Mr. John Paul Asija Class: Politics & Society Tutorial Date: 01APR2019 Tutor: Ms. Blits

Assignment: 5-page paper

In many of our readings this semester the authors have used the term reason. Reason is integral, not just in the tutorial readings but also in the seminar readings where Plato, in "The Republic" through the mouth of Socrates, declares that justice is when the rational part of the soul rules over the other portions of the soul. One of the most exciting modern fields of science is that of Artificial intelligence which attempts to build machines that can reason. All the texts we have read so far (except perhaps The Prince) value reason as an essential element for living and governing well. I intend to investigate the question, "What is reason, and what role(S) does it perform in the lawmaking process?". I will begin by investigating this question only in the context of the Nicomachean Ethics, and other texts from class will be pulled in as necessary. Discussion of physical laws of nature, such as the motion of the planets, is necessarily out of scope because human minds do not craft these laws.

Aristotle never directly addresses reason in the Nicomachean Ethics but references it often. I do not know why Aristotle does not directly address reason; perhaps he does it in another text or considers the point obvious. Either way, he seems to have something in mind when he refers to reason at various points in the Nicomachean Ethics. It is my goal to understand what he means by the term reason if not in totality at least in the context of political science.

Aristotle invokes the topic of reason in his discussion of the soul, which he claims has a rational and non-rational part. He additionally claims that the soul's rational part is further divided into two parts.

"Let us Assume there are two parts that have reason: with one we study beings whose principles do not admit of being otherwise than they are, and with the other, we study beings whose principles admit of being otherwise" ^[1] Book VI 1139A 7

It should not be very far off to start by inferring that the rational part of the soul is the part of the soul that is capable of reasoning and that we can learn something about reasoning by investigating the rational part of the soul. Since science belongs to the rational part of the soul, and my translator uses the term political science to describe legislating, I believe that Aristotle's discussion of scientific knowledge is an appropriate place to begin the investigation. In his discussion of scientific knowledge, Aristotle claims that science belongs to the rational part of the soul whose principles do not admit to being otherwise than they are. We may learn about reason by examining scientific knowledge because there is a relationship between science and reason. In his discussion of science, Aristotle says,

"Induction leads to the principle [...] whereas deduction proceeds from the universal. Hence Deduction has principles from which it proceeds and which are not themselves reached by deduction. Hence they are reached by induction" ^[1] Book VI 1139b 30

Here it appears that Aristotle is placing induction prior to deduction. This is interesting because it implies that the principles from which deduction reasons are not innate in man. These principles are arrived at via induction. This means that there may not be an innate law in man. I say this because Aristotle implies that all law, even that which is deduced from first principles, is deduced from observation. After all, first

principles are constructed via induction from observation. This lays out a law that is empirical in its fundamentals. Not a law that is based on natural or eternal principles. From this, it would follow that inductive reasoning is more critical to law than deductive reasoning.

Aristotle additionally mentions reason in his discussion of prudence. I want to move here from scientific knowledge because according to Aristotle prudence concerns the rational part of the soul that is separate from science.

"There are two parts of the soul that have reason. Prudence is a virtue of one of them, of the part that has belief; for belief is concerned, as prudence is with what admits of being otherwise" ^[1]Book V11140b 26</sup> Prudence, for Aristotle, is deeply connected with deliberation, which implies that deliberation through prudence is related to reason or perhaps that prudence's relationship with reason is mediated by deliberation. Aristotle says, "It seems proper to a prudent person to be able to deliberate finely [...] about what sorts of things promote living well in general" ^[1]Book V11140a 26</sup>. Deliberation is discussed more in-depth in Book III, and our discussion must now shift there. In Book III, chapter 3, Aristotle tells us several things about deliberation. He tells us what deliberation is "*All deliberation is inquiry*"^[1]Book III 1112b 21</sup>. Aristotle tells us what deliberation concerns: "*Deliberation concerns [...] where the outcome is unclear and the right way to act is undefined*"^[1]Book III 1112b 9</sup>. It is made clear that we deliberate about principles, not particulars "*Nor do we deliberate about particulars, about whether this is a loaf*"^[1]Book III 1113a 1</sup>. Aristotle also stipulates that we only deliberate about things that we can affect "*we deliberate about what results through our agency*" ^[1]Book III 1112b 4

This is interesting in several places, most importantly for what it may imply about the relationship between lawmaking and scientific knowledge. Scientific knowledge concerns many things that we can not Affect. We can imagine some city-state passing a law that the sun must rise in the west and set in the east. Such a law would be ridiculous and ineffective. It is obvious that laws made by men must concern the actions of men. This means that lawmaking is a deliberative action. If it is a deliberative action, then law-making has principles that admit of being otherwise. It can then be concluded that lawmaking is not a type of scientific knowledge. From this, it follows that even if induction is prior to deduction for scientific knowledge it may not necessarily be the case for the type of reason that applies to lawmaking. The separation between scientific knowledge and law-making is further supported by Aristotel's statement, "*political science and prudence are the same state*"^{(1)Book VI1141b 23}. Since prudence and scientific knowledge come from separate portions of the rational part of the soul, it can be concluded that science and prudence are not the same state, which further implies that science and political science are not the same state. It would seem that political science is not a science at all. It is then concluded that the reason which affects lawmaking is not scientific but deliberative. Or, to put it in the terms of Aristotle, the reason of political science comes from the rational part of the soul that deals with that which admits of being otherwise.

A deliberative law allows for a law that is deductive instead of inductive, and I believe that this is what Aristotle intends. Despite his statement that we do not deliberate about particulars, I believe that we must deliberate from particulars to principles and then make laws from principles to particulars. In Book III, Aristotle states.

"For each of us stops inquiring how to act as soon as he traces the principle to himself and within himself to the guiding part."^{[1] Book III 1113a 4}

I take this to mean that in a dilemma, the deliberator is not clear on which principle within themselves should dictate their actions. To clarify the type of dilemma, let us imagine a child told to put away their toys. The child is told that the red toys go in the first bin, and his blocks go in the second bin. What happens if this child is given a red block to put away? Here, the right way to act is undefined, and this is when Aristotle tells us we must deliberate. The child will not deliberate about whether the object is actually a block or if the block is red, but the child will deliberate from this particular to one of the rules or principles they were given. The toy can not go in both bins. The child must decide if it is more important that all red objects go in the first bin or that all blocks go in the second bin. This type of dilemma is the beginning of deliberation, and the deliberation is over when the child decides which bin to put the block in. Aristotle, of course, says that children do not reason but the example is meant to illustrate the type of dilemma that requires reason not to show reasoning occuring.

Reason I posit is the process by which a person deliberting a dilemma makes their decision. To further illustrate if deliberation were to be the act of driving then reason would be the process by which the internal combustion engine converts fuel to motion. This may explain why reason is not directly addressed in the text. It is simply outside the scope. Many people drive every day while having no idea how an internal combustion engine works. It is not necessary that someone understands the intricacies of what reason is in order to deliberate well enough to solve the majority of their dilemmas.many people seem to navigate the many dilemmas of life without ever considering the nature of reason and Aristotle seems to be limiting his scope in the Nicomachean Ethics to a more practical wisdom.

The task remains now that we have some conception of reason to make clear what role reason plays in lawmaking for Aristotle. The law is a type of prescribed action much like the two rules about putting away toys that our hypothetical child was given. What separates those prescribed actions from Law is that those dictates are about particulars only. Law must also consider the principle that those particulars will connect to in the event of a dilemma. Law based in reason should help navigate dilemas not create new ones. It was established before that prudence and political science are the same state. This means that anything that is true of prudence is also true of political science. And since Aristotle states "The reason that is prudence is concerned with particulars as well as universals" it must then be the case that the reason of political science must also be concerned with both the particular and the universal. Thus reason in the making of laws does not determine the precepts or the particulars of the law but rather connects them. The law connects a particular to a principle for the citizen such that they do not need to deliberate themselves to know which principle drives the task at hand. A law would tell the child which bin the red block goes in without requiring deliberation.

We now know enough about reason to begin constructing a black box system. Which can be seen in diagram 1. Reason as it applies to law takes in a set of principles and a set of particulars and produces a function or perhaps, a set of functions¹ which maps those principles and particulars to each other.



Diagram 1

I am not yet prepared to closely examine the reason box of Diagram 1. I believe that we can be better prepared to do so by studying the inputs and outputs of the system. The inputs can be examined in our readings from Thomas Aquinas who appears to blur the line between our inputs. He states

"There belongs to the natural law, indeed primarily, very general precepts, precepts that everyone knows, and more particular secondary precepts, which are like proximate conclusions from first principles." ^[2] $_{\text{Question 94 Article 6}}$

This throws a wrench in the gears of the system constructed in diagram one. The inputs are not two separate sets but is actually one set whose members have a probability of being either a universal or particular. I am immediately tempted to make comparisons to wave particle duality but the mathematics would soon dominate the discussion. I will instead interpret this section to mean that the precepts and particulars in the two separate sets can be transformed from an unordered set to an ordered set².

Fortunately the idea of some precepts being more general than others also, provides a framework that did not exist in Aristotle for resolving the dilemma of the child's toys. It allows for two general

¹ This could also be a set of n-tuples that does not constitute a function, but the implications are similar and a function is easier to conceptualize.

² I don't know enough set theory to know if this transformation this possible or not but I suspect it is.

precepts to influence a particular action to different degrees. If we could declare that one of the toy sorting rules was more general, we then have the beginnings of a justification to choose one bin over another for the red block.

If the inputs to our system can be categorized from least to most general and if such a ranking is capable of providing a framework to solve the toy sorting dilemma then it may be that part of what happens in the opaque part of our system is this ordering. This allows us to update our system diagram.



Diagram 2

This updated system now shows the input ordering step which is part of the reasoning process. Several questions remain in order to complete this diagram. The two that stick out to me as most important are. First what else must occur if anything to the ordered sets so that they can be transformed into the set of mapping functions. And second what role does the set of mapping functions play in the lawmaking process. I believe these questions are the most important remaining questions because they are more specific versions of the questions asked in the beginning of this essay. What is reason? and what role does reason play in the lawmaking process?

Having now arrived at two more specific questions, one that I believe is basically mathematical and another which is not. I believe that it is more appropriate to tackle the question which is not mathematical. I will now attempt to place our system diagram of reason into the wider context of law making as shown in diagram 3.

Here I show that there is a step prior to reason in which the sets of particulars and universals are gathered. I posit that not every possible precept or particular will be relevant to every dilema and there must be some way of determining which are to be included in the mapping function.³ I have called this process phase 1 because I am not sure if it belongs more to reason or to deliberation.

³ I am rejecting the idea of a universal mapping function for all possible precepts and particulars out of hand.





The end result of this diagram is a completed law. By this I do not mean complete collection of laws but rather something that meets the minimum requirements to constitute a law. This law must posit a circumstance and then dictate an appropriate action. This means that the appropriate action must be known to the legislator. The legislator can use prudence to predict which actions will lead to the desired outcome. But I'm not sure what role the mapping functions produced by reason play in this process or if the functions play any role at all.

I am not convinced that prudence works from the mapping function produced by reason as an input. It could be that prudence runs in parallel to reason and that some other process combines the results of reason and prudence into a completed law. This structure can be seen in diagram 4. I am hesitant to propose this structure over that in diagram 3 because I can not define the unknown process of combination.



Diagram 4

Having arrived at this impasse it may be appropriate to further define it. I believe the fundamental question that I cannot answer is "Why must laws contain a universal and a particular? Why is it not sufficient to simply dictate an action?" If I could answer this question then I would be able to define the unknown process.

Despite this impasse I believe something has been learned. Reason is now understood as producing a function that maps particulars and principles to each other possibly in a probabilistic manner or possibly by ordering them from least to most general. This mapping function is then combined with some type of prudence either in series or in parallel to form a completed law. To go any further in describing how an ordered set is transformed to a mapping function I believe is a mathematical problem. To further detail how a set of functions is used to craft laws is a problem in an unknown domain.

Bibliography

[1] Aristotle and T. Irwin, Nicomachean ethics, 2nd ed. Indianapolis, Ind.: Hackett, 2007.

[2]T. Aquinas, R. Regan and W. Baumgarth, *On law, morality, and politics*, 2nd ed. Indianapolis: Hackett Pub., 2002.