

SECULAR NATURAL LAW AND THE NORMATIVE JUSTIFICATION OF THE STATE

I.

It is probably always appropriate to examine the moral justification for law and government, but in these crazy times of frenzied patriotism, yet profound cynicism regarding government, it is particularly apt. The task of convincing the skeptic, anarchist, or simple cynic is likely beyond the power of scholarly reasoning. What may be hoped for, however, is a reasoned ethical defense that those of us who see government, not just as a practical necessity, but an intellectually and normatively warranted institution, can feel comfortable with. I believe a very persuasive ethical case for government can be constructed along the lines of venerable natural law tradition.

Natural law postulates a deep theoretical connection between the way the world operates, fundamental facts about basic human nature, human reason, and the moral rules and laws that govern human behavior. In its classical formulation, this happy marriage of fact and value is the product of omniscient and omnipotent design and execution. Natural law's association with theistic religion, of course, has been the source of profound skepticism. But even in its most classical statements, God's involvement, though candidly assumed, was never taken as theoretically necessary. Certainly in contemporary jurisprudence, the work of Fuller, Dworkin, and even Finnis, should provide ample reminders that a robust normative approach to the law remains possible in contexts where religion is totally

absent.ⁱ It is in this context that I want to sketch a thoroughly secular version of natural law.

II.

Natural law, in both its classical and secular incarnations, is a version of moral realism. Richard Boyd nicely summarizes moral realism:

1. Moral statements are the sorts of statements which ... are ... true or false;
2. The truth or falsity ... of moral statements is largely independent of our moral opinions, theories, etc.;
3. Ordinary canons of moral reasoning—together with ordinary canons of scientific and everyday factual reasoning—constitute, under many circumstances at least, a reliable method of obtaining and improving (approximate) moral knowledge.ⁱⁱ

Although the articulation is clearly contemporary, the basic theory is of course quite ancient and probably best captures the way non-academic thinking about morality has always been. Still, moral realism is committed to some very strong metaphysical and epistemological assumptions. Moral truth and falsity is objective, absolute, and thoroughly cross-cultural. Furthermore, normal human beings possess reliable cognitive resources for knowing these normative truths and falsities. Once these necessary presuppositions are candidly recognized, they have always seemed problematic to scholars with theoretical bents of minds.

John Mackie phrased his arguments against any form of moral realism as explanatory questions. How could the underlying metaphysics and epistemology possibly be true? Consider his famous argument from “queerness.”

If there were objective values, then they would be entities or qualities or relations of a very strange sort, utterly different from anything else in the universe. Correspondingly, if we were aware of them, it would have to be by some very special faculty of moral perception or intuition, utterly different from our ordinary ways of knowing everything else.ⁱⁱⁱ

Actually, moral realism often commits itself to a third queer property. Secular natural law asserts a surprising motivational component to the recognition of moral truth. "If the requirements of ethics are rational requirements, it follows that the motive for submitting to them which it would be contrary to reason to ignore."^{iv} Secular natural law forthrightly accepts these daunting explanatory challenges. If it cannot plausibly explain how objective values could exist in a secular world, how normal human beings could come to know them, and how they could exert a motivational push to action, then skeptics are certainly justified as dismissing the theory as mysterious to the point of magical.

Mackie raises a second explanatory challenge that has wider appeal outside of technical metaethics. How can moral realism be squared with known facts about human cultures?

The argument from relativity has as its premises the well-known variation in moral codes from one society to another and from one period to another, and also the differences in moral beliefs between different groups and classes within a complex community^v

Again the questions are relevant and to the point. Secular natural law will need to satisfactorily account for differences in moral perceptions from culture to culture, group to group. And to forestall the obvious worry, it will be completely

unacceptable for the realist to assert that one culture is simply morally blind, while another possesses unique insight into the moral truth.

III.

The version of natural law that I seek to defend looks to evolutionary biology for responses to these theoretical challenges to realism. I want to ease into this argument by suggesting an analogy with human linguistic competence. Consider Pinker and Bloom's summary of some fascinating data.

All human societies have language. As far as we know they always did; language was not invented by some groups and spread to others like agriculture or the alphabet. . . . The grammars of industrial societies are no more complex than the grammars of hunter-gatherers. . . . Within societies, individual humans are proficient language users regardless of intelligence, social status, or level of education. Children are fluent speakers of complex grammatical sentences by the age of three, without benefit of formal instruction. They are capable of inventing languages that are more systematic than those they hear, showing resemblances to languages that they have never heard, and obey grammatical principles for which there is no evidence in their environments.^{vi}

They then draw the obvious conclusion.

[T]he ability to use a natural language belongs more to the study of human biology than human culture; it is a topic like echolocation in bats or stereopsis in monkeys, not like writing or the wheel. ^{vii}

Noam Chomsky postulated over fifty years ago that the grammar of all natural languages was a part of our basic human nature. We can learn language so easily, recognize nonsense sentences as grammatically correct,^{viii} and even add the grammatical complexity of a creole when young children learn to speak their

parents native, and non-grammatical, pidgin, because the “rules” of the “deep-structure” are “hardwired” in our brains. Many contemporary linguists and cognitive psychologists now believe that linguistic competence, and grammatical knowledge in particular, is innate. They further suppose that the “deep structure” of syntax is something that can be modeled in abstract rules. Finally, they believe that all of this is a story contained in the evolutionary history of our species.

I intend a very strong analogy. Normative knowledge is objective because it is innate in our species. The “deep structure” of values – cooperation, constrained-maximization, or justice – is something that can be modeled in abstract terms. And evolution has hardwired into normal human beings perceptual and cognitive resources that allow us to recognize clear cases of justice and injustice, and to have strong affective and intellectual responses to the normative behavior of our fellows.

IV.

The history of western ethical thinking is a history of moral objectivism. There were exceptions, of course, but most of the significant ethical theories from Plato to G. E. Moore were stated as conceptual, and occasionally empirical, truths that were applicable to any culture or historical context. Much of early twentieth century moral thinking, however, was anti-objectivist - either relativistic, or simply skeptical. It came as a surprise to many contemporary moral philosophers, therefore, to see a kind of robust moral objectivism vigorously defended once again from within mainstream analytic metaethics. But just such a defense has

been mounted, and it appears only to be gaining momentum. Moral realists are first of all realists . They are firmly committed to the independent existence of an external world. Consider the thoughts of Hilary Putnam.

[T]o hold that every conceptual system is therefore just as good as every other would be something else. If anyone really believed that, and if they were foolish enough to pick a conceptual system that told them they could fly and to act upon it by jumping out of a window, they would, if they were lucky enough to survive, see the weakness of the latter view at once. . . . [T]here are experiential inputs to knowledge; knowledge is not a story with no constraints except internal coherence.^{ix}

The scientific realist would insist that we have much more than "experiential inputs to knowledge." Modern natural science has discovered much about the physical-chemical-biological world that is the source of these inputs and part of the mechanism. Scientific realists insist that these are genuine discoveries , and not simply conventionally sanctioned constructions.

When viewed from a sufficiently wide-angled perspective we can see science as progressive and slowly converging toward the idealization of a single true description and understanding of the world. This general model is offered as an empirically testable hypothesis, not as a question-begging metaphysical pronouncement from a God's Eye perspective. The scientific realist claims that the best explanation of scientific success -- the only one that does not make this success a miracle -- is robust scientific realism.^x

Scientific realism is one thing, moral realism is quite another. Moral realists have tried to model their theory as closely as possible on that of scientific realists. One plausible version of moral realism starts with what might be called empirical value naturalism.

There are a number of important human goods, things which satisfy important human needs. Some of these needs are physical or medical. Others are psychological or social . . . The question of just which important human needs there are is a potentially difficult and complex empirical question.^{xi}

Value naturalism does not automatically entail moral realism, since the human needs and corresponding human goods in question may still be non-moral. Thus, the moral realist must go one step further and identify a cluster of human goods that are genuinely moral.

Moral goodness is defined by [a particular] cluster of goods . . . Actions, policies, character traits, etc. are morally good to the extent to which they tend to foster the realization of these goods.^{xii}

It goes without saying that, if the question of just which human physical, medical, and social needs there are is a difficult empirical question, the corresponding question about moral goods will be even more complex and controversial.

Still, the moral realist has made the first step toward a response to the charge of metaphysical and epistemological queerness. There is nothing epistemologically untoward in the empirical discovery that certain diets are good for human beings. What, however, of the ontological status of values? Here, again, the modest connection between diet and health does not seem to raise serious ontological worries. It is certainly not in any way dependant on any "brooding omnipresence in the skies." At the same time, when the values in question are robust enough to provide a moral justification for the state, it is hard to see how they could simply be natural features of the natural world. The first step to an

adequate theory of the ontological status of natural values depends on the concept of supervenience.

There were times in the history of human knowledge when it must have seemed hard to understand how ice could ontologically reduce to water. Even in the age of contemporary natural science, many find it hard to understand how the concept of life can ontologically reduce to biochemistry. Similarly, one of the most pressing questions of cognitive science is how the consciousness can ontologically reduce to neurophysiology. The modern, secular, scientific ontology, at least within our culture's paradigm, is one of microphysics. We tell stories about atoms and molecules. Features of chemical, biological, and psychological reality require descriptions and explanations at higher, more general, and often more abstract levels. These other levels of description do not commit us to mysterious realms of existence -- in one sense, it's still just the atoms and molecules. We talk about physical properties, like being frozen solid, as a supervenient characteristic of those atoms and molecules. More complicated supervenience occurs with accounts of life, consciousness, and social-political behavior. The realist, moral or scientific, need not be committed to full-blown reductionism. At this point, it is unlikely that properties like being alive, or being conscious, or being objectively good, can be reduced in any law-like way to current theories in physics or chemistry. We need to be able to tell some story, of course, about the process of supervenience -- going in one direction -- and the process of reduction -- going in the other. This

sketchy story can sound remarkably plausible when told by the molecular biologist, or cognitive scientist, or evolutionary psychologist.

Moral realists claim that moral facts are simply facts about the natural world, stated at an appropriate level of generality and abstraction. Human beings, their interactions with their fellows, and their social and political arrangements, are part of the natural world that is the concern of the scientific realist. The sciences -- not just the natural sciences, but the social and human sciences, as well -- must describe and explain this aspect of reality just like any other. Moral facts -- this circumstance is better than that; this arrangement is more just than some other -- are simply facts (or more modestly, factual hypotheses) about this complicated level of reality. So too, the moral realist asserts, features of human existence require description and explanation at the levels of sociology, anthropology, ethics, and political theory. None of this requires ontologically queer modes of existence.

If moral facts supervene on physical and biological facts, this not only allays many potential ontological worries, it also beautifully handles a major source of epistemological problems. Moral knowledge, according to the moral realist, is acquired in the same way as other sorts of knowledge. We observe the world, gather data, offer explanatory hypotheses, devise experiments, consult respected authorities and texts, discuss and debate with colleagues, and generally engage in those activities -- imperfect, but mostly reliable -- that have allowed us to survive in the world, and to amass the impressive collection of knowledge that constitutes the institutions of science and the humanities. Neither scientific realism, nor moral

realism, solves the age old problems of epistemology -- skepticism, the debate between foundationalism and coherentism, and the like. The moral realist's modest response is simply to point out that the theory does not create additional epistemological worries.

V.

The theory of the social contract . . . concerns the rationale of relationships among persons, and between society and its members, rather than the cause of those relationships. The justification of rights and duties, institutions and practices, is to be found by regarding them as if they were contractual, and showing the rationality of this hypothetical contractual base.^{xiii}

Several contemporary political theorists have appealed to the Prisoner's Dilemma as an important part of the justification of the state.^{xiv} It would be extravagant to suggest that an abstract model in game theory could, by itself, justify anything. It does, however, have a lot to teach us, both about a moral defense of law and government, and the origins of ethical norms themselves. Consider a "game" with the following matrix of payoffs.

		Player B	
		Cooperates	Defects
Player A	Cooperates	3, 3	0, 5
	Defects	5, 0	1, 1

Player A's payoff is shown first. The goal of the game is to earn as many points as possible.

The Prisoner's Dilemma is a strategic game, in the technical sense, because the payoffs depend on the plays of both participants. The play that will guarantee A the highest possible payoff, the one that is rational in the economist's sense of maximizing personal utility, is obvious with just a little reflection. A has no control over what B plays anyway, so A simply considers the wise response to both of B's possible plays. If B plays Cooperate, the rational thing for A is to play Defect; 5, after all, is more than 3. If B plays Defect, A still plays Defect, since 1 is better than 0. The Defect play is dominant; it always returns the highest possible score. Exactly the same reasoning shows that Defect is also dominant for B.

The Prisoner's Dilemma is insidious because rational players will each play Defect, thus dooming themselves to the second lowest payoff possible. The dilemma is that by simple reflection on the payoff matrix, it is perfectly obvious that there is play open to each of them that will simultaneously improve both of their lots. If each of them plays Cooperate, each receives 3. How can it be that rationality leads to a sub-optimal outcome?

A and B seem to need some kind of external help to escape from the prisoner's dilemma. They need a way of constraining each of their short-term, selfish tendencies. If they are mutually denied the option of playing Defect, they are both better off. One of the obvious external mechanisms is the institution of promising. They might simply agree with one another to play Cooperate.

Unfortunately, promises can be broken. In its own way, B's agreement to play Cooperate makes it even more tempting to play Defect, since it perhaps increases the odds of a 5 payoff for A. Similarly, A's agreeing to play Cooperate sets A up for the "sucker's payoff", and perhaps makes A more inclined to renege on their deal. Once again, exactly the same considerations apply to B's play in the context of mutual promises. Two very interesting consequences come from this simple thought experiment. One is the discovery that unenforceable promises do not adequately remove us from Prisoner's Dilemmas. Secondly, we see that it is crucial that our own behavior be constrained, not simply that of our opponent. A's problem is not really helped at all if A has 100% assurance that B will honor the deal, but B has no assurance that A will do the same. B would never be foolish enough to promise to play Cooperate in such a context.

The other external solution is the existence of some coercive authority that "forces" us to play Cooperate. It has seemed obvious to many contemporary commentators that Hobbes' famous thought experiment of the state of nature is nicely captured as a kind of prisoner's dilemma.^{xv} It might be perfectly rational to bargain away the total freedom to play either Cooperate or Defect, to limit ourselves to plays of Cooperate only, and to authorize (a significant word!) some external sovereign to ruthlessly enforce the bargain. It is a rational tradeoff, of course, because it creates an environment in which there is a significantly greater chance of receiving payoffs of 3 every time we play the game, rather than the

payoffs of 1 to which we are doomed without the bargain, the constraint on selfish behavior, and the external agent of enforcement.

This reasoning constitutes a very interesting economic analysis of contract law.^{xvi} Of more importance to the current project, however, it provides a very significant step toward the normative justification of the state. The social contract becomes, neither a historical, nor hypothetical bargain. The justification of law and government is one of practical, economic rationality. We are better off with them than without them. Order, stability, and a social environment that encourages productive interaction are obviously, though contingently, important human needs. The state is a human good that is directly responsive to those needs. The only question that remains is whether this good is "merely" a contingent, rational response to the human condition - as is a healthy diet - or whether it is a moral good - one that it would be wrong not to pursue. The moral realist in political theory, of course, will endorse the latter reading. But, this will require a further argument.

VI.

The just person is fit for society because he has internalized the idea of mutual benefit, so that in choosing his course of action he gives primary consideration to the prospect of realizing co-operative outcome. If he is able to bring about, or may reasonably expect to bring about an outcome that is both (nearly) fair and (nearly) optimal, then he chooses to do so; only if he may not reasonably expect this does he choose to maximize his own utility.^{xvii}

Above I claimed that you and I needed help to escape from the prisoner's dilemma. The help to which we have appealed so far is distinctly external. We discovered that mutual promises were of little value without some adjudicating body enforcing the terms of our promises as quasi-legal contracts. Government and law seem inescapable, and in an argument devoted to establishing their necessity this may not be a bad thing. Still, many would argue that keeping one's promises is a moral obligation, regardless of whether the state is ready to step in the event of breach. Suppose you and I are best friends, might we not expect the mutual play of Cooperate, even in the complete absence of the state? Could it be the case that there are internal constraints that allow for escape from prisoner's dilemmas?

David Gauthier has argued that morality is a voluntarily chosen system of rules that allow for constrained utility maximization. Simple utility maximization is what led to the Defect play being dominant for both of us in the prisoner's dilemma. By constraining ourselves with a "moral rule" - thou shall not play Defect! - we maximize the best option for both of us collectively, as well as the best realistic option for each of us individually.

Constrained maximization thus links the idea of morals by agreement to actual moral practice. We suppose that some moral principles may be understood as representing joint strategies prescribed to each person as part of the on-going cooperative arrangements that constitute society. These principles require each person to refrain from the direct pursuit of her maximum utility, in order to achieve mutually advantageous and reasonably fair outcomes.^{xviii}

In order for constrained maximization to lead us to a solution to the prisoner's dilemma, something of a change in human psychology must occur. If, as neoclassical economics teaches, individual utility maximization is both a fundamental feature of human reason, and human motivation, the moral individual must somehow rise above this.

The constrained maximizer does not reason more effectively about how to maximize her utility, but reasons in a different way. . . . The constrained maximizer considers (i) whether the outcome, should everyone do so, be nearly fair and optimal, and (ii) whether the outcome she realistically expects should she do so affords her greater utility than universal non-co-operation. If both of these conditions are satisfied she bases her action on the joint strategy.^{xix}

The tendency to reason and act as a constrained maximizer must be truly internalized in order to escape the prisoner's dilemma. We must naturally think as constrained maximizers. If I am not confident that you reason in this way, playing Defect is my only reasonable option, and again, the same reasoning applies to you.

Rational actors, in Gauthier's "state of nature", are in a situation analogous to the religious skeptic faced with Pascal's wager. It may be rational to believe, since the costs of belief are small, and the potential rewards huge, while the costs of disbelief could conceivably be infinite. Even if one buys the reasoning, here, how does this lead to genuine belief? Genuine belief does not seem to be the sort of thing over which we have that kind of direct voluntary control. Pascal realized this, of course, and suggested that the only rational thing to do was go to church,

pray, and hope that genuine conversion would take place. Gauthier says things that sound similar. He claims that we must acquire the disposition to think morally. If we always, or even usually, reason from straightforward utility maximization, we are doomed to the prisoner's dilemma. But if we succeed in acquiring this disposition to think differently, there is hope.

At the core of our rational capacity is the ability to engage in self-critical reflection. The fully rational being is able to reflect on his standard of deliberation, and to change that standard in light of reflection. Thus we suppose it possible for persons, who may initially assume that it is rational to extend straightforward maximization from parametric to strategic contexts, to reflect on the implications of this extension, and to reject it in favor of constrained maximization.^{xx}

Gauthier's overriding metaphor, as is clear from the title of his book - *Morals By Agreement* - is one of rational, voluntary choice. I will suggest below, that however rational the strategy of constrained maximization is, it is far from voluntary. The disposition to behave morally may well be something that far from being acquired, is actually innate.

Before leaving Gauthier's project, however, we should note how clearly it fits in the spirit of moral realism. The appeal to the economist's notion of utility maximization embodies the moral realist's desire for culturally independent standard for establishing the rationality of a moral system. Cooperation, in Gauthier's technical sense - "an outcome that is both (nearly) fair and (nearly) optimal" - is a natural human good. There is nothing metaphysically, nor epistemologically, queer about such arrangements. Constrained maximization is

objectively rational, and its actualization in human reasoning and affairs is a perfectly natural, supervenient, feature of human biology, psychology, and political economy.

VI.

Our minds have been built by selfish genes, but they have been built to be social, trustworthy and cooperative. ... Human beings have social interests. They come into the world equipped with predispositions to learn how to cooperate, to discriminate the trustworthy from the treacherous, to commit themselves to be trustworthy, to earn good reputations, to exchange goods and information, and to divide labour. ... Our societies and our minds evolved together, each reinforcing trends in the other. ... [T]his instinctive cooperativeness is the very hallmark of humanity and what sets us apart from other animals.^{xxi}

The hypothesis is straightforward. Cooperative behavior has clear advantages in prisoner's dilemma contexts. Many of the day-to-day circumstances that human beings find themselves in are captured by the abstract model of the prisoner's dilemma. Therefore, cooperation has advantages for human beings. This allowed us to argue that government and law were important human goods, since they furthered human cooperation. It also allowed Gauthier to argue that developing an internal disposition to cooperate was rationally justified. But, if human cooperation has clear advantages, might not these advantages be, at least in part, biologically based? The evolutionary psychologists say that they are, indeed they must be.

Champions of a biological approach to morality are often their own worst enemies. They have an alarming tendency to overstate their theses, and the

annoying habit of responding to their critics with ad hominem shibboleths. Their theories have been used by others as a theoretical foundation for unjust defenses of lazier faire capitalism, as well as downright racism and sexism. But, however extravagant their most outrageous claims, and however unfortunate the purposes of some of their most vocal supporters, sociobiologists must be separated from the scientific hypothesis of sociobiology. And the theory itself seems a natural extension of mainstream biological thought.

Biologists have long been aware of a certain kind of cooperative behavior that they called altruism. Individual members of a species are often instinctually driven to do things that are quite good for other individuals in the species, but dangerous, or even suicidal, for the individual itself. Danger calls in the presence of predators, warn others but call attention to the caller. Kamikaze attacks by honeybees protect the hive, but at the ultimate cost for the individual. Altruistic behavior presented something of a scientific embarrassment, since it seemed in conflict with standard evolutionary theory. It has always been tempting to talk about what is, not just good for the individual, or in many contexts, the gene, but also about what is good for the group. Altruistic behavior is easy to explain from a "group selection" perspective. Unfortunately, group selection is usually bad biology. The mechanism of natural selection almost always works on individuals within a species (this talk can be helpfully recast in terms of genes, themselves), not on groups. And at this level, it seemed that natural selection would work to

eliminate, not encourage, altruistic behavior. After all, the altruist decreases his or her chances of passing on the genotype for the altruistic behavioral phenotype.

This vexing biological problem was beautifully solved, however, by the theory of kin selection. The altruist may decrease his or her chance of survival and reproduction, but may also as a consequence of the altruistic behavior increase the chances for survival and reproduction for close relatives. Thus, a fixed percentage of the individual's genes - including, perhaps, the gene for altruism - do succeed in getting passed on to the next generation. If the altruistic phenotype typically manifests itself in contexts where enough close relatives benefit, then standard Darwinian theory explains it beautifully.

Powerful, though, indirect evidence that internal constraints on behavior - altruism, sympathy, guilt, and the like - have clear biological advantages for our species is forthcoming from three fairly disparate academic disciplines - behavioral ecology, cognitive psychology, and what might be called, virtual social science. Robert Axelrod has made a strong case that "nice," "cooperatvie" programs, like TIT-FOR-TAT, systematically win round-robin computer tournaments for iterated prisoner's dilemma games. TIT-FOR-TAT, itself, is an amazingly simple program. It is nice, it plays Cooperate on its first move, and indeed until its opponent plays Defect. It then plays whatever its opponent played the move immediately preceding. It immediately punishes defection by its opponent and is, thus, not exploitable. At the same time, it is forgiving and will begin to cooperate as soon as its opponent does likewise. TIT-FOR-TAT behaves as though it had internalized

Gauthier's principle of constrained maximization. And in a sense it has. The program gives it an innate tendency to "refrain from the direct pursuit of [its] maximum utility, in order to achieve mutually advantageous and reasonable fair outcomes."^{xxii} And perhaps most remarkable of all, if we allow a "genetic algorithm," which models a kind of natural selection, to produce the prisoner's dilemma strategies, rather than human programmers, programs with the basic properties of TIT-FOR-TAT naturally "evolve."^{xxiii}

TIT-FOR-TAT and its successor programs are just that, computer programs for playing a formal strategic game. It appears, however, that a number of species engage in behavior that has the same structure. "Scouting parties" of sticklebacks will leave their schools to investigate pike to determine if they are hungry and pose a threat.

When two sticklebacks inspect a predator together, they move forward in a series of short spurts, one fish taking the initiative and risk each time. If the pike moves, both fish dash back again. [Behavioral ecologists] argued that this was a small series of prisoner's dilemmas, each fish having to offer the 'cooperative' gesture of the next move forward, or take the 'defector's' option of letting the other fish go ahead alone. . . . It may seem absurd to look at fish, expecting to find sophisticated game theorists, but the is, in fact, no requirement in the theory that the fish understand what it is doing. Reciprocity can evolve in an entirely unconscious automaton, provided it interact repeatedly with other automata in a situation that resembles a prisoner's dilemma.^{xxiv}

This is far from an isolated example; vampire bats, baboons, dolphins, chimpanzies, and many other species behave in cooperative ways, first modeled by TIT-FOR-TAT.

Finally, cognitive psychologists are uncovering tantalizing clues that certain moral sentiments are hard-wired in our species. Consider the phenomenon of empathy. Newborn infants will reactively cry in response to a recording of another's cry. By the age of two to three years children can easily experience "empathetic distress" in response to descriptions of another's misfortune.^{xxv} And fully mature moral reasoners put themselves in the shoes of others without even thinking about it. If indeed the ability and tendency to empathize with the plight of others counts as a genuine, species-specific, innate tendency, its evolutionary story is easy to supply. Clearly, a tendency to empathize with others would result in a strong affect to behave according to the rule of constrained maximization. Other moral sentiments like guilt and care would admit to similar evolutionary "just so" stories.

VII.

To anticipate a common objection raised by many social scientists and others, let me grant at once that the form and intensity of altruistic acts are to a large extent culturally determined. Human social evolution is obviously more cultural than genetic. The point is that the underlying emotion, powerfully manifested in virtually all human societies, is what is considered to evolve through

genes. The sociobiological hypothesis does not therefore account for differences among societies, but it can explain why humans differ from other mammals.^{xxvi}

Nature and nurture have never been mutually exclusive options. The argument that our species might possess a genetic predisposition to cooperation and constrained maximization does not call into question the manifest differences in moral beliefs and practices. Nor does it deny the importance of cultural mechanisms in transmitting, indeed in creating, concrete moral systems. Biologically based moral realism simply demands that human cooperation - an interaction that is modeled on, but not defined by, the prisoner's dilemma - is every bit as objective a human good as a healthy diet, or a loving family. It then suggests that individual utility maximization is not the only basis of human action and reason. Since, cooperation is good for us, and undoubtedly increases our chances for survival and reproduction, it is hardly surprising that natural selection would build into our psychological makeup an inclination to reason and act according to the strategy of constrained maximization.

Consider, again, Gauthier's definition of the constrained maximizer.

The constrained maximizer considers (i) whether the outcome, should everyone do so, be nearly fair and optimal, and (ii) whether the outcome she realistically expects should she do so affords her greater utility than universal non-co-operation. If both of these conditions are satisfied she bases her action on the joint strategy.^{xxvii}

It would hardly be surprising to discover that different cultures might define joint outcomes that count as "fair" in very different ways. Different "interpretive

communities" within a single culture probably do the same - Marxists and free marketers are good examples. Moral realists suspect, however, that there is something like a concept of fairness that underlies different cultures' and communities' individual conceptions. And the evolutionary psychologist reasonably hypothesizes that we possess, as a species, a genetic ability to perceive grossly unfair arrangements.

A very useful metaphor for this model of the relationship between the concrete cultural manifestations of normative systems, ones that are almost by definition relativistic, and the underlying conceptual and biological reality that moral realists insist on, is the relationship between human evolutionary history and concrete human languages. Linguists, as we have seen, have long argued that humans possess an innate ability to master language.^{xxviii} Still, it is perfectly obvious that individual natural languages vary greatly in vocabulary and grammatical structure, and no one would dream of suggesting that one becomes a native speaker of Spanish because it's in one's genetic makeup. The cultural relative, culturally determined, and culturally transmitted ability to speak a natural language may nevertheless, be fundamentally dependant on a species-specific genetic endowment.

Culture is vitally important to the story to be told here. I take it to be partial confirmation, rather than an embarrassing anomaly, that there wide cultural variance in concrete moral systems, and in political intuitions about legitimacy, justice, and the like. The moral realist would expect this to be the case. In addition,

culture plays a large role in the construction of political legitimacy. Even if law and government count as objectively good, from the moral realist's perspective, there is still the empirical question of how political authority becomes established. A question to which we now turn.

VIII.

I can imagine many readers who might be willing to concede the biological plausibility of a genetic predisposition for normal human being to behave cooperatively, at least within the confines of familiar groups, but who would insist that this is quite beside the point of establishing an objective standard of interpersonal justice, however "deep," it may or may not be. A standard way of expressing this argument was anticipated by Hume long before Darwin, let alone contemporary evolutionary theory.

In every system of morality, which I have hitherto met with, I have always remarked, that the author proceeds for some time in the ordinary way of reasoning, and establishes the being of a God, or makes observations concerning human affairs; when of a sudden I am surprised to find, that instead of the usual copulations of propositions, *is*, *and* *is not*, I meet with no proposition that is not connected with an *ought*, or an *ought not*.^{xxix}

The *is/ought* distinction is often used in contemporary discussion as a shibboleth to bring discussion to an end, but it is clearly relevant in the present context. How can facts about human evolutionary history ever yield normative truths?

I know of no contemporary scholar who would want to argue that the following inference is logically valid.

X is the case

Y ought to be done

It is of course true that if **X** and **Y** are already embedded in a normative or rule governed context, then there are lots of inferences of this form that are unexceptional. A heart was led; I have a heart in my hand; therefore I ought to play a heart. Last week I sincerely uttered the words "I promise to help you move next weekend;" therefore I ought to forget about the fishing trip and help you move.^{xxx} But the conclusions only follow because of preexisting rules about bridge and promising.

Why, then, have so many moral theorists appeared to commit such a basic fallacy? Some of the answer, of course, is simple carelessness in their thought or exposition. The more interesting answer, however, is that there are connections that reason and intelligence recognize other than those of logical entailment. Secular natural law embraces as a fundamental truth about the human condition a strong, "law-like," connection between (certain kinds of) is and ought. Secular natural law sees normative properties as supervenient upon more "basic" biological, anthropological, psychological, and simply empirical facts about humans and the world they inhabit.^{xxxi} The appeal to supervenience will, of course, ring hollow without some theoretical structure that at least outlines how explanations at level are to be translated into explanations at the other. Physics, chemistry, biology, and neuroscience underwrite the appeals to supervenience in my simple

examples. Evolutionary psychology, game theory, and the like play a similar role for secular natural law.

IX.

John Finnis has argued that Hume was actually concerned with a very different problem in his discussion of is and ought.^{xxxii} Here the fallacy is not so much one of formal logic, but a quasi-logical connection between (alleged) normative fact and practice. Many moral theorists have suggested that the following inference is sanctioned by the sincere endorsement of a moral claim.

J recognizes that Y ought to be done

J desires to do Y

Now certainly **J** might be a perfect sociopath and, although recognizing the truth of the moral claim, is nonetheless left quite unmoved with respect to doing **Y**. Thomas Nagel would no doubt grant the possibility of sociopaths, but still insist that their reasoning, not just their behavior, is flawed.

[A] normative requirement on action must have correspondingly strict motivational backing. If ethics is to contain practical requirements, motivational theory, specifically the theory of rational motivation, must contain results that are similarly inescapable.^{xxxiii}

Nagel seems to see the issue in terms of the logic of practical action. Some rule-like principle of practical action must underlie the above inference. Such a move invites puzzlement from skeptics like Hume, but there is no major theoretical problem with the device. It matters little whether the sociopath reasons badly, or simply fails to exhibit the normal cognitive regularities we expect from our fellow

human beings. Just as in the earlier inference, a relationship that appears to be one of entailment is better seen as asserting an explanatory connection. Secular natural law has an interesting story to tell here.

Genotypes (the genetic information) express themselves in individuals as phenotypes (structure, behavior, etc.). The monarch butterfly expresses its genotype in a famous color pattern. Interestingly, the tiger swallowtail butterfly expresses a different genotype in a very similar pattern. The evolutionary explanation is well-known. The monarch defends itself by being extremely distasteful, but for the defense to be effective it must announce the unpleasant consequences to would-be predators. Hence, the evolutionary advantage of the color scheme. The tiger swallowtail free rides; no phenotype for being distasteful, but still impersonates the monarch and receives the evolutionary benefit. In humans, certain kinds of behavior are beneficial, mating, finding nutrition, suckling, and behaving justly. In our species a common mechanism for ensuring adaptive behavior is through a kind of indirect approach. We don't eat because it is a basic instinct, but because we feel distress in the form of hunger, and eating produces pleasure. Secular natural law postulates a similar story as mitigating the connection between the abstract advantages of cooperation and the inclination to behave cooperatively. Natural selection has given us the cognitive resources to recognize clear cases of cooperation and non-cooperation. It has further endowed us with affective responses to this behavior when we see it. We experience outrage, offense, anger, resentment, at injustice and unfairness. We feel warmth,

comfort, happiness, and the like when confronted with instances of courage, charity, and altruism. Ethical skeptics claim that these are simply learned responses that culture imposes on us. Secular natural law sees the relationship as, at least in part, species specific, given our evolutionary history. That's why "natural" behaviors can become counter-productive, given special circumstances – obesity in environments too generous with fat and calories, or inclinations to blood revenge in the face of perceived injustice. How can values be objective the skeptic queries?

How can sugar be objectively sweet? There is no logical connection between sugar and sweetness. It's highly unlikely that this is some cultural artifact. Sugar is objectively sweet because natural selection has designed us to experience sugar as both sweet, and generally pleasant. Perhaps some of our fellows fail to experience the sweetness or the pleasant experience. They do not reason badly in some system that rates taste and reason, they simply suffer from a cognitive and perceptual defect. Sociopaths may or may not recognize injustice when they see it, but assuming they do, they do not exhibit the normal affective response that secular natural law sees as part of our genetic heritage.

X.

I agree with both Jean Hampton and Robert Nozick that discussions of the normative justification for the state should begin by taking seriously the anarchists' argument.^{xxxiv}

The fundamental question of political philosophy, one that precedes questions about how the state should be

organized, is whether there should be any state at all.
Why not have anarchy?^{xxxv}

Much as the epistemological skeptic is a common foil for presenting a theory of knowledge, or the use to which we have already put the moral skeptic, political skepticism is obvious place to begin the secular natural law defense of the state. The anarchist's challenge is sadly familiar, given its ubiquity in the popular culture. How dare the state tell me what to do? By what authority does it take my property, make claims on my time, or simply constrain free choices I make?

Perhaps the most famous answer to these questions is offered by the social contract tradition. The consent of the governed, tacit to be sure, but consent nevertheless, is what ultimately justifies the state. The argument is familiar but worthy of quick summary. A state of nature – one without law, government, or social conventions – would be chaos. In Hobbes' succinct characterization, the life of humans would be, "solitary, poor, nasty, brutish, and short."^{xxxvi} Any sane and rational individual will willingly trade ultimate freedom – the freedom to behave as a straightforward maximizer – for the security of the state. Again, no subsequent advocate has improved on Hobbes' wording.

I authorize and give up my right of governing myself to this man or to this assembly of men on this condition, that you give up your right to him and authorize all his actions in like manner.^{xxxvii}

We agree to behave as constrained maximizers, and we further agree to authorize the creation, and accept the legitimacy, of the sovereign to enforce the rules of constrained maximization.

As famous as the social contract position is, equally celebrated is its vulnerability. There never was a state of nature; nor an initial bargaining away of straightforward maximization; nor an agreement to authorize government. And no social contract theorist ever thought there was. The appeal was never to history, or long lost documents, but to the rationality of the audience. Hobbes prefaces the above quote with a telling concession, "**as if** every man should say to everyman ...^{xxxviii} But if we never contracted, how can we be bound? The tradition says that there exists and tacit, or implicit, or hypothetical contract. When the argument is laid out rational individuals will easily see that the sovereign is preferable to the state of nature, and they certainly would have entered into the agreement, had they been given the opportunity.

XI.

Before reviewing the obvious and fatal response to the notion of hypothetical contracts, secular natural law wants to concede a couple of things to our social contract colleagues. First, the argument beautifully illustrates the necessity of government as a rational solution to the multiple player prisoner's dilemma proposed by the state of nature hypothesis. Anyone who has ever taught the social contract argument to undergraduates can easily attest to pedagogic power of the thought-experiment. It convincingly demonstrates that it is rational to prefer government to anarchy. It is not only in my best interest that you are bound by law and government, nor simply the best interest of an abstract entity – the society; it is in my own selfish best interest that government has a claim on

my freedom. This was the lesson of constrained maximization. In order for the system to work, we all (or almost all) must always (or almost always) be constrained.

In addition, a more theoretically sophisticated notion of the tacit consent may play a legitimate explanatory role in the origin and maintenance of actual governments and political structures. Jean Hampton argued that a legal positivist account of government is what really underlies, both the empirical and normative, import of the social contract argument. Her starting point is H. L. A. Hart's legal positivism.^{xxxix} Hart pointed out that the system of rules he identified as law depends on the legitimate authority to create and change legal rules. Thus primary rules depend on second-order rules for their legitimacy. Second order rules, themselves, depend on other, higher level second order rules. But this justificatory hierarchy cannot be infinite. At a certain point the authority of the entire system must rest on a rule of recognition which is not authorized by other rules, but simple social "recognition" on the part of affected parties. Dworkin, for example, reminds us that the acceptance of the United States Constitution was not legally or normatively mandated by anything in law, but the simple, and perhaps surprising, historical fact that the people accepted the Constitution's legitimacy.^{xl} Hampton extends Hart's analysis as a justification of the state. Legitimate political authority depends on the creation of "leadership conventions."

Creating the leadership convention involves generating these sorts of rules [Hart's rules of recognition]. Together they constitute an impersonal authority in the legal system ... The rules are obligating not because

they are themselves dictated by an authoritative office-holder (this puts the cart before the horse – these rules define what counts as an authoritative office-holder), but because they are accepted, via convention by the people.^{xli}

Hampton's model fits into the social contract tradition, not because it relies on some imagined, or hypothetical, contractual agreement between individuals in an equally imagined state of nature, but because actual, living, breathing human beings embody, at a collective and unconscious level, a governing convention.

The anarchist, however, should be quite unmoved by all of this. The challenge, after all, is a normative defense of the state. The anarchist is happy to concede the rationality of individuals entering into a leadership convention. As a bit of sociological history, the account is plausible. But the fact remains, rationality and explanatory robustness doesn't always necessitate normativity. There was no social contract, and rules of recognition hold only as long as real individuals continue to recognize them.

Perhaps the social contract can appeal to fairness. As Plato saw over two millennia ago, even the most ardent skeptics of government have to concede the beneficial things the state has already provided them.

[The state has] brought you into the world, and nurtured you and educated you, and given you and every other citizen a share in every good we had to give . . . [H]e who has experience of the manner in which we order justice and administer the state, and still remains, has entered into an implied contract ...^{xlii}

The anarchist will have several legitimate quibbles with Socrates here. One explicit part of his argument was that he had always known that he could leave Athens if

he wasn't happy with his situation. But, it is far from clear that average citizens, even in the freest and most open states, have the practical means to simply pack up and leave should they find the terms of the implied agreement unacceptable. But far more damaging at a theoretical level is the fact that the entire argument presupposes a preexisting normative order. There must already be in existence clear standards of what is fair and just for citizens to feel compelled repay the advantages they have received with a tacit granting of authority to the state. This isn't really a problem for secular natural law, but such standards fail to exist by definition in the classical state of nature.

Still, when all is said and done, the most serious objection to the social contract goes back to the beginning – the contract is a fiction. And no fancy argumentative footwork gets away from that. The standard move of reinterpreting the agreement to a tacit, or hypothetical, form of consent runs into an insurmountable problem. I am carelessly walking along the city streets, plugged into my iPod, and start to head across the intersection in the path of a speeding bus. You reach out and catch me, doubtlessly saving my life. I no doubt owe you, certainly my gratitude, and perhaps a more tangible token of my appreciation. But consider the following argument. If I had foreseen such a circumstance, I would have gladly agreed to pay you a thousand dollars to save me – I fully concede that. Therefore, you argue in court, although neither of us did foresee the situation, nor did we enter into any sort of actual agreement, I nonetheless owe you a thousand dollars, because if had I foreseen, I would have agreed. But this

is absurd. The hypothetical, or counter-factual, agreement has no bearing whatsoever. Ronald Dworkin clearly articulates the point.

[H]ypothetical contracts do not supply an independent argument for the fairness of enforcing their terms. A hypothetical contract is not simply a pale form of an actual contract; it is no contract at all.^{xliii}

XII.

Secular natural law offers a very different response to the anarchist. How is the state normatively justified? It is justified because cooperation is an objective normative good, and law and government facilitate social cooperation. We have evolved as a social species. Our sociality, at least as much as our intelligence, is what has allowed us to prosper as both individuals, and more globally as humans. One might dispute classical definitions of humans as rational animals, or political animals; few would quarrel, however, with the categorization of humans as social animals. The state is an empirical necessity for cooperative societies much larger than hunter-gatherer tribes. Human nature has evolved in such a way that we value cooperation, as well as those institutions like law and government that must exist in order for cooperative instincts to thrive.

But the anarchist is again unmoved. Humans do value cooperation, and the state may be a practical necessity for ensuring cooperation between large groups of individuals. But how does this result in moral authority for the state? This question will, I fear, remain forever unanswerable, if we allow to go unchallenged the anarchists' clear assumption. The whole debate assumes that the burden of proof lies with the defender of government. Absolute freedom is the natural state,

and law and social constraint the artificial constructions requiring defense. Many forms of classical liberalism insist on the priority, not just of the individual, but of autonomous individuals exercising absolute liberty. Hobbes adopts a thoroughly modern sounding secular perspective, and appeals to biological considerations in advancing his argument for the primacy of individual liberty.

The right of nature, which writers commonly call *jus naturale*, is the liberty each man has to use his own power as he will himself, for the preservation of his own nature, that is to say, of his own life, and consequently of **doing anything** which, in his own judgment and reason, he shall conceive to be the aptest means thereunto.^{xliv}

Secular natural law concedes, not only the biological importance, but also the normative significance, of self-preservation. But Hobbes' view of absolute individual liberty is too simple. Hobbes sees the human condition as a collection of straightforward maximizers. Secular natural law, however, claims that natural selection has not given normal human beings the right, or even the simple inclination, to do anything they please or deem to be in their best interest, but instead an obligation and incentive to cooperate under conditions of relative optimality and fairness.

Secular natural law harkens back to an earlier tradition in political thought. Humans are naturally political animals (constrained maximizers); any account of individual liberty must take that natural fact as a normative and empirical starting point. None of this means that individual rights have no role to play, or that some kind of simplistic communitarianism prevails. Certain forms of government satisfy

the conditions of constrained maximization. Societies arranged under these sorts of states are “natural,” and have a prima facie legitimacy. The onus would fall upon the skeptic of law and government to show their illegitimacy. In other cases, existing states may be far from optimality or fairness, and secular natural law provides the revolutionary, or simple skeptic, with the conceptual ammunition for taking on government. Natural law has always insisted on a normative hierarchy where positive law was liable to ethical censure. This is a far cry, however, from the anarchist’s claim that the abstract institution of the state lacks moral authority. Secular natural law inverts the skeptic’s claim that law and government are artificial institutions in need of normative justification. Constraint in conditions of relative optimality and fairness for all in the group is now the empirical and normative starting point. The right to behave non-cooperatively becomes the alternative requiring conceptual justification. Acquiescing to the authority of the state is merely one sort of cooperative behavior, much like caring for one’s offspring, or affection for one’s mate.

Law and government contribute to social cooperation in two very different ways. The most basic, of course, is as mechanisms designed to keep the peace. Humans are not saints; they all too often behave non-cooperatively. As Madison clearly saw, external constraints to augment the internal biological ones are required in the social world. Institutions like law, government, and criminal punishment are contingent necessities, given human nature.

But what is government itself but the greatest of all reflections on human nature? If men were angels, no government would be necessary.^{xlv}

For many in the social contract tradition, human beings not only fail to be angels, they fail to be civilized at all. Their behavior is only constrained by fear, of their fellow humans, and most specifically of a ruthless sovereign. But one need not see the human condition in nearly such bleak terms, in order to appreciate the contribution offered to constrained maximization by institutions like law, government, law enforcement, and criminal punishment.

As fundamental as the night-watchman image of the state is, equally important is its positive contribution to optimal constrained maximization. Commerce, industry, education, and a host of other necessary features of the human condition require incredible amounts of cooperation. From absolutely basic features like currency and the private law, to public universities and social welfare, government does much more than simply enforce cooperation, it produces cooperation. That is nowhere clearer than in the elementary responsibility of making a public decision. Madison was probably wrong – even if men were angels, government would still be necessary. At least if the society of angels was of free-thinking agents with minds of their own, and not angelic robots with only one point of view. John Finnis makes the fundamental point beautifully.

There are, in the final analysis, only two ways of making a choice between alternative ways of coordinating action to the common purpose of common good of any group. There must be either unanimity, or authority. There are no other possibilities.^{xlvi}

XIII.

Thus we come full circle. Secular natural law argues for objective normative values. These values arise from our evolutionary past. Our basic human nature allows us to see, understand, and indeed to feel, instances of human cooperation and non-cooperation. Constrained maximization, or what Gauthier calls justice, is a basic human good. Our intellect (aided, perhaps, by reflection on the prisoner's dilemma) allows us to see the self-interested, and biologically adaptive, advantages of constrained maximization. But our hearts, even more effectively than our heads, cause us to react with powerful emotions when confronted with non-cooperation and injustice. The anarchist challenges the authority of the state by asserting the fundamentality of straight forward maximization. But if we are right, this is not only bad political theory, it is bad biology. Humans are genetically predisposed to value cooperation, and to behave as constrained maximizers. But men and women are not angels. In addition to their private cognitive and emotional resources, they require external incentives for cooperative behavior. The state provides a very efficient mechanism for ensuring (general) social cooperation. In addition, cooperative ventures require public goods, and most importantly, efficient means of arriving at collective decisions. Again the state fits the bill very nicely. Law and government may not be logically necessary nor sufficient conditions for large scale social cooperation, but they do seem contingently required. Human nature might have been different, but given what it turned out to be, the state is normatively justified because it is the most effective

means of ensuring, and advancing, constrained maximization between large numbers of cooperating human beings.

ENDNOTES

-
- ⁱ Lon Fuller, *Morality of Law* (New Haven: Yale University Press, 1965), p. 96; John Finnis, *Natural Law and Natural Rights* (New York: Oxford University Press, 1980); and Ronald Dworkin, "Natural Law Revisited," (34 *University of Florida Law Review* 165, 1982).
- ⁱⁱ Richard Boyd, "How to Be a Moral Realist," in Geoffrey Sayre-McCord, editor, *Essays on Moral Realism* (Ithaca: Cornell University Press, 1988), p. 182.
- ⁱⁱⁱ John Mackie, *Ethics: Inventing Right and Wrong* (Harmondsworth: Penguin Books, 1977), p. 6.
- ^{iv} Thomas Nagel, "From The Possibility of Altruism," reprinted in Stephen Darwell, et al, editors, *Moral Discourse and Practice* (Oxford, Oxford University Press, 1997), p. 323.
- ^v Mackie, *op. cit.*, p. 5.
- ^{vi} Steven Pinker and Paul Bloom, "Natural Language and Natural Selection," in J. H. Barkow, et. al, editors, *The Adapted Mind: Evolutionary Psychology and the Generation of Culture*. (Oxford: Oxford University Press, 1992)., p. 451.
- ^{vii} *Ibid.*
- ^{viii} Consider Chomsky's famous example, "Colorless green ideas sleep furiously."
- ^{ix} Hilary Putnam, *Reason, Truth, and History* (Cambridge, UK.: Cambridge University Press, 1981), p. 54
- ^x Boyd, *op. cit.*
- ^{xi} Boyd, *op. cit.*, p. 203.
- ^{xii} *Ibid.*
- ^{xiii} David Gauthier, *Morals By Agreement* (Oxford: Oxford University Press, 1986).
- ^{xiv} See, for example, Gregory Kavka, *Hobbesian Moral and Political Theory*, (Princeton: Princeton University Press, 1986); and Jean Hampton, *Hobbes and the Social Contract Tradition*, (Cambridge: Cambridge University Press, 1986
- ^{xv} *Ibid.*
- ^{xvi} See, Jules Coleman, *Risks and Wrongs* (Cambridge, U.K.: Cambridge University Press, 1992; and Robert Cooter and Thomas Ulen, *Law and Economics* (Glenview: Scott, Forman and Company, 1988).
- ^{xvii} Gauthier, 1986, *op. cit.*, p. 157.
- ^{xviii} *Ibid*, p. 168.
- ^{xix} *Ibid*, pp. 169-70.
- ^{xx} *Ibid*, pp. 183-4.
- ^{xxi} Matt, Ridley, *The Origins of Virtue*, (New York, Penguin Books, 1996), p. 249.
- ^{xxii} Gauthier, 1986, *op. cit.*, p. 168
- ^{xxiii} Robert Axelrod, *Complexities of Cooperation* (Princeton: Princeton University Press, 1997), pp. 10-29.
- ^{xxiv} Ridley, *op.cit.*, p. 79.
- ^{xxv} Elliot Sober and David Sloan Wilson, *Unto Others: The Evolution and Psychology of Unselfish Behavior* (Cambridge, MA: Harvard University Press, 1997).
- ^{xxvi} E. O. Wilson, *On Human Nature* (Cambridge, MA: Harvard University Press, 1978), pp 153-4.

-
- ^{xxvii} Gauthier, *op. cit.*, p. 347.
- ^{xxviii} See, Stephen Pinker, *The Language Instinct*, (New York: William Morrow and Company, 1994).
- ^{xxix} David Hume, *A Treatise of Human Nature* (1740), quoted in Finnis, *op. cit.*, pp. 36-7.
- ^{xxx} See, John Searle, "How to Derive 'Ought' from 'Is'" *Philosophical Review* 73, 1964.
- ^{xxxi} Frank Jackson, *From Metaphysics to Ethics: A Defence of Conceptual Analysis* (New York: Oxford University Press, 1998).
- ^{xxxii} Finnis, *op. cit.*, pp. 33-48.
- ^{xxxiii} Nagel, *op. cit.*, p. 123.
- ^{xxxiv} See, Jean Hampton, *Political Philosophy* (Boulder: Westview Press, 1996); and Robert Nozick, *Anarchy, State, and Utopia* (New York: Basic Books, 1974).
- ^{xxxv} Nozick, *op. cit.*, p. 4.
- ^{xxxvi} Thomas Hobbes, *Leviathan* (1660), Chapter VIII.
- ^{xxxvii} *Ibid*, Chapter XVII.
- ^{xxxviii} *Ibid*.
- ^{xxxix} See, H.L.A Hart, *The Concept of Law* (Oxford: Oxford University Press, 1961).
- ^{xl} See, Ronald Dworkin, "Justice and Rights," in *Taking Rights Seriously* (Cambridge, MA: Harvard University Press, 1977), pp. 150-83.
- ^{xli} Hampton, *op. cit.*
- ^{xlii} Raphael Demos, editor, *Plato Selections*, (New York, Scribner's, 1955), pp. 44-6.
- ^{xliii} Dworkin, 1977, *op. cit.*, p.151.
- ^{xliv} Hobbes, *op. cit.*, Chapter XIV.
- ^{xlv} James Madison, *Federalist* 51.
- ^{xlvi} Finnis, *op. cit.*, p. 232.