be white males), regardless of ethnicity or religion or nationality. However, the concept of natural rights was later put to use in the British and American abolitionist movements. Here, the concept played a different role: it was deployed to mobilize free people

to act so as to free slaves from domination, but not primarily to mobilize slaves for abolition. If this description is accurate, it exhibits an important point about the role of moral appeals in some counter-domination strategies: not only can they be used to solve collective action problems that the oppressed encounter, but they can also serve to motivate people who are not subject to oppression to act on the behalf of the oppressed. Moral justifications that were first employed to liberate a particular group of human beings (such as African slaves) were redeployed to liberate other groups (such as women), and moral consistency reasoning that was first used to resist the exploitation of humans became a potent weapon in the struggle for "animal liberation."

XII. The Moral-Epistemic Dimension of the Struggle

I have emphasized that the key structural feature of the struggle between hierarchy and resistance is a competition among moralized strategies. But which strategies are available to the opposing parties depends upon a number of factors, including the character of the social-epistemic environment and the distribution of power within it.

Miranda Fricker famously distinguishes between two types of injustice persons may suffer qua knowers or qua potential contributors to public knowledge. The first is epistemic exclusion or testimonial injustice: some people, because of the group identity ascribed to them, are excluded from public deliberations or from the enterprise of producing knowledge or, when they are allowed to participate at all, their contributions are discounted or ignored. The second is hermeneutical injustice: as a result of pervasive injustices in their society, people may be bereft of the concepts needed to articulate their grievances (examples include the concepts of gender discrimination, ethnic discrimination, white male privilege, spousal rape, sexual harassment in the workplace, and microaggressions).

A. The importance of epistemic goods in the struggle

Those who suffer either kind of epistemic injustice are at a strategic disadvantage in the struggle against domination. In the first instance, their protests will not be heard or taken seriously—they will be voiceless, unable to shift public opinion in their favor by moral arguments or prudential considerations. In the second, they may not be able to achieve the normative coordination needed for successful collective action against the dominators or may not even realize that they are being dominated. So, the struggle between dominators and resisters is not just characterized by disparities in physical power or material resources; it also features disparities in *moral resources*; and *moral resources often depend on the distribution of epistemic goods —resources needed for forming beliefs and developing concepts.*

In some cases, resisters only achieve effective resistance once they have augmented their arsenal of moral ideas, overcoming hermeneutical injustice. Failure to develop the appropriate moral weaponry may contribute to a group's failure to overcome domination. Here is one highly speculative possible example. The so-called "slave revolt" led by Spartacus failed. There is no evidence that Spartacus or his followers possessed anything that could be called an antislavery ideology or a revolutionary moral perspective of any sort, much less that they were motivated by an articulated conception of social justice. (In their brief period of freedom, they engaged in indiscriminate violence and pillaging and never succeeded in formulating, much less promulgating, a "message" that would lead others to view them as anything other than just another threat). Had they possessed strategically potent moral ideas with which to characterize their behavior, they might have had a better chance of prevailing against the might of Rome, because this "normative power" might have increased their cohesion, expanded their numbers, and enabled them to devise longer-term goals.

The contrast with the successful Haitian slave result of 1790 could not be starker. As soon as Haitian slaves heard of the French Revolution they began wearing the revolutionary colors and drew the conclusion that the Rights of Man and the Citizen of the French Declaration applied to them; and they acted accordingly.[23] It seems likely that the idea of a right to revolution they learned from the French experience was a strategic advantage in overcoming the collective action problems that threaten to thwart revolutionary action. Unlike Spartacus and his followers, they possessed moral concepts that were valuable strategic resources in their struggle against domination.

Another example, this time from the struggle against gender-based domination, is the concept of sexual harassment in the workplace. Once this concept took hold, people who struggled against sexism had a new and potent weapon. They could articulate a wrong of sexism that was typically unacknowledged up until then and could begin the task of formulating norms and laws that prohibited the behavior in question. Earlier feminists, operating in an environment that lacked this concept, were at a comparative disadvantage in their struggle against sexism.

B. How inequalities in epistemic resources shape the hierarch/resister dynamic

There is a third kind of epistemic injustice that Fricker does not explicitly identify but which can also have major effects on the hierarchy/resistance struggle: *injustice in the distribution of epistemic resources and in the costs of accessing epistemic resources.* Epistemic resources here include education, access to powerful effective media and the knowledge of how to use it, and secure access to prominent public venues. Restricting the public's

[23] Seymour Drescher, *Abolition: A History of Slavery and Antislavery* (Cambridge: Cambridge University Press, 2009).

access to printing presses, or more recently their use of the Internet and other forms of electronic communication, is a common practice that dominators employ to prevent the oppressed from exercising their moral capacities effectively in resistance. Resisters have exploited the power of the Internet, and the response of dominators has been swift and sophisticated, as with restrictions on the Internet imposed by the Chinese, North Korean, Indian, and Iranian governments.

A thorough exploration of the epistemic dimension of the perpetual struggle—which I cannot provide here--will include three features. First, it will provide an account of how inequalities in the distribution of tangible epistemic resources (such as education or Internet access) or in the costs of access to them, can affect the struggle against domination. Second, it will explain the contributions that ideologies can make, either to creating epistemic impediments to successful resistance to domination—as when ideologies include beliefs that obscure the fact of domination or encourage the oppressed to believe that resistance would be futile—or in facilitating resistance by equipping the oppressed with moral concepts and justifications that contribute to effective collective action against dominators. Third, it will include an account of how the struggle between domination and resistance sometimes contributes to the development of new moral ideas that facilitate alterations in the distribution of epistemic resources available for use in the struggle (such as notion of the right to freedom of expression and the right to freedom of association).

XIV. Limitations of the Account

My main thesis that the hierarch/resister struggle generates alterations in the repertoire of moral concepts, new moral justifications, and new expressions of the moral emotions, as well as new institutions, is subject to two important limitations. First, I do not claim that *all* significant developments in the evolution of morality or of institutions are the result of this struggle. Second, I do not claim that the outcome of the struggle, either at any particular point in time, or over the long run, is *decisively determined* by the strategic use of moral concepts and justifications.

A. The efficacy of moral weaponry

It bears emphasis that my central thesis is that the hierarch/resister struggle drives the evolution of moral concepts and justifications that bear on the propriety of hierarchy and their institutional embodiments. That thesis is itself neutral as to how efficacious moral appeals actually are. Nonetheless, two facts are all but inexplicable if moral appeals do not have considerable strategic value. The first is simply the enduring ubiquity of moral appeals in the struggle. If moral appeals were inefficacious, a kind of froth or epiphenomenon, it is hard to see why savvy participants in the struggle would

continue to invest energy and resources in them. Second, some moral appeals are voiced and then go extinct, while others persist and spread. That suggests that some mechanism of cultural selection is at work. Selection filters out traits or behaviors that don't work or are counterproductive.

Unless moral appeals are doing some work, it is hard to explain why some spread and persist and some don't. Of course, a meme theorist of the extreme and crude sort might say that this just means that some moral "brain viruses" are better at exploiting human host brains than others and has nothing to do with their function or their strategic value in the struggle.[24] But that extreme view is extremely implausible, in effect denying that the reproductive fitness of moral ideas (and ideas generally) is significantly influenced by their ability to serve human interests. (It also assumes, again quite implausibly, that humans have not been able to use their cognitive and moral powers to develop immune responses against supposed meme brain viruses). The best explanation of the transhistorical and cross-cultural ubiquity of moral appeals in the perpetual struggle, and of the fact that some appeals diffuse and persist while others do not, will include the hypothesis that such appeals in fact do typically have strategic value under certain conditions, especially in helping to solve collective action problems that both hierarch coalitions and resister coalitions must solve in order to succeed.

XV. Conclusion

Moral change has been under-theorized from a naturalistic standpoint. Evolutionary principles and concepts have been applied to explain the origins of human moralities, but little has been done to employ them in explanations of how moralities have changed over time. In this essay I have begun to develop a naturalistic explanation of one important dimension of moral change: the evolution of concepts and justifications regarding hierarchy and the institutional innovations that embody these moral changes. I have argued that a number of central moral concepts and types of justifications that bear on the evaluation of hierarchy—most of which have appeared only rather recently in human history—are best explained as strategic resources that were generated in the ongoing struggle between those who seek to exert power over others and those who resist them. I have also suggested that if an adequate theory of the dynamics of the hierarch/resister struggle can be developed, it may be possible to begin to devise a scientifically informed moral technology for managing hierarchy, a technology that would not only provide effective constraints on existing unjustifiable inequalities in power but would also be flexible enough to respond effectively to new domination strategies as they emerge.

[24] Richard Dawkins, "Viruses of the Mind," in *Dennett and His Critics*, ed. Bo Dahlbom (Cambridge: Cambridge University Press, 1995).

This line of thinking is a radical departure from the standard way of conceiving the relationship between morality and technology, according to which morality is something that is needed to harness and constrain technologies from the outside, as it were. On my view, moralities are technologies—more specifically, technologies for cooperation—though of course they are more than that.[25] My analysis of the hierarch/resister dynamic makes it clear that morality should not be thought of as something alien to technologies, a kind of external constraint on their development and uses, but rather as something that itself can function as a technology, in this case a technology for managing hierarchy.

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[25] Buchanan, *Our Moral Fate.*