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Frazier, Ryan, "Prudence and Executive Control: An Analysis of the Decision-Making Processes of the Christian and the Modern Man" (2015). *Spring 2015, Faith and Science*. 4.

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**Prudence and Executive Control:
An Analysis of the Decision-Making Processes of the Christian and the Modern Man**

Breathless and red in the face, your neighbor approaches you in your yard. Apparently angry, he stammers, “Hey, any chance I can get that hunting rifle I lent you back?” The situation does not appear normal to you—especially after you remember hearing a loud altercation occur over in the vicinity of your neighbor’s backyard. You know your neighbor to have a short temper, but you have never encountered him this angry before. Thoughts race through your head as you attempt to decide whether or not you ought to return his rifle. You do owe your neighbor—he was charitable enough to loan it to you for your weekend hunting trip. It would be equally just to give him his due. Given the circumstances, what are the chances that, upon returning his gun, he may harm someone? After some deliberation, you judge it to be more prudent to provide an excuse as to why you cannot return it at the moment. You believe the situation to be too hazardous to return the rifle to your neighbor. For the common good of the neighborhood, and your angry neighbor, it is best for you to withhold justice until he has calmed down.¹

How does one come to this decision? The primary concern of this composition is to explore two different perspectives of this question: whether modern scientific research can sufficiently explain the Christian intellectual virtue of prudence. I aim to illustrate that executive control, while able to explain, “How or whether a person goes about doing something,²” is unable to account for the greater question of *why*. I propose that St. Thomas Aquinas’ explanation of prudence provides a reasonable, satisfactory answer. In

¹ Adapted from Titus, Craig Steven. “Reasonable Acts.” *Philosophical Virtues and Psychological Strengths: Building the Bridge*. Eds. Cessario, Romanus, Craig Steven Titus, and Paul C. Vitz. Sophia Institute Press, 2013. 110-114.

² Lezak, Muriel Deutsch. *Neuropsychological Assessment*. (5th ed.) Oxford: Oxford UP, 2012. Print. 37.

order to best perform this analysis, I will first present the intellectual virtue of prudence as Christians understand it. In doing so, I will provide the classical, Thomistic account for this virtue. Next, in order to identify the parallels between prudence and the modern narrative, it is important to explore the intricacies of executive control, which will provide a modern account for decision-making and all of the factors contained therein. Last I will explicate the gaps in executive function's explanation of prudence as it relates to the modern man.

I. PRUDENCE

The intellectual virtue of prudence is more than just making the right decision. In the context of our daily lives, we hear advisors chirp, "Be prudent" so as to mean "Careful!" or "Don't spend your money carelessly!" But the Catholic Church places more stock in the virtue of prudence as it relates to our faith lives than we might infer from these suggestions we hear when trying on a pair of jeans. Prudence, referred to as 'The Queen of all virtues,' holds a place of high esteem in Christian Tradition. To best understand the virtue of prudence, I will define and explain the virtue and the role it plays in each individual's faith life. Then I will explore, through the perspective James F. Keenan, S.J. sets forth in his essay "The Virtue of Prudence," how prudence operates, perfects, and directs us.

Before diving into St. Thomas Aquinas's explanation and analysis of the nature of prudence as an intellectual virtue, first let us understand what the virtue is. Prudence is unlike other virtues, which are, "purposive disposition[s], lying in a mean that is relative to us and determined by a rational principle."³ The way in which it is most unlike virtues

³ Aristotle. *Nicomachean Ethics*. Book 2, Chapter VI.

of the will (e.g. temperance, courage, etc.) is that prudence is not meant to attain the mean. Prudence either works or it does not. Some actions can be more prudent than others, but there is no such thing as being ‘too prudent,’ in the Christian sense of the word. St. Thomas echoes Aristotle when he defines prudence as, “right reason applied to action.”⁴ Let us further examine this definition.

St. Thomas addresses the nature of prudence in the first three articles of question 47 of the Second Part of the Second Part of the *Summa Theologica*. He responds to challenges regarding the faculty to which prudence belongs and by which faculty the virtue is applied. In these first three articles, Thomas argues that prudence lies within our cognitive faculties (intellect), is for practical knowledge alone, and can be applied to particulars. In the first article, Thomas delineates prudence as a cognitive faculty. It relies on, “obtain[ing] knowledge of the future from knowledge of the present or past.”⁵ Next, he defends the practical application of prudence: “Counsel is about things that we have to do in relation to some end: and the reason that deals with things to be done for an end is the practical reason. Hence it is evident that prudence resides only in the practical reason.”⁶ Last, Thomas argues for prudence’s application to “singulars,” or particular situations, as opposed to universals:

But no man can conveniently apply one thing to another, unless he knows both the thing to be applied, and the thing to which it is applied. Now actions are in singular matters: and so it is necessary for the prudent man to know both the universal principles of reason, and the singulars about which actions are concerned.⁷

⁴ Aquinas, St. Thomas. *Summa Theologica*. “IIa IIae, q. 47 a. 2”

⁵ Ibid. “IIa IIae, q. 47 a. 1”

⁶ Ibid. “IIa IIae, q. 47 a. 2”

⁷ Ibid. “IIa IIae, q. 47 a. 3”

Taken together, it is important to note that prudence resides within the intellect *and* the will. Because prudence belongs to our cognitive faculties and, at the same time to our will, for it can be applied in particular situations to our actions. We must consider the implications.

Consider this analogy. Prudence operates as a general would oversee his lieutenants. The virtues have their own capacities. Temperance needs to moderate how much or how little one should eat or drink. In self-expression, one must express himself truthfully, not in a boastful or understated manner. When embarrassed, one must express himself with modesty, not in shyness or shamelessness. These virtues have jurisdiction over these particular actions, as a lieutenant has control over how he runs his barracks. To the same point, prudence has control and eminence over all of these virtues of emotion, as a general directs his lieutenants on strategy and purpose going into battle.

For example, let's examine the behavior of a young man at a party. The man finds himself conversing with a beautiful young lady. He hopes to impress this woman because he is attracted to her. In doing so, he attempts to be funny. In selecting a joke, however, he needs to maintain a polite and respectful demeanor. In this realm of conversation, he must practice the virtue of wittiness. If he is too witty, he errs to the excess—or buffoonery; if he is not witty enough, he errs to the deficiency—or boorishness. This man's prudence, if it is well formed, will deliberate, judge and act according to the good. The importance of balancing his action or feeling in conversation is twofold: first, he must not betray his own values in order to impress this woman. Perhaps the woman prefers men who act like buffoons. The man should not feel inclined to act like a buffoon, for if he does, it will most probably not lead to his fulfillment. On a deeper level, he must

not deceive her, for that will provide the woman with an inaccurate impression of who he is. The former deals primarily with his long-term pursuit of goodness. The second deals with the common good—the good of the woman and both individuals’ lives as they strive toward virtue, truth, and goodness moving forward.

In this way, prudence takes into account the particulars of a situation and recalls past experience, belonging both to the individual and those whom the individual might have observed (i.e. mentors). In this act of deliberation, prudence engages the intellect in proposing multiple courses of action and their outcomes. Then, using our knowledge of the good, it judges, “how best to [proceed] from right intention, and [guides] by true beliefs about how best to bring about the good end.”⁸ Belief in and pursuance of the good lies implicitly within this explanation. Pursuing the good or a particular end is perhaps the most important aspect of the Christian understanding of prudence. This nuance is something I believe to be unaccounted for in the modern explanation of decision-making. I will support this belief in section three of this composition.

Prudence also perfects an individual’s moral life. Perfection requires no completion. In Christian theology, this complicated concept is seen in God, whose goodness flows from His perfection—for He requires no improvement. He does not wait for completion. Unlike God, however, our moral lives seek perfection, for they are incomplete. Part of the intellectual virtue’s function, as mentioned above, is to recall past experience in deliberation. In so doing, prudence recalls moral failures and consequences of past decisions. Critics of Christian moral theology have argued that because prudence

⁸ Wood, W. Jay. "Prudence." *Virtues and Their Vices*. By Kevin Timpe and Craig A. Boyd. N.p.: n.p., n.d. 42. Print.

is an intellectual virtue, it is not able to engage material objects. Keenan answers this in his piece on Prudence in *The Ethics of Aquinas*:

Although the moral virtues perfect the rational, irascible, or concupiscible appetites, they do so inasmuch as they engage objects that will perfect these appetites. The objects engaged are right if they are prudential. If the object of justice, temperance, or fortitude is not prudential, the act will not be just, temperate, or fortitudinous, nor will it perfect the agent.⁹

Keenan also makes it a point to distinguish acts that make one *more* just, temperate, or fortitudinous. Prudence is only able to perfect a person if the individual acts according to her guidance. In a way, prudence is a self-reinforcing virtue: the more an individual hones his virtues, the more prudential they become. In so doing, they become more virtuous. The image that comes to mind in regards to prudence is a spiral staircase: although cyclic, one improves their standing with each step forward (and upward).

The last aspect of the nature of prudence left for discussion is the way in which prudence directs the moral life of the individual. One must understand that prudence works within our natural inclinations. It shapes and guides us until our inclinations are naturally in line with the good. St. Thomas calls this *connaturalty*—or, second nature. Keenan interprets it thus: “Prudence directs in two ways: it perfects the practical reason as it *determines* and *pursues* the means for attaining the natural inclination’s perfection.¹⁰” It follows, then, that human beings were created with the potential to lead prudential lives of virtue. This does not, of course, take into account sin and acts of imprudence, which will not be considered for it is not within the scope of this composition.

⁹ Keenan, S.J., James F. “The Virtue of Prudence.” Pope, Stephen J., ed. *The ethics of Aquinas*. Georgetown University Press, 2002. 262.

¹⁰ Ibid. 263. Emphasis added.

II. EXECUTIVE CONTROL

Human beings have developed a variety of intellectual abilities over the course of our evolution. These intellectual abilities have enabled the most heralded achievements of human existence. Through the mapping of the neural networks in our brains, we have been able to pinpoint the loci of many of the functions that ‘make us human.’ The prefrontal cortex is of particular interest in this discussion of prudence. Executive control, or executive functioning, “refers to processes serving to monitor and control thought and action, including attention regulation and response inhibition.¹¹” First, we will explore executive control and how it works. Next, we will examine the parts of executive control and how, when dysfunctional, cause problems in day-to-day decisions we make. The field of psychology and cognitive neuroscience has divided executive control in varying ways. Thus, for the purposes of this paper, we will address executive control as it is divided into volition, planning and decision-making, and inhibition. In each part of executive control, this section will seek to find parallels in the way executive functions explains prudence in terms of the decision-making process of the modern man.

The executive functions are intimately linked to our cognitive abilities. Because of this, it is difficult to believe that our executive functions can be separated from our cognitive abilities. Cases like this are visible in scientific literature. For example, lesions in particular areas of the prefrontal cortex inhibit the individual’s ability to choose from an array of options. This direct affect on the individual’s cognitive ability seemingly

¹¹ Carlson, Stephanie M., Angela C. Davis, and Jamie G. Leach. "Less Is More Executive Function and Symbolic Representation in Preschool Children." *Psychological Science* 16.8 (2005): 609-616.

substantiates the inseparable nature of executive and cognitive functions. However, this is not the case, as displayed by Lezak in *Neuropsychological Assessment*:

When executive functions are impaired, even if only partially, the individual may no longer be capable of satisfactory self-care, of performing remunerative or useful work independently, or of maintaining normal social relationships regardless of how well preserved the cognitive capacities are.¹²

It appears as though executive functions are responsible for some aspects of our character; for example, our motivation, our behavior in social situations, and our ability to make decisions (to name only a few). Consequently, it becomes tempting to attribute many identifying personality traits and our resultant *decisions* to our executive functions. This muddled relationship between cognitive and social function is what leads me to believe there are some parallels between executive control and prudence. This is especially evident in individuals who incur injuries that result in the dysfunction of executive control.

For example, there is a case of a hand surgeon who experienced a hypoxic event during a cardiac arrest, whose executive functions were crippled as a result. “His cognitive abilities, for the most part, were not greatly affected; but initiating, self-correcting, and self-regulating behaviors were severely compromised.¹³” Both several weeks and years after the patient had recovered from the episode he underwent a battery of cognitive tests. Most of which came back normal as compared to his baseline. Yet he felt the effects in the wake of the event:

The patient’s exceptionally good test performances belied his actual behavioral capacity. Seven years after the hypoxic episode, this 45-year-

¹² Lezak, Muriel Deutsch. *Neuropsychological Assessment*. (5th ed.) Oxford: Oxford UP, 2012. Print. 37.

¹³ *Ibid.* 38.

old man who had had a successful private practice was working for his brother as a delivery truck driver...his niece bought all of his clothing and even selected his wardrobe for important occasions... He knew neither where nor with what she bought his clothes, and he did not seem to appreciate that this ignorance was unusual... His sister-in-law reported that it took several years of rigorous rule-setting to get the patient to bathe and change his underclothes each morning. He still changes his outer clothing only when instructed... If left home alone for a day or so he may not eat at all, although he makes coffee for himself.¹⁴

This man's volitional impairment, as evidenced by his apathy and aloofness, is unlike a cognitive impairment that results in the loss of memory. This total change of character, from an independent, type A surgeon to a lazy, aloof truck driver serves as a powerful example of the connection between the social implications of executive function and personality.

The example provided above serves as an excellent illustration of the importance of volition. Not only is it important to consider the effects it has on the motivation of an individual (as exemplified in the apathy of the patient above) but also on our cognitive abilities. This aspect of executive control is imperative when striving after a long-term goal. Individuals with impaired volitional capacity can engage in day-to-day affairs, but have no concept of future plans. Also, lack of volition makes it difficult to grasp abstract goals and concepts. In this way, it follows that an individual with dysfunctional volition would have difficulty working towards concepts like the good or God. We acquire this ability to abstract concepts and ideas at a young age. This point has been repeatedly observed in psychology studies with children, who are offered two rewards: one large and one small. For instance, in a study done by Mischel and Baker:

¹⁴ Lezak, Muriel Deutsch. *Neuropsychological Assessment*. (5th ed.) Oxford: Oxford UP, 2012. Print. 38.

Children waited longer to receive a larger reward (two marshmallows vs. one) when it was suggested they cognitively transform the reward ('imagine the marshmallows are white fluffy clouds') than when they were told to imagine its taste.¹⁵

Carlson, Davis and Leach replicated their observations in three and four year olds in their "Less Is More" task.

It is apparent that volition possesses twofold importance in our moral lives. First, it motivates us. For the modern man, volition moves us to achieve our goals—to be all that we can be. Without volition, we cannot be independent and pursue a flourishing life. Second, volition allows us to strive for long-term, abstract ideals. In modernity, people pursue abstractions of everything from 'equality' to 'freedom.' Volition is similar to the will, in that, it allows us to act.

Next, planning and decision-making are other important aspects of our executive control functions. In fact, they may be the most integral part. In order for an individual to plan, he must be able to consider changes that may occur in the future and adjust accordingly. "The planner must also be able to conceive of alternatives, weigh and make choices, and entertain both sequential and hierarchical ideas necessary for the development of a conceptual framework... to [carry out] the plan."¹⁶ It is clear that planning and decision-making integrate different cognitive functions humans possess.

Prefrontal cortex impairment can lead to dysfunction of planning and decision-making. Individuals in this condition often display poor judgment, risky and socially

¹⁵ Carlson, Stephanie M., Angela C. Davis, and Jamie G. Leach. "Less Is More Executive Function and Symbolic Representation in Preschool Children." *Psychological Science* 16.8 (2005): 609-616.

¹⁶ Lezak, Muriel Deutsch. *Neuropsychological Assessment*. (5th ed.) Oxford: Oxford UP, 2012. Print. 671.

inappropriate behavior, and impulsivity.¹⁷ The most popular and widely known example of this is Phineas Gage. However, a study from 2008 reports that patients with damage to or lesions in their insular cortex failed, “to adjust their bets by the odds of winning... attained a lower point score on the [Cambridge Gambling] task and experienced more ‘bankruptcies.’ There were no group differences in probability judgment.¹⁸” This reaffirms the possibility of an individual’s cognitive functions to still be intact while incurring behavioral abnormalities after damage to executive control.

The planning and decision-making capabilities of the brain’s executive function calls to mind the deliberative and judicial roles that prudence plays in lives of virtue. Thus planning and decision-making play an important role in our moral lives. This provides us with an explanation for an important ideal to the modern man—an ideal that feeds the image of the ‘self-made man.’ Modernity sees each individual as having the potential to attain whatever he may have within his power and influence. The power of planning and deliberation allows us to consider many options and direct ourselves toward that which we deem most ideal.

Last, inhibition plays a central role in the decision-making process as it is related to executive control. As defined by Meijers *et al.*, “inhibition comprises deliberately suppressing ones dominant responses or impulses.¹⁹” By suppressing the instinctual, and often socially unacceptable, impulses we have, this aspect of executive

¹⁷ Clark, L., Bechara, A., Damasio, H., Aitken, M. R. F., Sahakian, B. J. & Robbins, T. W., L.; Bechara, A.; Damasio, H.; Aitken, M. R. F.; Sahakian, B. J.; Robbins, T. W. (2008). "Differential effects of insular and ventromedial prefrontal cortex lesions on risky decision making". *Brain* 131 (5): 1311–1322.

¹⁸ *Ibid.*

¹⁹ Meijers, Jesse, et al. "Prison brain? Executive dysfunction in prisoners." *Name: Frontiers in Psychology* 6 (2015): 43.

function prevents us from acting inappropriately—steering us clear from actions that may entail negative consequences. At the same time, inhibition allows us to ignore impulses so that we might be able to better and more appropriately respond to a situation or decision we face.

Dysfunction of inhibition can lead to detrimental behaviors, as one might be able to imagine. The inability to suppress our most primal, irrational impulses is not ideal for a civil, intellectual discussion at dinner. It is apparent that someone without impulse control, who is dealt an insult, might respond in an inappropriate manner at a dinner party—perhaps with another, cruder insult or even in violence. A response like that could land that individual in jail. It is no surprise then, that a meta-study conducted by Meijers *et al.* found that prisoners in jail were likely to have some form of executive dysfunction. The study also suggested that violent offenders showed worse performance on inhibition tasks than did non-violent offenders.²⁰

The similarity to prudence is quite clear. Inhibition allows for an individual to suppress his most basic response so that he might use his rational to determine a better course of action. In this way, inhibition places an individual in a situation where he can use the deliberative faculties he possesses. Inhibition to the modern man is a tool that facilitates social participation and appropriate behavior. It provides an evolutionary benefit and thus, in the eyes of the modern man, has survived. Inhibition allows for assimilation into civilized culture. But, had things gone differently, and our society was uncivilized, inhibition would only get you killed.

²⁰ Meijers, Jesse, et al. "Prison brain? Executive dysfunction in prisoners." *Name: Frontiers in Psychology* 6 (2015): 43.

III. INADEQUACIES OF EXECUTIVE CONTROL

It is quite clear that modern science's account of executive control can explain, to some extent, the executive functions which allow us to participate appropriately in society. Not only can science explain executive control but it can also verify much of the behaviors and ideals touted by the modern man. While the parts of executive function can partially match up to aspects of prudence, the scientific account does not appropriately explicate the *why*. As this paper has alluded to, the scientific explanation purports that social adaptation provides motivation for proper use of our executive functions. However, prudence provides a better, more appropriate explanation for the motivation behind much of our decisions: the good.

Pursuing the good or a particular end is perhaps the most important aspect of the Christian understanding of prudence. For Christians this good is unity with God in heaven. With this as the object of human existence, and the means of human flourishing, it directs and perfects human decisions. In prudence's deliberation and judgment, she selects the course of action that will bring the agent closer to its goal.

The parts of executive control do not function as the parts of prudence do. Although volition allows us to act and grasp abstractions, it does not always work to be unified with the will of God. Perfect prudence presupposes our will's perfect union with God. Volition allows the modern man to pursue ideals of equality and independence but only as a means to an end that will not bring about the fullest of human flourishing. For modern science, there is no such thing as 'perfect volition,' just one that is self-serving. Modernity touts the will of the individual over everything else. That is not the message of Christianity, and thus not the function of prudence.

Next, while our brains possess the capabilities of planning and decision-making, the ultimate end is not always a priority. The ultimate end, for Christians, is the only end. Although every human seeks a flourishing life, not always do we orient ourselves to this end. Although our brains provide us with the ability to make ‘the right decision,’ not always do we make that decision *for the right reason*. The modern man is bound to lose his way as he searches for fulfillment when he uses himself as the sole measure of right and wrong. Prudence compiles our past experiences, those of others, and, most importantly, the wisdom of Revelation to guide us toward this end.

Last, inhibition may provide social justification for appropriate behavior, but when social implications are stripped away, what makes the decision ‘right?’ Without social norms, prudence takes into account our ultimate goal and points us in that direction; this is the consequence of using the person of Christ as the measure by which we deem something right or wrong. Prudence, through the virtues, enacts the ‘right’ course of action because it has been honed towards our happiness, or unity with God. More importantly, it makes us *better* at selecting the ‘right’ option. Underlying the motivation of prudence is a desire to become more virtuous and a better individual with each decision we make. Consequently, by choosing the good for ourselves, we undoubtedly contribute to the good of others—the common good.

This is what separates the decision of the modern man from the Christian in our angry neighbor scenario. By the standard of the modern man, you are not culpable for the actions of the man should you return his rifle. In returning his rifle, you have done justice to him and your relationship. This will increase the likelihood of him lending you something else in the future—much to your benefit. However, there is something wrong

with enabling your neighbor's murderous fury. Well-formed prudence guides you to the right decision *for the right reason*. She does this by perfecting your executive functions: volition, planning and decision-making, and inhibition, among others. The safety of the community as well as your search for flourishing is at risk. Should you listen to the Queen of Virtue, she will guide your neighborhood to safety and you and your neighbor to happiness.

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