

Claremont Colleges

Scholarship @ Claremont

CMC Senior Theses

CMC Student Scholarship

2020

The Capabilities Approach To Metaphysical Personhood

Mohnish Shah

Follow this and additional works at: https://scholarship.claremont.edu/cmc_theses



Part of the [Metaphysics Commons](#)

Recommended Citation

Shah, Mohnish, "The Capabilities Approach To Metaphysical Personhood" (2020). *CMC Senior Theses*. 2464.

https://scholarship.claremont.edu/cmc_theses/2464

This Open Access Senior Thesis is brought to you by Scholarship@Claremont. It has been accepted for inclusion in this collection by an authorized administrator. For more information, please contact scholarship@cuc.claremont.edu.

CLAREMONT MCKENNA COLLEGE

**THE CAPABILITIES APPROACH TO
METAPHYSICAL PERSONHOOD**

SUBMITTED TO
PROFESSOR AMY KIND

BY
MOHNISH SHAH

FOR
SENIOR THESIS
SPRING 2020
MAY 11, 2020

Abstract

It is accepted that humans are persons, but what does this mean? Society equates personhood with legal rights, moral worth, and metaphysical status. But exactly what makes us persons and distinguishes us from non-persons? What does our conception of this distinction and the value and rights we grant to persons but not to non-persons say about the type of creature that we are?

Many philosophers have tried to define metaphysical personhood. However, this thesis argues that current accounts of metaphysical personhood are inadequate. Next, this thesis borrows and modifies Martha Nussbaum's capabilities approach to human dignity in order to construct a new account of metaphysical personhood. This thesis defines metaphysical personhood as the existence of seven innate abilities: ability for self-awareness, ability to sense, ability to imagine, ability to think, ability to reason, ability to feel emotion, and ability to empathize. Each of these abilities must exist to the degree necessary for its subject to have status dignity. The concepts of innate abilities and status dignity are defined in the thesis. Finally, this thesis tests this new account of metaphysical personhood on multiple base and edge cases such as insects, dogs, children, aliens, and more. Based on these tests, this thesis makes the observation that complex imagination is the greatest hurdle for metaphysical personhood and is what differentiates humans from other species on earth.

Finally, this thesis acknowledges that controversial conclusions could arise from this new account of metaphysical personhood. Especially, under this account, some humans may not be metaphysical persons at least some of the time. However, this thesis concludes that moral persons need not be metaphysical persons and that regardless of an entity's metaphysical status, we might still owe them moral considerations.

Acknowledgements

I would like to start by thanking my reader and mentor, Professor Amy Kind, with whom I have spent four semesters during the course of my undergraduate studies. Of particular inspiration to me was her class on the metaphysics of persons and her advanced seminar on imagination. These classes led me to explore, in greater detail, metaphysical personhood as well as imagination's potential role in what makes us persons. This thesis was written during an unprecedented socio-economic global crisis due to the coronavirus pandemic. Despite the stressful and hectic time, Professor Kind has been incredibly supportive. Her time and input have been invaluable and for that I am beyond grateful.

To all the other professors who taught and influenced me, thank you for nurturing my love of learning with knowledge across a wide array of subjects ranging from mathematics to philosophy. Each and every class I took challenged me to grow as a thinker both personally and academically. I would also like to extend my gratitude to Jeffrey Records, whose generous scholarship eased my parents' and my own financial burdens behind these educational opportunities.

Next, thank you to all the wonderful people I have met and the many friends I have made throughout my four-year journey at CMC. From the meaningful conversations to the memorable experiences, my time at CMC and my personal development would not be the same without you. A special thanks to Annika Mammen, Mitre Athaiya, and Richy Chen for allowing me to bounce ideas off you and for accompanying me on many midnight study sessions/adventures to Mix Bowl Cafe.

Finally, I would like to thank my parents, Pallavi and Praveen Shah, for always encouraging my learning and for being a constant pillar of support throughout my personal, academic, and professional pursuits.

Table of Contents

INTRODUCTION.....	1
CHAPTER 1: EXISTING ACCOUNTS OF METAPHYSICAL PERSONHOOD	5
CHAPTER 2: THE CAPABILITIES APPROACH FOR METAPHYSICAL PERSONHOOD.....	15
CHAPTER 3: TESTING THE NEW ACCOUNT OF METAPHYSICAL PERSONHOOD.....	28
CONCLUSION	40
BIBLIOGRAPHY.....	41

Introduction

Do fetuses deserve the same protections as adults? At what point does artificial intelligence become equal to humans? What, if anything, distinguishes us from animals such as dogs, chimpanzees, and dolphins? This last question might not be as clear cut as you think. Take the example of a gorilla named Koko. Koko's IQ is estimated to be between 70 and 95 which puts her intelligence in the same ballpark as humans. Her intelligence can be seen in her linguistic capacities; Koko has learned approximately 1,000 signs and can understand approximately 2,000 spoken words. Furthermore, Koko has been described as creative, capable of telling jokes, and capable of creating new words by combining old ones (Kind 2015, 1). She has also communicated a full range of emotions. One notable example is when Koko expressed sorrow after hearing about the death of Robin Williams, whom she had met and befriended years prior (Coffey 2014). Koko is clearly a complex specimen, but is she a person?

I will go ahead and assume that all readers of this paper are human beings who believe that they are persons. Intuitively speaking, our conception of personhood begins with the idea that we take ourselves to be persons. We define personhood as an entity that has attained the highest of statuses, a status equal to ourselves. As such, personhood is associated with increased legal protection, moral worth, and metaphysical value. Each of these three associations describes a different kind of personhood: legal personhood, moral personhood, and metaphysical personhood. This thesis, as the title suggests, focuses on metaphysical personhood. However, before I begin my exploration of metaphysical personhood, it is beneficial to untangle the differences between these three types of persons. This will make the objective of metaphysical personhood clearer.

According to Amy Kind, to be a legal person “is to be the subject of legal rights and obligations” (Kind 2015, 4). Kind offers the example of the Fourteenth Amendment which protects a person’s right to life, liberty, and property (Kind 2015, 3-4). While the determination of legal personhood can pull heavily from the concepts of metaphysical and moral personhood, in practice its objective is judicial and therefore the scope of legal personhood is often expanded or retracted in order to fulfill political purposes. For example, in the past, slaves and women were excluded from legal personhood in order to restrict their voting rights. On the other hand, many pro-life advocates wish to grant fetuses full legal personhood in order to abolish abortion. These pro-lifers might not believe that fetuses have moral or metaphysical personhood but will still define fetuses as legal persons in order to ban abortion. Since legal personhood is defined by legal systems, what constitutes a legal person in one country might be different than another. This is not the case with moral or metaphysical personhood. These kinds of personhood attempt to define personhood universally through innate features that distinguish persons from non-persons.

Kind defines moral personhood as an entity that we include “as part of our moral community and treat [...] as deserving of moral consideration” (Kind 2015, 5). Often, moral personhood is interpreted as synonymous with the right to life. Upon this perspective, a philosopher attempting to define moral personhood is attempting to determine which moral qualities in an agent grant that agent its right to life. Another perspective on moral personhood is to define a moral person as an entity that has moral status. Mary Anne Warren describes moral status as “a means of specifying those entities toward which we believe ourselves to have moral obligations, as well as something of what we take those obligations to be” (Warren 1997, 9). Moral status includes the right to

life but is also more encompassing. One example of moral status in use would be the difference in the moral wrongness of kicking a cat or slapping a human. Those that intuit a greater wrongness in slapping a human over kicking a cat would justify their reasoning through the human having greater moral status than a cat. The objective in defining moral personhood, then, is to determine the features of a human that grant humans greater moral status than a cat.

This brings us to the last account of personhood: metaphysical personhood. Kind points out a key distinction between accounts of metaphysical personhood versus accounts of legal or moral personhood. Legal and moral personhood are evaluative. Ascribing an entity legal personhood grants that entity legal rights and ascribing an entity moral personhood grants that entity moral status. However, ascribing an entity legal or moral personhood “does not thereby tell us anything about what kind of thing it is or what properties it has” (Kind 2015, 12). Metaphysical personhood, on the other hand, is a descriptive notion. This means that attributing metaphysical personhood to an entity provides “at least a partial description of it” (Kind 2015, 12). This description allows us to better understand what distinguishes metaphysical persons from non-persons.

In order to engage with any account of metaphysical personhood we must begin with the assumption that metaphysical personhood exists. After we accept this premise, any exploration of metaphysical personhood begins with intuition. This is because the question of metaphysical personhood stems from our curiosity in determining what makes us, metaphysically, what we are. Our intuition tells us that fully functioning adult humans are clearly persons whereas insects are clearly not. But what about Koko, aliens, robots, artificial intelligence, fetuses, children, and disabled humans? For these, the answer is not immediate. While our intuitions are powerful and can help with obvious

base cases, further exploration is needed to make determinations on murky “edge” cases. For any proposed account of metaphysical personhood to be successful, it must conform with our intuitions to obvious base cases. For remaining edge cases, a successful theory of metaphysical personhood should offer strong reasons for why a specific entity is classified as a person or non-person. This reasoning should abide with, at least somewhat, our general intuitions regarding metaphysical personhood.

Now that we understand the objective behind metaphysical personhood, we can look at some existing accounts of metaphysical personhood.

Chapter 1: Existing Accounts of Metaphysical Personhood

Many attempts have been made to define metaphysical personhood. One definition of “person,” endorsed by colloquial language, is a living being with human genetics or a human body. S. F. Sapontzis points out that this use of the term includes babies or intellectually and developmentally disabled adults while excluding other animals such as dogs. This seems strange considering that, as Sapontzis emphasizes, “the behavior of a normal, adult dog is more organic, intelligent, and self-aware than that of a human infant or a human adult suffering some severe muscular, neurological, or mental disorder” (Sapontzis 1981, 608). Under this account of personhood, no matter how advanced a non-human animal, the animal cannot be a person. On the other hand, no matter how limited the mental or physical functioning of a human, the human is a person. From a philosophical perspective, most readers would object to such a contradictory account of personhood. Fictional worlds such as Star Trek and Narnia have depicted non-human and sometimes non-physical entities, such as aliens, animals, robots, or artificial intelligence, with human qualities. General intuition would indicate that these fictional beings possess equal metaphysical status to humans and should be granted metaphysical personhood. Since non-human beings can be persons, we need an account of personhood that is not dependent on physical bodily attributes.

Some philosophers circumnavigate the physical body dilemma by arguing that metaphysical and moral personhood are one and the same. They then seek to define metaphysical personhood through moral status. I disagree with this as moral and metaphysical personhood, as stated in the introduction, have different objectives: one being evaluative and the other being descriptive. While moral personhood is interested in determining what grants an entity full moral status, metaphysical personhood is interested

in determining which attributes constitute the nature of persons. It is likely that moral and metaphysical personhood are closely interconnected, and it is plausible that they are perfectly correlated. If metaphysical and moral personhood are perfectly correlated, all metaphysical persons would have full moral status and all entities with full moral status would be metaphysical persons. However, perfect correlation does not imply sameness. Let me give an example to demonstrate this. In 2016, the Atlantic wrote an article about how humans are the only animals with chins. Before you object, the Atlantic defines “chin” as “a lump of bone that protrudes from the lower jaw” (Yong 2016). Many animals have a bottom section to their face that looks like a chin, but other than humans no animal has a bone extending from their lower jaw. This means that “human” and “organism with a chin” are perfectly correlated concepts, however this does not mean the two concepts have the same meaning.

Immanuel Kant attempts to avoid the body dilemma by removing the human body as a requirement for metaphysical personhood. In his book, *Critique of Practical Reason*, Kant argues that metaphysical persons are entities with advanced capacities such as reason, free will, and moral sense (Kant 2015). Kant’s definition of personhood is complex, and it is difficult to ascertain whether or not he is trying to depict metaphysical or moral personhood. From my understanding, Kant is attempting to define metaphysical personhood. However, his definition of metaphysical personhood is perfectly correlated with moral personhood.

Mary Anne Warren summarizes Kant’s reasoning as to why persons are distinct from other animals. Persons “are free to act upon the deliverances of reason, rather than merely from natural causes. Unlike other animals, we are not motivated solely by emotion, instinct, and other non-rational forces. Because we can neither doubt our

freedom, nor find room for it in the natural world, we must locate it within the realm of things in themselves, where causal laws do not apply” (Warren 1997, 100). We humans, according to Kant, are persons because of our ability to reason. Kant believes that reason breaks the cycle of instinctual cause and effect that restricts lesser animals and allows us to determine right from wrong. Most importantly, Kant believes the freedom we obtain from reason grants us moral agency as we can be held responsible for acting in accordance with or against our moral obligations. This moral agency, according to Kant, is what distinguishes metaphysical persons from non-persons. Moral agency is also what Kant believes grants an entity full moral status, making Kant’s metaphysical personhood seemingly perfectly correlated with moral personhood.

The issue with Kant’s construction of personhood is moral agency. In order for an agent to be morally responsible for its actions it must have free will. On this, Kant and I agree. The problem with free will is that free will and determinism are exclusive. One cannot exist with the other. Should this world operate deterministically, all agents would have no free will. For any action there would have been no possibility to act otherwise. Kant claims that the ability to reason grants persons free will. However, in a deterministic world, reason would be a function of chemistry, biology, and physics. Determinists argue that our genetics, environment, and past experiences determine the neurological pathways within our brains. These neurological pathways, when activated by internal or external stimuli, dictate our reasoning. This means that our reasoning is predetermined by factors outside of ourselves and therefore free will cannot exist. If free will does not exist, no agent could be morally responsible for their actions. We cannot hold someone responsible for an action if they could not have done otherwise.

Some compatibilists would argue that it is possible to have moral agency in a deterministic world. The most famous of these arguments is made by Harry Frankfurt. He rejects the premise that moral agency requires the possibility to have done otherwise. In his paper, "Alternate Possibilities and Moral Responsibility," Frankfurt offers an example where he believes an agent could not have done otherwise but still has moral responsibility. His example, summarized by the Stanford Encyclopedia of Philosophy, can be roughly paraphrased as follows. Suppose Jones wishes to shoot Smith. A third actor, Black, wants Smith dead and therefore wants Jones to shoot Smith. Black is worried that Jones will waver in his determination to shoot Smith and so Black takes necessary precautions. He utilizes hypnosis and the insertion of a mind-altering chip to ensure that should Jones waver, Black can force Jones to shoot Smith. Suppose that Jones carries out his plan without wavering. He shoots Smith without the need of any intervention from Black. In this example, Jones had no alternative option. Had Jones wavered, he would have been manipulated by Black and would have still shot Smith. However, Frankfurt argues that, despite his lack of choice, Jones is morally responsible for shooting Smith because he shot Smith out of his own volition. Therefore, Frankfurt believes you can be held morally responsible even if you could not have done otherwise (McKenna and Coates 2019).

The issue with Frankfurt's account of compatibilism is that it mistakes determinism with the idea that one could not have done otherwise. According to Frankfurt, despite the fact that he had no alternative options, Jones's volition to shoot Smith stems from his free will. We can then hold Jones morally accountable for his volition. Frankfurt believes he has given an account of free will in a deterministic world. However, if our world is deterministic, Jones deciding to shoot Smith out of his own

volition, rather than due to Black's manipulation, was predetermined by his genetics, environment, and experiences. Therefore, Jones volition is not rooted in free will and we cannot hold him morally responsible for having that volition.

There is heavy debate in the philosophical community on the reality of determinism. Kant, who believes in the possibility of free will, might argue that his account of metaphysical personhood is valid. However, Kant's account of determinism is dependent on the falsity of determinism. The issue with this is that the reality of determinism should be irrelevant to metaphysical personhood. Should we discover the world is deterministic, the idea of metaphysical personhood should not cease to exist. Even in a deterministic world, there are notable metaphysical differences between an insect and a human. These metaphysical differences indicate that there exists a line that separates persons from non-persons. Remember, metaphysical personhood is universal and should explain all instances of personhood: in deterministic and nondeterministic worlds. Therefore, any sound account of metaphysical personhood cannot be dependent on free will. Because Kant's account of metaphysical personhood is dependent on free will, his account is at best identifying confounding variables for personhood.

Now that we have determined determinism cannot be a barrier for metaphysical personhood, we must explore other accounts of personhood. John Locke and Harry Frankfurt offer two possible accounts of metaphysical personhood that are independent of determinism and free will.

Locke defines a person as a "thinking intelligent being, that has reason and reflection, and can consider itself as itself, the same thinking thing, in different times and places; which it does only by that consciousness which is inseparable from thinking" (Locke 1690, 211). Locke's account of personhood shares some similarities with Kant's.

Both believe that the capabilities of intelligence and reason are necessary for personhood. However, Locke differs with Kant in that he adds consciousness and removes moral agency as necessary criteria of personhood. While this solves for the issue of determinism, Locke's definition is not sufficient. Modern research and case studies have provided evidence that many non-human organisms have capacities for intelligence, reason, and consciousness. In fact, a paper written by Andrew Barron and Colin Klein suggests that insects' "capacity for selective attention supports [the] assertion that insects have a capacity for subjective experience" (Barron and Klein 2016, 4905). This means that insects have consciousness.

Furthermore, a recent study conducted in the University of Michigan provides evidence that paper wasps exhibit behavior that resembles logical reasoning. This study, conducted by Elizabeth Tibbets, shows that paper wasps are capable of transitive inference, a type of logic. Transitive inference is a form of deductive reasoning which utilizes the transitive property. One example of transitive inference is concluding that if $A > B$ and $B > C$ then $A > C$. In her study, Tibbets tested whether wasps could create a hierarchy of colors. To do this, she exposed paper wasps to several bicolored chambers. In each chamber, when the wasp moved towards the "inferior" color, the wasp would be shocked. For the other color, no shock would be administered. For example, in a chamber with the colors blue and green, the wasp would be shocked when moving towards green but not when moving towards blue. This teaches the wasp that blue is "better" than green. Tibbets repeated this across multiple chambers with different color combinations to see if wasps could develop a color hierarchy using transitive inference. For example, if a wasp learned that blue is better than green, and that yellow is better than blue, then the wasp

would know that yellow is better than green. Surprisingly, wasps moved in the direction of the favorable color around 67% of the time (Tibbetts et al. 2019).

Under Locke's account of personhood, paper wasps are persons. However, this contradicts intuition and for good reason. There are many notable differences between humans and paper wasps. While paper wasps may meet Locke's requirements of intelligence, reason, and consciousness, humans have a higher aptitude for all of these abilities. Locke's barebones definition of metaphysical personhood places no minimum threshold for the extent of the abilities he requires for personhood. This results in an account of metaphysical personhood that is far too encompassing.

Frankfurt's definition of metaphysical personhood is the last account I will consider. He comes closest to successfully defining metaphysical personhood as he is immune to the issue of determinism and the issue of minimum thresholds that exclude insects from personhood. In his paper, "Freedom of the Will and the Concept of a Person," Frankfurt defines personhood as the possession of second order volitions. The concept of second order volitions is incomprehensible without first understanding first and second order desires. According to Frankfurt, first order desires are "simply desires to do or not to do one thing or another" (Frankfurt 1971, 7). For example, if I am hungry and sit next to a cupcake, I will have the first order desire to want to eat that cupcake. According to Frankfurt, all animals have first order desires. However, not all animals have second order desires. A second order desire is a desire to have a desire. Going back to the aforementioned example, I might not want to have the desire to eat a cupcake. I might want to have a desire to eat a healthier snack. Not all second order desires move us to action. There are instances where we have second order desires but do not want those second order desires to influence our decisions. This might seem counterintuitive, but

Frankfurt offers an example of such an instance. Suppose a psychotherapist specializes with drug addicts. This psychotherapist believes that his ability to treat and psychologically analyze his patients would be improved if he understood their urge to abuse drugs. He therefore has a desire to desire drugs. However, the psychotherapist is fully aware of the danger of drugs and so while he has this desire to desire drugs, he does not want this second order desire to push him to abuse drugs (Frankfurt 1971, 9). When an entity has a second order desire that it wishes to be its will, Frankfurt considers this entity to be a person. Frankfurt calls these types of second order desires second order volitions. Entities that have second order desires but are incapable of second order volitions are what Frankfurt calls wantons, which is a status above basic animals but below persons. A wanton does not concern itself with the question of its will. This does not mean that a wanton has no rational abilities. It is possible for a wanton to use reason to deliberate and determine the best means of acting upon its desire. However, a wanton does not care which of its first order desires is the desire that move it to action.

To illustrate the difference between a wanton and a person, Frankfurt offers the example of two addicts. Both addicts are physically incapable of resisting their addictions. However, the first addict wishes he was not addicted to drugs. He wishes that his desire towards a healthy lifestyle was the desire that motivated his actions. However, against his wishes, it is ultimately his physical desire for drugs that moves him to action. This addict is what Frankfurt calls the unwilling addict. The unwilling addict exhibits a second order volition. He wants his desire to not abuse drugs to be his will. He is therefore, according to Frankfurt, a person. The other addict does not care whether or not his addiction motivates his actions. This second addict might have multiple first order desires, one of which is to not abuse drugs. However, he has no preference as to which

first order desire motivates his actions. Rather, he submits to the strongest of his first order desires and never considers which first order desire he would like to be his will. This second addict is a wanton as he does not have any second order volitions (Frankfurt 1971, 12-13).

Frankfurt's account of personhood is independent of determinism. Second order volitions can exist due to deterministic causes or free will. His account is also not susceptible to the paper wasp problem faced by Locke. Frankfurt's definition excludes most animals, and especially insects, from personhood as these organisms are incapable of second order volitions. Despite this, Frankfurt's account is still lacking. His sole requirement of personhood is second order volitions. This implies that an entity with second order volitions, but without thought or reason, is a person. Frankfurt believes such an entity is impossible. I disagree. It is entirely conceivable for an entity to have first order desires, second order desires, and second order volitions without any ability for thought and reason.

Take, for example, an alien species that operates in a hive-like society revolving around a queen. The queen is complex. She is capable of thought and reason. However, each of the non-queen entities, which we shall call minions, of this species have no ability to think or reason. They do have base instincts which drive their first order desires. In this alien society, the queen has the ability to influence her minions via telekinesis. This influence acts as the minions' second order desires and second order volitions. For example, assume the minions have a first order desire to eat yogurt. Let's say that on a particular day, the queen is craving yogurt. Due to limited stores of yogurt, the queen uses telekinesis to influence her minions to have the second order desire to desire not to eat yogurt. Furthermore, she is capable of influencing the minions in such a way that

these minions wish this second order desire was their will. These minions are then capable of second order volitions. Consequently, according to Frankfurt, minions are persons. This seems erroneous. It makes sense to assume the queen is a metaphysical person, but to ascribe the same metaphysical status to minions just feels wrong. The minions are incapable of thinking for themselves and simply desire what they are told to desire. This makes minions closer to machines than us. The ability to think and reason are integral to what gives us metaphysical value and should be criteria for metaphysical personhood. In this regard, like Locke's account of personhood, Frankfurt's account of personhood is too lenient.

Chapter 2: The Capabilities Approach for Metaphysical Personhood

Locke's and Frankfurt's accounts of metaphysical personhood offer good starting points for thinking about what constitutes metaphysical personhood, but both accounts are insufficient. They both introduce important abilities and functions that are important for personhood but neither account provides a list of criteria that effectively weeds out all non-persons. The question then becomes how do we find such a list?

I believe to answer this question we must look to the dignity of persons. Before I continue, it is important to understand what dignity is. Paul Formosa and Catriona Mackenzie define dignity as follows: "x has dignity if and only if x has a respect-worthy status. [...] A status is respect-worthy if it is a weighty and important status to which we should respond with (something like) awe or reverence" (Formosa and Mackenzie 2014, 877). Formosa and Mackenzie outline two types of dignity that persons possess: achievement dignity and status dignity. However, there is a third type of dignity, species dignity, that the two philosophers overlooked. Martha Nussbaum explores this type of dignity, as it relates to humans, through what she calls the Capabilities Approach to Human Development.

According to Formosa and Mackenzie, achievement dignity is tiered and temporary. It can be gained or lost based on present achievements or states of being. For example, I gain achievement dignity when I act virtuously and tutor children at my local orphanage. I lose achievement dignity when I act dishonorably and lie for my own advantage (Formosa and Mackenzie 2014, 880).

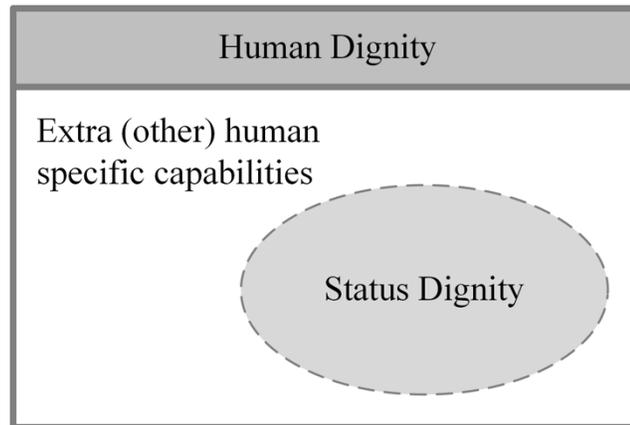
Species dignity is an Aristotelian concept and relates to the dignity that stems from the capabilities that define what it means for a specific species to flourish. A capability is to be capable of doing a particular action. While a species might have many

capabilities, only a handful define what it means to be a member of that species. Let us call these capabilities the flourishing-capabilities. Nussbaum believes flourishing-capabilities are respect-worthy qualities and that the restriction of any of these flourishing-capabilities is an affront to a species' dignity. Therefore, to have species dignity is to have all of the capabilities that are flourishing-capabilities for a particular species. For example, for pigeons, flying is essential to what it means to be a pigeon. Should a pigeon be locked in a cage and restricted from flying, we would consider that to be an offense to the pigeon. Therefore, flying is a flourishing-capability for pigeons and constitutes a part of a pigeon's species dignity. This is a quick summary of species dignity and the role Nussbaum believes capabilities play in regard to species dignity. In reality, Nussbaum defines three kinds of capabilities, each of which plays a part in species dignity. I will dive deeper into species dignity, specifically the species dignity of humans, and explain the concept of capabilities in greater detail later in this chapter.

Finally, status dignity is binary. You either have it or you don't. Status dignity "refers to the respect-worthy status of a person him or herself" (Formosa and Mackenzie 2014, 877). Status dignity is closely related to species dignity. If an organism has all the necessary capabilities necessary for personhood, that organism has status dignity. To have status dignity is what it means to be a person. This means that all capabilities necessary for status dignity are flourishing-capabilities for persons. This also means that, by definition, all persons have status dignity and all entities with status dignity are persons. However, while all persons have status dignity, it is possible for persons to have additional species-specific flourishing-capabilities.

But which capabilities are necessary for status dignity? To find out, we can look to the species dignity of humans, otherwise known as human dignity, since we know that

humans are persons. Because humans are persons, the capabilities that define human dignity include all the necessary capabilities for status dignity along with other human specific capabilities. I have created a visual representation in the following figure.



If we filter out all the other human specific capabilities, which are capabilities that seem to be specific to humans but irrelevant for personhood, we are left with the capabilities necessary for status dignity and thus metaphysical personhood.

Martha Nussbaum is renowned for her exploration of human dignity in her book *Creating Capabilities: The Human Development Approach*. To determine which capabilities are flourishing-capabilities for humans, Nussbaum provides the case study of an Indian woman named Vasanti whose capabilities are at first restricted but then later allowed to prosper. When Vasanti's story begins, she is married to a husband who does not respect her and who regularly abuses her. In addition to suffering from domestic violence, Vasanti is forcefully cut off from her family, friends, and community. She is not allowed to work and is incapable of engaging in politics due to a lack of education and a forced seclusion that has left her illiterate and oblivious to current events. Her domestic problems are compounded due to the fact that her husband is an alcoholic gambler. In order to earn some quick cash, Vasanti's husband takes advantage of a government

program seeking to curb population growth by offering monetary incentives for men who undergo vasectomies. The vasectomy proves disastrous for Vasanti as it makes it impossible for Vasanti to bear children with her husband. With no possibility for children in the future and no existing children in need of care, Vasanti's perceived usefulness in the eyes of her husband is diminished resulting in an escalation of domestic abuse.

Unhappy with her life, Vasanti leaves her husband and returns home.

At home, Vasanti's life takes an upwards turn. Her father passed away years prior but fortunately her brothers are there to take care of her. They run an auto parts shop and allow Vasanti to use one of the machines to start her own business. She uses the machine to make components for sarees. With some financial support from her brothers as well as a local nonprofit organization, Vasanti is able to take out a loan to buy more machines and expand her business. Inspired by her newfound confidence and hoping to improve the lives of others like herself, Vasanti begins volunteering to combat domestic abuse in her local community. While volunteering, Vasanti begins to make meaningful friendships with like-minded women. By the time Nussbaum meets Vasanti, Vasanti has plans to enroll in educational programs that will teach her how to read, write, plan her personal finances, and be politically involved (Nussbaum 2011).

After Nussbaum completes her story, she asks her readers to focus on the aspects of Vasanti's narrative that stand out. To most readers these themes include: domestic abuse, education, companionship, financial independence, and self-confidence. These themes stand out because we believe they are related to what Vasanti has the power to do and be (her capabilities) and they have a profound impact on her sense of self-worth and her human flourishing. We feel empathy for Vasanti when we hear her capabilities to form friendships, work, and live at home safely are restricted by her husband. When we

learn that Vasanti eventually leaves her husband, giving her access to capabilities she previously lacked, we assume her quality of life improved.

Based off this case study, Nussbaum has made it evident that there are certain capabilities that are central for human life. Before diving into the list of capabilities necessary for human dignity, we must first understand Nussbaum's three sub classifications of capabilities: innate abilities, internal capabilities, and combined capabilities.

Innate abilities are the traits we are born with. For example, Vasanti was born with the innate ability to see. Internal capabilities are "trained or developed traits and abilities, developed, in most cases, in interaction with social, economic, familial, and political involvement" (Nussbaum 2011, 21). While Vasanti might have been born with the ability to see, she was not born with the ability to read. She might be able to distinguish different letters from each other, but without any education, she would be illiterate. However, with the help of some schooling, over time, she can become a skilled and quick reader. Any development of internal capabilities is useless without the freedom and resources to express them. Even if Vasanti learns how to read, this skill would be useless if she is restricted from books, newspapers, and the internet. This brings Nussbaum to her concept of combined capabilities. A combined capability is the alignment of an internal capability and the external conditions that grant the freedom for the ability to manifest itself. Going back to the reading example, Vasanti would have the combined capability to read if she had learned how to read and had access to meaningful reading material. On the other hand, no matter her external circumstances, Vasanti would never have the innate ability nor would it be possible for her to develop the internal

capability to jump twenty feet in the air. Consequently, she would never have the combined capability to jump that high.

Capabilities are not to be confused with functioning. A functioning is a state of being. Take the comparison of a person who is fasting and a person who is starving. Both people have the exact same functioning in regard to nutrition. They are both facing a caloric deficit. However, the fasting individual is doing so by choice. They have the capability to fast or not fast. On the other hand, the starving individual has no such capability.

With an understanding of these sub-classifications of capabilities, we can now engage with Nussbaum's construction of human dignity. Nussbaum defines human dignity by the ways it can be violated. Human dignity can be violated in one of two ways. The first manner it can be violated is when "social, political, familial, and economic conditions [...] prevent people from choosing to function in accordance with a developed internal capability: this sort of thwarting is comparable to imprisonment" (Nussbaum 2011, 30-31). The other manner in which dignity is violated is when, due to poor conditions, the development of internal capabilities is stunted (Nussbaum 2011, 31).

Clearly not all internal and combined capabilities are necessary for dignity. For example, when Vasanti's husband restricts her from making friends, we consider that to be an affront to her dignity. However, if her husband restricts her from crowing like a rooster, we would not consider her dignity to be similarly offended. According to Nussbaum, there are ten central capabilities that are necessary for human flourishing and therefore must be protected to respect human dignity. Here is Nussbaum's presentation of these capabilities.

Capability	Nussbaum's Exact Description (Nussbaum 2011, 33-34)
Life	Being able to live to the end of a human life of normal length; not dying prematurely, or before one's life is so reduced as to be not worth living.
Bodily Health	Being able to have a good health, including reproductive health; to be adequately nourished; to have adequate shelter.
Bodily Integrity	Being able to move freely from place to place; to be secure against violent assault, including sexual assault and domestic violence; having opportunities for sexual satisfaction and for choice in matters of reproduction.
Senses, Imagination, and Thought	Being able to use the senses, to imagine, think and reason-and to do these things in a "truly human" way, a way informed and cultivated by an adequate education, including, but by no means limited to, literacy and basic mathematical and scientific training. Being able to use imagination and thought in connection with experiencing and producing works and events of one's own choice, religious, literary, musical, and so forth. Being able to use one's own mind in ways protected by guarantees of freedom of expression with respect to both political and artistic speech, and freedom of religious exercise. Being able to have pleasurable experiences and to avoid nonbeneficial pain.
Emotions	Being able to have attachments to things and people outside ourselves; to love those who love and care for us, to grieve at their absence; in general, to love, to grieve, to experience longing, gratitude, and justified anger. Not having one's emotional development blighted by fear and anxiety. (Supporting this capability means supporting forms of human association that can be shown to be crucial in their development.)
Practical Reason	Being able to form a conception of the good and to engage in critical reflection about the planning of one's life. (This entails protections for the liberty of conscience and religious observance.)

Capability	Nussbaum's Exact Description (Nussbaum 2011, 33-34)
Affiliation	(A) Being able to live with and toward others, to recognize and show concern for other human beings, to engage in various forms of social interaction; to be able to imagine the situation of another. (B) Having the social bases of self-respect and nonhumiliation; being able to be treated as a dignified being whose worth is equal to that of others. This entails provisions of nondiscrimination on the basis of race, sex, sexual orientation, ethnicity, caste, religion, national origin.
Other Species	Being able to live with concern for and in relation to other animals, plants, and the world of nature.
Play	Being able to laugh, to play, to enjoy recreational activities.
Control over Environment	(A) <i>Political</i> . Being able to participate effectively in political choices that govern one's life; having the right of political participation, protections of free speech and association. (B) <i>Material</i> . Being able to hold property (both land and movable goods), and having property rights on an equal basis with others; having the right to seek employment on an equal basis with others; having the freedom from unwarranted search and seizure. In work, being able to work as a human being, exercising practical reason and entering into meaningful relationships of mutual recognition with other workers.

The above table of capabilities and the descriptions for them is specific to human dignity and not status dignity. To modify the table to suit status dignity we must remove some capabilities and modify the remaining to remove any excess qualities that are specific to what humans are but not necessarily what our intuitions towards persons are.

In chapter 1, we entertained the idea of robots and artificial intelligence being persons. Since these entities are not “alive” and do not always have bodies, we can

remove the capabilities of life, bodily health, and bodily integrity as those are dependent on life and bodies. We must also remove or modify any capabilities that reference human culture or politics. This is because not all species share our culture or politics, however, they might still be complex enough in their capabilities to be persons. With this in mind, we can immediately remove the capability for “control over one’s environment” as it is entirely related to human culture and politics. To modify the remaining six capabilities, we must remove all references to race, gender, religion, property ownership, politics, etc. These attributes, while playing a large role in human life, might not be relevant to other advanced species that could be persons. After modifying Nussbaum’s capabilities, we are left with a table of internal and combined capabilities that must be protected in order to respect a person’s status dignity. This table can be seen on the next page.

Before examining the modified table, keep in mind that all persons have status dignity. This means that for an entity to be a person, the entity should have the potential to develop, under the right circumstances, the following internal and combined capabilities. If, for whatever reason, these capabilities are not allowed to develop or manifest themselves, the entity still has status dignity and thus personhood, however, the entity’s status dignity has been disrespected.

Capability	Modified Description of Nussbaum’s Capabilities (Nussbaum 2011, 33-34)
Senses, Imagination, Thought, and Reason	<p>Being able to use senses to imagine, think, and reason at a high capacity. A person is able to use imagination, thought, and reason to make critical judgements about itself, what is best for itself, and to form a conception of the good while critically reflecting on it. In addition to having a conception of the “good,” a person must be able to act in accordance with this conception rather than succumb to instinct and basic desire. A person must be able to use imagination and reason to form second order volitions. In other words, a person must be able to imagine several variants of itself under different first order desires and use reason to determine which variant it would like to embody. Furthermore, a person should be able to produce self-expressive works. Finally, a person should be able to have pleasurable experiences and be able to avoid unnecessary pain.</p> <p>This capability has been heavily modified from Nussbaum’s original presentation. Nussbaum treats “Practical Reason” as a separate capability. I believe senses, imagination, thought, and reason are used simultaneously and should be one capability. Nussbaum states that senses, imagination, and thought must exist in a “truly human way.” For this modified capability, I expand upon what that means. I also remove references to human culture such as religion.</p>
Emotions	<p>Being able to have attachments to things and people outside ourselves; to love those who love and care for us, to grieve at their absence; in general, to love, to grieve, to experience longing, gratitude, and justified anger. Not having one’s emotional development blighted by fear and anxiety.</p> <p>This capability remains exactly the same as Nussbaum’s original presentation.</p>

Capability	Modified Description of Nussbaum's Capabilities (Nussbaum 2011, 33-34)
Affiliation	<p>A) Being able to live with and show concern for others, empathize with (and show compassion for) others and the capability of justice and friendship. (B) Being able to have self-respect and not be humiliated, that is, being treated with dignity and equal worth.</p> <p>This capability is a modified version of Nussbaum's original presentation. Nussbaum's originally included references to humanity and human specific attributes such as race, gender, religion etc. This capability was modified to remove all references of those human specific attributes.</p>
Other Species	<p>Being able to live with concern for and in relation to other animals, plants, and the world of nature.</p> <p>This capability remains exactly the same as Nussbaum's original presentation.</p>
Play	<p>Being able to play and to enjoy recreational activities.</p> <p>This capability is a slightly modified version of Nussbaum's original presentation. Nussbaum includes laughter in this capability. It is possible that some advanced organism is as advanced as a human but unable to laugh due to biological limitations. Therefore, the only change to this capability is the exclusion of laughter.</p>

These five capabilities are associated with status dignity and hence metaphysical personhood. Remember, if an entity has status dignity then the restriction of any of these combined capabilities or the suppression of the development of any of these internal capabilities is a wrongdoing on that entity. This means that a creature has status dignity and therefore personhood if the creature has all the innate abilities to the degree necessary

for all of the above capabilities to be within the potential for that creature. The creature need not have the internal or combined capabilities but only have the potential to develop them. Therefore, when testing for personhood, we must test for the innate abilities and the strength of those abilities rather than checking if the creature has demonstrated examples of the capabilities themselves. This is because it is possible that a creature has the innate abilities necessary for these capabilities but due to external circumstances were never able to develop the internal or combined capabilities listed above. In such an instance, the creature still has its status dignity and thus personhood. However, the creature's status dignity has been disrespected. With this in mind, the list of innate abilities that define metaphysical humanity is outlined in the following table.

Capability	Prerequisite Innate Abilities
Senses, Imagination, Thought, and Reason	Ability for self-awareness Ability to sense Ability to imagine Ability to think Ability to reason
Emotions	Ability to feel emotions
Affiliation	Ability to empathize (the ability to empathize requires the prerequisites abilities to feel emotions to imagine oneself as another)
Other Species	Ability to empathize
Play	Ability to sense Ability to imagine Ability to think Ability to reason

In summary, to achieve metaphysical personhood, an entity must have the following innate abilities: ability for self-awareness, ability to sense, ability to imagine, ability to think, ability to reason, ability to feel emotion, and ability to empathize. Furthermore, these innate abilities must be complex enough for the owner of these abilities to have the potential for all five internal and combined capabilities needed for status dignity. Now, all that is left is to test this new account of personhood.

Chapter 3: Testing the New Account of Metaphysical Personhood

To check if this new capability approach to personhood is viable, we must see how it classifies obvious cases such as humans and insects. If this new account of personhood is successful it should, at the very least, classify humans as persons and insects as non-persons. If this new approach is successful for the basic cases, we can continue to test it on more difficult cases such as dogs, chimpanzees, and dolphins. For this account of personhood to be superior to the accounts listed in chapter 1, it must also effectively handle the problems and counterexamples addressed in chapter 1. This means the capabilities approach to personhood must be independent of determinism, must classify paper wasps as non-persons, and must classify the minions from the hive mind example as non-persons. If the capabilities account of personhood can pass these tests, then we can continue to test this account of personhood with more complicated edge cases such as Koko the gorilla, children, disabled humans, advanced aliens, and advanced artificial intelligence. Based on the results of these complicated cases, we can learn more about what it means to be a metaphysical person.

I previously mentioned that in regard to personhood it is the existence of innate abilities rather than internal and combined capabilities that define personhood. The reason being that it is entirely possible that a creature has the relevant innate abilities to have certain internal and combined capabilities but due to environmental circumstances was never able to develop those capabilities. However, for the purposes of the following tests, I will assume that if no creature of a particular species has ever shown a particular internal or combined capability then that species likely does not possess the innate abilities to the degree necessary to develop those capabilities. This is by no means a guaranteed assumption, but it is a necessary one to proceed with practical testing.

Let us start with humans. We know that humans meet the requirements for personhood because the requirements for status dignity are simplified versions of the requirements for human dignity. Now we can move onto insects. In chapter 1, we determined that insects are capable of self-awareness and some insects, like paper wasps, are able to reason. This proved to be problematic for Locke as his account of personhood results in paper wasps being persons. However, under the capabilities approach to metaphysical personhood, there are additional requirements for personhood. Even if wasps are capable of basic logic, this does not mean that wasps possess the ability to reason to the degree necessary for metaphysical personhood.

Under the capabilities approach, in order for a wasp's innate ability for reason to meet the threshold for personhood, they must be able to use reason to form a conception of "good." Furthermore, a wasp should be able to act on reason even if its reason contradicts with its instincts and immediate desires. In the case of humans, this can be seen when we choose to forego unhealthy snacks for our long-term health. In that instance, we are using reason to override an immediate instinctual desire. We do not know if wasps have the ability to reason to the degree necessary for personhood. In the case of the color experiment, we know that wasps will go towards a favorable color because they want to avoid being shocked. This shows they have the ability to use reason to act in accordance with immediate desires. Currently, we have no evidence that wasps are capable of creating a conception of "good" or are capable of using reason to override immediate desires.

But even if paper wasps do have the innate ability for reason powerful enough to count towards personhood, they still do not meet other requirements for personhood. One of the abilities wasps are lacking is the ability to feel emotions. According to Timothy

Gibb, an Entomologist at Purdue University, “most entomologists agree that insects do not feel emotion – at least, not in the same way that humans do. Their brains are too simple, missing the key parts associated with emotion in human brains. There may be some level of awareness in insect consciousness but not to the extent of feeling attraction, or empathy or happiness or sadness or even the ability to feel joy or pain” (Gibb, Purdue).

So far, the capabilities approach to personhood has effectively classified humans as persons and has classified insects, including the more advanced wasps, as non-persons. This means this new approach, at the very least, improves upon Locke’s account of personhood. But does it solve for the issues faced by Kant and Frankfurt? Remember that Kant ran into the problem of determinism. If determinism were real, his version of metaphysical personhood ceases to exist. This is not an issue for the capabilities approach to personhood. No aspect of self-awareness, sense, imagination, thought, reason, emotion, or empathy are predicated on free will or determinism. Therefore, all seven necessary innate abilities required for personhood can exist in both a free and a deterministic world.

Next, let us consider the counterexample to Frankfurt’s account of personhood, the case of the hive minded minions. In this counterexample, hive minded minions have second order volitions imposed upon them by their queen, however they do not have the innate ability to reason. Since minions are incapable of reason, according to the capabilities approach to personhood, they are not persons. Because this new account successfully classifies minions as non-persons, this new account of personhood improves upon Frankfurt’s account of personhood.

Now we can move onto more complex animals such as dogs, chimpanzees, and dolphins. To determine if these animals are persons, we must test to see if they have all

the necessary innate abilities for personhood. The first two abilities, self-awareness and sensation, are obvious and do not need further explanation. All three animals clearly have a sense of self awareness and are capable of processing sensory inputs.

All three animals also have the innate ability of emotion. Any dog owner can tell you that their dog has a full range of emotions including but not limited to: anger, happiness, sadness, and love. Meanwhile, chimpanzees have been shown to mourn death. Researchers James Anderson, Alasdair Gillies, and Louise Lock studied a group of chimpanzees in Scotland and noticed that the chimpanzees supported an elderly female prior to her death. Following the death of their companion, the chimpanzees remained somber and avoided the site of their friend's death. (Anderson, Gillies, and Lock 2010). Dolphins are also known to feel emotion. A quick Google or Youtube search will show many instances of dolphins acting happy or sad. In addition, heartbreaking photo evidence from the Evening Standard shows a grieving dolphin carrying her dead calf for days after its death (Tobin 2019). Furthermore, many dolphins show signs of depression and other negative psycho-physiological effects when forced into captivity. This mental stress often results in the premature death of these dolphins (Carter 1982, 194-195). All three animals clearly have the innate ability to feel emotion and these emotions are complex enough to demonstrate the capability of emotion needed for status dignity.

These three animals also have strong abilities for empathy. Dogs are known to comfort their owners during times of trauma. Dogs are also known to put their lives at risk to save their human companions. One example, reported by CNN, is when a dog named Curly risked its life to wake up its owner during a house fire (Maxouris 2019). Meanwhile, chimpanzees often share resources, which suggest chimpanzees feel empathy for their fellow chimps (Silk et al. 2013). Lastly, anecdotal evidence suggests that

dolphins are able to understand and sympathize with the plights of others. One example, from scientist Maddalena Bearzi and reported on by Elizabeth Day of *The Guardian*, tells the story of a group of dolphins who led scientists to the floating body of a girl who attempted to kill herself (Day 2015). Another example of dolphins using empathy comes from a video taken at Kyum Park in South Korea. In this video, a group of dolphins are flocking to help an injured companion who was incapable of swimming on her own. The uninjured dolphins dove below the water, creating an impromptu raft to carry the injured dolphin to safety (Marshall 2013). These animals not only have the ability for empathy but clearly possess the two capabilities that come with empathy, “affiliation” and “other species,” as all three animals have shown that they can affiliate with their own species as well as members of other species.

The final abilities in question are the ability to imagine, ability to think, and ability to reason. There is strong evidence suggesting that all three animals have some degree of imagination, thinking, and reasoning. For example, according to Marc Bekoff, a professor of Ecology and Evolutionary Biology at the University of Colorado, dogs often “chase their tails and bite them as if the tail was prey or a competitor” (Bekoff 1998). This pretend play suggests dogs have some imaginative capacity as pretend play is impossible without imagination. Chimpanzees are also known to pretend play. A chimpanzee named Viki has been seen pulling an imaginary pull toy, pretending her imaginary toy was stuck, and imitating humans reading newspapers (Gomez and Martin-Andrade 2005, 151). For dolphins, researchers have found evidence that calves continuously produce new and innovative play. They will play with anything they happen to come across, from plastic to dead animals in the water. Young dolphins also make

their own “toys”, playing with bubbles that they produce. (Kuczaj and Eskelinen 2014). This ability would also be impossible without imagination.

Finally, all three animals have proven capable of thinking and reasoning. Chimpanzees are able to deduce the locations of other chimpanzees based off stimuli such as moving branches (Volter 2017). Additionally, Researchers have found that dolphins use reason to solve puzzles and plan ahead. One study, conducted by Stan Kuczaj, Mark Xitco, and John Gory tested dolphins’ problem-solving abilities. They constructed a puzzle that required dolphins to push four weights on-top of a cube in order to release fish. In some trials, the weights were placed far from the cube. In other trials, the weights were placed close to the cube. The dolphins tested were not only able to solve this puzzle but were able to find efficient solutions to their problems. In the trials where the weights were far away, the dolphins carried multiple weights at once to save time. In trials where the weights were close to the cube, the dolphins only carried one weight at a time to conserve energy (Kuczak, Gory, and Xitco 2009). This shows that dolphins are able to use reason to find the most efficient solutions to novel problems. Finally, dogs have done well in tests of inferential reasoning. Inferential reasoning is the ability to determine that A or B, not A, therefore B. For example, my dog has been able to deduce that if I hide a treat in one of two containers, and I show her that one of the containers is empty, then the treat must exist in the other container.

The important question is whether dogs, chimpanzees, and dolphins have these abilities to the level that they have potential for the following capabilities: “play” and “senses, imagination, thought, and reason.” I have already referenced examples of all three animals playing: dogs playing with their tails, chimpanzees playing with imaginary toys, and dolphins playing with bubbles. All that is left to check is whether these animals

have the potential to develop or already have the capability of “senses, imagination, thought, and reason.” More specifically, we must check if these animals are capable of forming a conception of good, acting on reason over base instinct and immediate desires, and forming second order volitions. All three animals have shown an ability to form a conception of good. I have given examples of all three animals acting with empathy in the best interest of others: the dog saving its owner from a fire, chimpanzees sharing resources, and a group of dolphins helping their injured drowning friend. In addition, studies have shown that dogs and chimpanzees have an understanding of equality and refuse to partake in activities where they are rewarded less than their peers when completing the same task (Emory University 2014). This shows dogs and chimpanzees understand that inequality is bad.

All three animals are also able to act in accordance with reason over instinct and immediate desire. This is evident as all three animals have passed delayed gratification tests. In one study, dolphins were trained to remove trash from their tanks and exchange them for treats. One dolphin kept a stash of trash in reserve, rather than immediately exchanging it for treats, so that on days when his tank was clean, he could pull from his savings of trash to obtain treats (Anderson 2019, 54). Chimpanzees have also done well in tests of delayed gratification. A study conducted by Michael J. Beran and Theodore A. Evans showed that chimpanzees are willing to accept tokens for more preferable food in the future rather than accepting less preferable food in the present (Beran and Evans 2013). My own dog, a six-month-old miniature Australian Shephard, is capable of abiding by her “leave it” command by sitting in front of her treats for several minutes before consuming it. This exhibit of self-control shows that many dogs are capable of delayed gratification.

The last requirement for dogs, chimpanzees, and dolphins to be deemed metaphysical persons is second order volitions. Due to an inability to effectively communicate with any of these creatures it is difficult to ascertain whether these creatures are capable of forming second order volitions. However, there are proxies we can use to make judgements regarding second order volitions. In order to have a second order volition, it is necessary to use imagination to juxtapose altering realities. For example, say I had a first order desire to study and another first order desire to play video games. The only way I can form second order volitions through my own accords, rather than through telekinesis from some hive queen, is to imagine a reality in which I study, imagine a different reality in which I play video games, juxtapose the two realities, and use reason to determine which reality is best for me. Due to their abilities for imaginative play, we know that dogs, chimpanzees, and dolphins have, at the very least, basic capacities for imagination. We also know that these animals have capacities for reason.

The remaining question is whether dogs, chimpanzees, and dolphins have the ability to juxtapose these realities in their imaginations in order to compare the pros and cons of their first order desires. According to Andrey Vyshedskiy, a professor at Boston University, the ability to juxtapose is dependent on a form of constructive imagination called Prefrontal Synthesis. Prefrontal Synthesis is primarily used to create novel mental images out of independent objects. The images must be novel. If I read the phrase “dog jumping” and have already seen a dog jumping, then my imagining a dog jumping does not count as Prefrontal Synthesis. However, if someone describes a floating pink castle in the sky, and I have never seen a floating pink castle in the sky, then my imagining such a scene is Prefrontal Synthesis (Vyshedskiy 2019).

According to Vyshedskiy, Prefrontal Synthesis is also essential for understanding recursive language structures. Vyshedskiy describes recursive language as follows. “Consider the two sentences: ‘A dog bit my friend’ and ‘My friend bit a dog.’ It is impossible to distinguish the difference in meaning using words or grammar alone, since both words and grammatical structure are identical in these two sentences. Understanding the difference in meaning and appreciating the misfortune of the 1st sentence and the humor of the 2nd sentence depends on interlocutor’s PFS ability (Vyshedkiy 2019, 6).

If an organism is capable of Prefrontal Synthesis, they will be able to understand recursive language. If an organism is able to understand recursive language, they will be able to understand the differences in meaning when the order of words is exchanged. Many animals have been able to learn basic language. Dogs are able to understand commands given to them by humans, and gorillas like Koko have been taught basic sign language. However, understanding basic language is far easier than understanding recursive sentences. Dolphins have been shown to understand tail recursion, which is the ability to understand conjoined sentences. An example of a conjoined sentence is adding the words “Mary told me” to the words “throw the ball” to create the sentence “Mary told me to throw the ball” (Gregg 2013). However, this ability is different from the type of recursion that requires Prefrontal Synthesis. According to evolutionary biologist William Tecumseh Fitch, evolutionary biologist Mar D. Hauser, and linguist Noam Chomsky, no non-human animal has shown an ability for recursive language. In a joint paper, they claim that “despite decades of search, no animal communication system known shows evidence of such recursion, and nor do studies of trained apes, dolphins and parrots” (Fitch, Hauser, and Chomsky 2005, 203). This means that no animal other than humans, that we know of, is capable of juxtaposition and hence no animal, other than humans, is

capable of second order volitions. This implies that dogs, chimpanzees, dolphins, and every other non-human animal, including Koko, are non-persons.

This is a promising result as it abides by our intuitions and gives weightage to our intuitions. It has been a common belief throughout history that humans are the sole persons on earth. However, it is not clear why this was the case. Now we know it is due to our superior imaginative capabilities which give us the power for second order volitions. But what about murkier edge cases such as advanced aliens, robots, artificial intelligence, fetuses, children, and disabled humans?

It is entirely possible for aliens to have the full list of innate abilities to the degree necessary to be persons. In addition, while we are not currently at this level of technological advancement, it is entirely possible for robots and artificial intelligence to be persons as well. The only abilities that are questionable, when looking to the future, are the ability for sense and the ability for self-awareness. Seeing as senses need not be biological and could be senses from robotic sensors or data inputs from code, it is possible for robots and artificial intelligence to have the ability to sense. Additionally, it is possible that in the future artificial intelligence and robots become self-aware. Therefore, it is possible for robots and artificial intelligence to be metaphysical persons.

On the other hand, the statuses of fetuses and young children are complicated. It is unclear exactly what Nussbaum means by innate abilities. We know that fetuses and young children will eventually develop into creatures that can exhibit the required abilities to the degree necessary for personhood. However, for a period of time, these abilities are underdeveloped. Fetuses and new born babies do not have the ability for reason or imagination necessary for second order volitions. However, as they age, these abilities will develop to the point that they do. Does innate ability refer to the potential

for an ability in its future state? Or does innate ability refer only to the degree of an ability in its present state? If the case is the former, then fetuses and babies are metaphysical persons. If the case is the latter, then fetuses and newborn babies are not metaphysical persons but will one day become metaphysical persons.

I personally lean towards the latter. If we refer to innate abilities as the abilities potential over time we run into some interesting problems. Modern artificial intelligence could then be considered persons. As of right now artificial intelligence is not advanced enough to be persons but one day it likely will be. In the future, virtual assistants like Siri or Alexa might be complex enough to possess the seven abilities to the degree necessary to be persons. This would mean that these virtual assistants are metaphysical persons today. While I lean against this line of reasoning, to make a more definitive conclusion, we would have to ask Nussbaum to further clarify innate abilities and their role in dignity. However, it is important to note that even if fetuses and new born babies/young children are not metaphysical persons, they may still be moral persons. Should this be the case, they would still be deserving of moral protections.

Finally, our last “edge” case is disabled humans. Once again, the answer is not clear cut. In short, it depends on the disability. If the disability has no effect on its subject’s innate abilities, then the disabled human is still a metaphysical person. For example, say a human were in a coma but suffered from no other limitations other than being in a state of deep sleep. This human still has the innate abilities for self-awareness, sense, imagination, thought, reason, emotion, and empathy. These abilities are just restricted. This human still has the potential for the capabilities required for personhood, but these capabilities are limited due to the human’s coma. In this example, the disabled human is a metaphysical person. However, this human’s status and human dignities are

being violated by the coma. On the other hand, take the example of a human who has been in a horrible car crash and is completely brain dead. This human no longer has all, or possibly any, of the innate abilities needed for personhood. Therefore, this human is no longer a metaphysical person.

This claim may seem controversial and to some extent it is but once again it is important to remember that metaphysical personhood and moral personhood are unique concepts. Even if a disabled human is not a metaphysical person, they might still be moral persons. And even if an entity is not a metaphysical or moral person, they still have some level of dignity and therefore still deserve moral and metaphysical respect.

Conclusion

The Capabilities Approach to Metaphysical Personhood defines a metaphysical person as an entity that has seven innate abilities: self-awareness, sense, imagination, thought, reason, emotion, and empathy. These abilities must exist to the degree necessary to have status dignity. This new account of personhood tests positively, successfully classifying our base cases of insects and humans as non-persons and persons respectively. Additionally, this new account of personhood solves the issues plaguing Kant, Locke, and Frankfurt, making it a strong candidate to replace these older, more popular accounts.

In my opinion, the most interesting realization stemming from this thesis is that humans are the only species of persons, that we know of, on planet earth. This is due to the fact that no other animal has the imaginative capacity to develop second order volitions. This is fascinating as it gives weight to a human intuition that has existed for centuries: that we are unique and special in some way. Now we know this uniqueness comes from our advanced imagination, which allows us to not only form second order volitions but also process complex language and problem solve creatively.

This account of metaphysical personhood does arrive at some controversial conclusions. If we accept this notion of personhood, then it is likely that fetuses, new born babies, very young children, and severely disabled humans are not metaphysical persons. To be certain of these conclusions, we would have to explore the idea of innate abilities more thoroughly, however this is a task for a future paper or another philosopher. However, regardless of the outcome, we must remember that moral persons need not be metaphysical persons. Regardless of an entity's metaphysical status, we might still owe them moral considerations.

Bibliography

- Anderson, David Anton. 2019. *Environmental Economics and Natural Resource Management*. Abingdon, Oxon: Routledge.
- Anderson, James R., Alasdair Gillies, and Louise C. Lock. 2010. "Pan Thanatology." *Current Biology* 20 (8). <https://doi.org/10.1016/j.cub.2010.02.010>
- Barron, Andrew B., and Colin Klein. 2016. "What Insects Can Tell Us about the Origins of Consciousness." *Proceedings of the National Academy of Sciences* 113 (18): 4900–4908. <https://doi.org/10.1073/pnas.1520084113>.
- Beran, Michael J., and Theodore A. Evans. 2012. "Language-Trained Chimpanzees (Pan Troglodytes) Delay Gratification by Choosing Token Exchange Over Immediate Reward Consumption." *American Journal of Primatology* 74 (9): 864–70. <https://doi.org/10.1002/ajp.22042>.
- Carter, Nick. 1982. "Effects of Psycho-Physiological Stress on Captive Dolphins." *Animal Studies Repository*, 193–98. https://animalstudiesrepository.org/acwp_wmm/9/.
- Day, Elizabeth. 2015. "Did a Dolphin Sense My Feelings of Grief?" The Guardian. Guardian News and Media. November 8, 2015. <https://www.theguardian.com/environment/2015/nov/08/dolphins-interaction-humans-empathy>.
- "Evolution of Responses to (Un)Fairness." 2014. Emory University. September 21, 2014. https://news.emory.edu/stories/2014/09/de_waal_science_fairness/campus.html.
- Formosa, Paul, and Catriona Mackenzie. 2014. "Nussbaum, Kant, and the Capabilities Approach to Dignity." *Ethical Theory and Moral Practice* 17 (5): 875–92. <https://doi.org/10.1007/s10677-014-9487-y>.
- Frankfurt, Harry G. 1971. "Freedom of the Will and the Concept of a Person." *The Journal of Philosophy* 68 (1): 5–20. <https://doi.org/10.2307/2024717>.
- Fitch, W. Tecumseh, Marc D. Hauser, and Noam Chomsky. 2005. "The Evolution of the Language Faculty: Clarifications and Implications." *Cognition* 97 (2): 179–210. <https://doi.org/10.1016/j.cognition.2005.02.005>.
- Gibb, Tim. n.d. "Insects May Be Smiling on the Inside." Edited by Charles Wineland. News & Stories. Accessed May 11, 2020. <https://ag.purdue.edu/stories/podcast/insects-may-be-smiling-on-the-inside/>.
- Gómez, Juan-Carlos, and Beatriz Martin-Andrade. 2005. "Fantasy Play in Apes." In *The Nature of Play: Great Apes and Humans*, edited by Anthony D. Pellegrini and Peter K. Smith, 139–72. New York: Guilford Press.

Gregg, Justin. 2015. *Are Dolphins Really Smart?: the Mammal behind the Myth*. Oxford: Oxford University Press.

Kant, Immanuel. 2015. *Critique of Practical Reason*. Translated by Mary J. Gregor. Cambridge: Cambridge University Press.

Kind, Amy. 2015. *Persons and Personal Identity*. Malden, MA: Polity.

Kuczaj, Stan A., and Holli C. Eskelinen. 2014. "Why Do Dolphins Play?" *Animal Behavior and Cognition* 2 (2): 113–27. <https://doi.org/10.12966/abc.05.03.2014>.

Kuczaj, Stan A., John D. Gory, and Mark J. Xitco. 2009. "How Intelligent Are Dolphins? A Partial Answer Based on Their Ability to Plan Their Behavior When Confronted with Novel Problems." *Japanese Journal of Animal Psychology* 59 (1): 99–115. <https://doi.org/10.2502/janip.59.1.9>.

Locke, John. 1964. *An Essay Concerning Human Understanding*. Edited by Anthony Douglas Woozley. Vol. 1. Meridian Books.

Marshall, Michael. 2013. "Dolphins Form Life Raft to Help Dying Friend." *New Scientist*. January 25, 2013. <https://www.newscientist.com/article/dn23108-dolphins-form-life-raft-to-help-dying-friend/>.

Maxouris, Christina. 2019. "A Dog Saved His Owner from a Devastating House Fire by Nudging Him with His Nose to Wake Him Up." *CNN*. Cable News Network. October 8, 2019. <https://www.cnn.com/2019/10/08/us/south-carolina-dog-owner-house-fire-trnd/index.html>.

McKenna, Michael, and D. Justin Coates. 2019. "Compatibilism." *Stanford Encyclopedia of Philosophy*. Stanford University. November 26, 2019. <https://plato.stanford.edu/entries/compatibilism/>.

Nussbaum, Martha Craven. 2011. *Creating Capabilities: The Human Development Approach*. Cambridge, Mass: Belknap Press of Harvard University Press.

Sapontzis, S. F. 1981. "A Critique of Personhood." *Ethics* 91 (4): 607–18. <https://doi.org/10.1086/292273>.

Silk, Joan B., Sarah F. Brosnan, Joseph Henrich, Susan P. Lambeth, and Steven Shapiro. 2013. "Chimpanzees Share Food for Many Reasons: the Role of Kinship, Reciprocity, Social Bonds and Harassment on Food Transfers." *Animal Behaviour* 85 (5): 941–47. <https://doi.org/10.1016/j.anbehav.2013.02.014>.

Tibbetts, Elizabeth A., Jorge Agudelo, Sohini Pandit, and Jessica Riojas. 2019. "Transitive Inference in *Polistes* Paper Wasps." *Biology Letters* 15 (5). <https://doi.org/10.1098/rsbl.2019.0015>.

Tobin, Olivia. 2019. "Grieving Dolphin Pictured Still Carrying Dead Calf Days after It Died." *Evening Standard*. April 10, 2019. <https://www.standard.co.uk/news/world/grieving-dolphin-pictured-still-carrying-dead-calf-days-after-its-death-a4113966.html>.

TodayShow. 2014. "Koko the Gorilla Mourns Loss of Her Special Friend, Robin Williams." *TODAY.com*. August 12, 2014. <https://www.today.com/pets/robin-williams-mourned-koko-gorilla-1D80056867>.

Völter, Christoph J., and Josep Call. 2017. "Causal and Inferential Reasoning in Animals." *APA Handbook of Comparative Psychology: Perception, Learning, and Cognition*, 643–71. <https://doi.org/10.1037/0000012-029>.

Vyshedskiy, Andrey. 2019. "Language Evolution to Revolution: the Leap from Rich-Vocabulary Non-Recursive Communication System to Recursive Language 70,000 Years Ago Was Associated with Acquisition of a Novel Component of Imagination, Called Prefrontal Synthesis, Enabled by a Mutation That Slowed down the Prefrontal Cortex Maturation Simultaneously in Two or More Children – the Romulus and Remus Hypothesis." *Research Ideas and Outcomes* 5. <https://doi.org/10.3897/rio.5.e38546>.

Warren, Mary Anne. 1997. *Moral Status: Obligations to Persons and Other Living Things*. Oxford: Clarendon Press.

Yong, Ed. 2016. "No, Really, Other Animals Don't Have Chins, Not Even Your Cat." *The Atlantic*. Atlantic Media Company. January 29, 2016. <https://www.theatlantic.com/notes/2016/01/no-really-other-animals-dont-have-chins/433890/>.