ALETHEIA

THE UNDERGRADUATE JOURNAL OF PHILOSOPHY AT TEXAS A &M SPRING 2018 This page intentionally left blank.

A Note from the Editor-in-Chief

I am extremely pleased to re-introduce Texas A&M's undergraduate journal of philosophy to the life of our philosophy department. *Aletheia* has been inactive since 2014, and I hope its restoration inspires the students of Texas A&M to share their creativity with one another and engage in even more rigorous debate. It has been a privilege to guide the authors in this edition through the publication process, and although my own journey as an undergraduate is complete, I look forward to seeing how the next Editorial Board develops the journal into a mainstay of the department. We, the Editorial Board, dedicate this edition to the philosophy students at Texas A&M in the hope that they carry on *Aletheia*'s legacy and continue to enrich the intellectual culture of the school.

I would like to thank our trusted advisors—Dr. Linda Radzik and Dana Gutierrez—for their invaluable guidance throughout this year-long process. Their passion for teaching undergraduates and desire to cultivate critical thinkers provided me the motivation to help re-establish this publication, and it surely would not exist without their vision and support. I would also like to thank the Editorial Board for dedicating their time to this publication voluntarily and for being patient while we figured things out along the way. Editing is often difficult and time-consuming work, let alone creating an academic journal almost from scratch, and their willingness to participate should not go unnoticed.

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About the Journal

Aletheia is Texas A&M's only undergraduate journal dedicated specifically to philosophy. In this edition, we have not excluded those outside the discipline but have embraced the unique perspectives of those with a demonstrated interest in contributing. We have selected all of the articles in this journal from current and recently graduated students of Texas A&M University. The topics covered here are diverse, ranging from questions about the rationality of the fear of death and the ethical ambiguity of Physician Assisted Dying to questions about the justifiability of solitary confinement, the historical evolution and revolution of scientific theories, and the nature of a unique form of self-deception. However, we recognize that there are many more questions remaining in philosophy, and should any of you undergraduates at A&M identify a question that requires further exploration, we would love to publish your work in order to generate that discussion.

Editorial Board

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NATURE'S DISTORTED MIRROR: RATIONALIZING AN OBJECTION TO LUCRETIUS' SYMMETRY ARGUMENT Chris Gillett

Abstract: I argue that Lucretius' symmetry argument against the fear of death is flawed because the period of non-existence prior to a person's birth is not in all relevant respects the same as the period of nonexistence after death. Antenatal non-existence ends with birth, but nonexistence after death is permanent. This permanent non-existence means that the events of people's lives can no longer be valued by them and will have no permanent significance to them once they are dead. The fear of death is rational because most people want their lives to have value, but permanent non-existence nullifies the value of life.

INTRODUCTION

Lucretius put forth his symmetry argument to relieve readers of their fear of death by asserting that someone should no more fear the nonexistence after their death than the period of non-existence before their birth. The keystone of this argument is the idea that the antenatal and postmortem periods of non-existence are fundamentally alike and therefore should be valued and feared equally little. My response to Lucretius' symmetry argument centers on the asymmetry of the duration of antenatal and postmortem periods of non-existence. Specifically, the time before someone is born is temporary from his or her perspective

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because it eventually comes to an end, whereas death is permanent because a dead person will necessarily never be alive again. This disparity in duration reveals how we experience the two periods in completely different ways. Steven Luper mentions this argument in the *Stanford Encyclopedia of Philosophy* entry on death, and I will expand upon it in this paper. Although Luper's argument may correctly explain why people are upset by death and not pre-birth, it does not prove that this attitude is rational. I will show that the intuitive apprehension about death is justified because the permanent non-existence posed by death prevents people from experiencing or valuing their lives again, a prospect that nullifies the value of a life to whomever has lived it, and is therefore undesirable to the rationally self-interested.

As James Warren points out, much of the academic criticism aimed at the symmetry argument has been from the perspective that people are right to view the antenatal and postmortem periods of non-existence as asymmetrical because people are naturally future-oriented in their thinking or because people's identities are anchored in the time period of their births (Warren). Although these approaches achieve the goal of showing the asymmetry of the non-existence that lies on either side of life, they do not speak to the specific nature of death in contrast to the nature of life, nor do they have anything to say about the harm of death. They explain the fear but do not prove that it is rational. These arguments, though persuasive, deal more in psychology than in philosophy, centering on how people think about the future versus the past. A more compelling response to the symmetry argument must deal with the nature of death specifically rather than assert the antenatal and postmortem asymmetry in a roundabout way by discussing how people perceive the two periods of non-existence to be different rather than how they really are. In addition, Jeremy Simon points out that a good response to Lucretius must be easily understood, relying more on common sense than on complicated academic concepts, because Lucretius' symmetry argument was intended to be

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understood by layman readers (Simon). I will attempt to satisfy both of these aims.

I will start by reviewing Lucretius' symmetry argument and how it should be interpreted for my purposes. I will then present a response to the symmetry argument based on the contrast between death's permanence, life's transience, and the non-existence before birth, and I will argue that the permanence of death nullifies the value of life, making the fear of death rational.

THE SYMMETRY ARGUMENT

To make the case that we should not be moan death, Lucretius argued that the time before birth is equivalent to death. He reasoned that if we are not upset by antenatal non-existence, we should not be bothered by death either. The argument first appears in his book, *De Rerum Natura*:

Look back at the eternity that passed before we were born, and mark how utterly it counts to us as nothing. This is a mirror that Nature holds up to us, in which we may see the time that shall be after we are dead. Is there anything terrifying in the sight—anything depressing—anything that is not more restful than the soundest sleep? (Lucretius 125).

Lucretius mentions both terror and depression as emotions he believes people should not feel in response to the prospect of death (125), but his pacifying argument can apply to more general negative attitudes about death. Simon points out that fears can be recast in terms of wishes (Simon). He asserts that a fear is equivalent to a wish that something not happen (418), so someone who is not afraid to die can still, for our purposes, be said to fear death if he or she wishes not to die. When I argue for the fear of death, I am referring to a wish that one not die.

Warren identifies a number of arguments that Lucretius may have intended to make in the passage, and I will address one version: the idea

that just as we do not now fear the time before we were born, we should not fear the time after we die (Warren). It is unclear if this interpretation is the exact argument that Lucretius intended to make, but it is supported by Epicureans. Epicureans subscribe to Epicurus' philosophical system, to which Lucretius was a notable contributor. Epicurus believed that experience was due to the existence of a soul and that the soul did not survive death, and he also advocated "freedom from bodily pain and mental disturbance," which would require an argument to relieve mental disturbance regarding death (Konstan). Because the third interpretation of Lucretius' arguments is supported by Epicureans, I believe it is a fair target for criticism (Warren).

Simon supplies an explicit reconstruction of the Lucretian argument:

- (P1) No one regrets that their life does not extend back farther than it actually does. This prior time is, from our current perspective, of no value (is 'nothing') to us.
- (P2) The time after our death is in all relevant respects the same to us as the time before our births.
- (P3) If two things are the same in all relevant respects, we should value them the same.
- (C1) The time after our death is, from our current perspective, of no value to us.
- (P4) We ought not bemoan the loss of something of no value to us.
- (C2) We ought not bemoan the postmortem life we will not have. (Simon 416).

For the sake of clarity, I will rewrite Simon's reconstruction of the Lucretian argument so that it specifically addresses the interpretation under question:

- (P1) No one fears the time before one's birth.
- (P2) The time after our death is in all relevant respects the same to us as the time before our births.
- (P3) If two things are the same in all relevant respects, we should fear them the same.
- (C1) We should not fear the time after our death.

Having examined the origin of Lucretius' symmetry argument, I have explained how I choose to interpret its meaning and have defended my focus on that interpretation. I will now discuss the difference between death and pre-birth.

THE RESPONSE TO LUCRETIUS

I assert that the difference in attitudes that most people have about death and pre-birth are due to a fundamental difference between the two. Lucretius asserts that they are equivalent, and he regards apathy towards pre-birth but not death as logically incongruous, according to Warren's interpretations (Warren). Those who criticize the symmetry argument have given many explanations for why death is generally regarded with apprehension, but pre-birth is mostly ignored; these rationales generally have to do with how people tend to process information and think about time, not how the nature of death is different from that of pre-birth. I will argue that death and pre-birth are different by considering other temporary periods of non-existence besides pre-birth, such as temporary unconsciousness, and by discussing how they compare to the nature of death.

It is helpful to start off by clarifying the definition of nonexistence. In the context of Lucretius' symmetry argument, someone who is dead is said not to exist despite the post-death persistence of his or her material body, which remains in the physical realm, though perhaps in a state of decay. It may be confusing to hear a dead person whose body still exists to be described as being in a state of non-existence, but in our discussion of death and the symmetry argument, "existence" or lack thereof refers to the person's mind rather than to his or her body. Kagan also uses "non-existence" in this way while discussing the symmetry argument (Kagan). A person's mind is a function of his or her body, specifically the brain, and when the brain no longer functions, the person is dead. Without a mind, experience is impossible; there is no consciousness or perception. The mind of a person no longer exists even if his or her body remains after death, so he or she is said to be in a state of non-existence for my purposes.

A discussion of the harm of non-existence should consider all states of non-existence, not just those of death and pre-birth, and there are plenty of other temporary states of non-existence that Lucretius does not address. A method for inducing temporary non-existence, anaesthesia, is practiced every day around the world. For many surgeries, patients are anaesthetized for the duration of the operation to save them from the unpleasant ordeal of being surgically cut. To prevent them from experiencing the operation, patients are placed into a state in which they can experience nothing; their senses and consciousness are suspended. Like pre-birth, this condition seems identical to that of death, but, assuming we have no reason to fear that the surgery will go wrong, our only fear when undergoing anesthesia is that too much will be administered and that we will never wake up from the anesthesia-induced state of non-existence. If we had no reason to fear a botched operation or an anesthetic mishap, we should fear anesthesia no more than we fear dreamless sleep. In fact, the unconsciousness that anesthesia induces, though identical to death in content if not duration, is generally preferred to the alternative of death.

A person may lose consciousness temporarily for a number of other reasons, such as a blow to the head, a comatose state, or sleep. It is true that fear of a blow to the head is widespread and reasonable, just as Epicureans acknowledge that it is rational to fear the process of dying (Kagan 294), but the actual period of non-existence resulting from that unconsciousness is not the subject of our fears. A comatose patient undergoes protracted periods of unconsciousness, sometimes for weeks or longer. There are fears associated with being in a coma such as the prolonged incapacitation that affects one's work, living arrangements, and so on, and there is also the fear that one may never wake up from the coma. However, the actual state of non-existence induced by the coma—the temporary suspension of consciousness and senses—does not cause us anxiety. Sleeping people could also be considered temporarily out of existence. Dreams are, of course, a unique feature separating sleep from death, but this does not negate the point that sleep and death are both periods of non-existence. While it is true that a person's mind may exist in a dream world, the person's mind does not exist in the context of the world that we all inhabit; the waking mind is unconscious.

We do not fear unconsciousness from anesthesia or the other similar periods of non-existence, so they must be different from death in some way. I accept Lucretius' premise that people fear death but do not fear pre-birth, and I also think it is true that people fear death but do not fear anesthesia-induced non-existence. I will show that death is considered differently because it is actually different from anesthesia, pre-birth, and other periods of non-existence, not because of psychological factors impacting perceptions of death.

All of these periods of non-existence that are not death (anesthesia, pre-birth, sleep, etc.) are equivalent to each other. The length of the period of non-existence and how it comes about does not matter because non-existence is an absolute, binary value. The period of pre-birth is temporary, spanning from the beginning of time to birth. From the subjective perspective of someone who is born, pre-birth and anesthesia are temporary in comparison to death because they eventually end, whereas death does not. I have defined non-existence as a period of unconscious because you have not been born yet and being unconscious because you are under anesthesia or in a coma. Therefore, if Lucretius wishes to assert that death is no more deserving of fear than pre-

birth, he must also accept that death is no more deserving of fear than any period of non-existence, such as sleep or anesthesia. This strikes me as intuitively wrong.

If you accept antenatal and postmortem equivalence as Lucretius does, you should hold identical views about pre-birth and anesthesia, etc. as about death, given the similarity between pre-birth and anesthesia. Although that seems wrong, this does not prove that pre-birth and death are different. We must examine the nature of death and whether it differs from other periods of non-existence to know if the symmetry argument is correct.

The nature of death is permanent non-existence. Anything less (temporary non-existence) is not death and is therefore tolerable to most people. The critical difference between death and pre-birth, sleep, anaesthetics, and every other period of non-existence is that death never ends. Death is far worthier of our fear than is any other cause of non-existence because it is complete finality and absolute personal extinction. No matter the length of non-existence, be it eight hours in the case of sleep or billions of years in the case of pre-birth, we do not necessarily fear periods of non-existence that eventually come to an end. In *De Rerum Natura*, Lucretius refers to death as more restful than the soundest sleep. Perhaps even he recognized that, although sleep and death are equivalent in terms of both being states of non-existence, death is fundamentally different because it is far more restful by virtue of being permanent. The time after our death is not in all relevant respects the same to us as the time before our births; the time before our births ended, but death never will.

To help illustrate this point, imagine how anesthesia would be considered if it were induced permanently. If patients were somehow eternally kept alive but permanently unconscious under anesthesia, people would want to avoid that fate just like they want to avoid death. Though the patient's body and mind are perfectly healthy, most will agree that, in this state of permanent non-existence, the patient may as well be dead. Those who do not wish to die would equally wish to avoid undergoing this 8 operation because, even though the patient is alive in a medical sense, the nature of this surgery is equivalent to the nature of death—permanent nonexistence. This helps us understand how death is different from antenatal non-existence and periods of non-existence caused by surgery, sleep, and so on. Surgery with anesthesia is common, and, assuming no one has reason to fear that something will go wrong, few fear the temporary nonexistence that it creates. However, our hypothetical surgery is understandably undesirable even though it is only different from normal surgery in its duration. This shows that it is not the non-existence that results from death that we fear but the permanence.

THE RATIONALITY OF THE FEAR OF DEATH

If you permanently cease to exist, you can never again value the events of your life, and they will have no permanent significance to you. A person's life could be remembered by others and have second-order effects on the world, but these effects are extrinsic measures of value for a person's life. From the perspective of each individual who is faced with death, the prospect of permanently losing consciousness represents a nullification of the personal value of his or her life. The length and quality of individuals' lives or whether they were even born in the first place are immaterial to them if they die. This is an upsetting idea to most people because it robs their lives of much of its purpose. What is the point of continuing to pursue our goals if it will not make any difference to us in the end? If we accept that there is only non-existence after death, we are faced with this unpleasant prospect. I will argue that the fear of death is rational because permanent non-existence prevents people from valuing their lives.

Hypothetical Case: Temporary Simulation

To demonstrate that permanent non-existence nullifies the value and consequences of previous existence to him who no longer exists, I will propose a hypothetical case in which a mind is created and exists only briefly before being destroyed. This case supports my claim that a temporary existence is equivalent to no existence at all from the subjective perspective of a mind that exists temporarily and then permanently does not exist.

Imagine that an exact copy of your mind is run in a computer simulation. In this simulation, this mind is conscious and experiences a virtual world that cannot be distinguished from true reality. I will accept for the sake of argument that this copy of your mind is a perfect copy and that the copy would continue to identify as you and desire selfpreservation. This simulation offers a world with which you can interact and in which you can do whatever you like. The simulation will end after five months, and the consciousness that exists in the virtual environment will permanently cease to exist upon the end of the simulation.

If a researcher working on a cure for a horrible disease were put in the simulation and used her five months to work uninterrupted by the distractions of ordinary life, she would likely make progress on her work, but her efforts would not make a difference because they would all be lost when the simulation ended. Once the simulation is completed, it does not matter to the now non-existent consciousness if the simulation lasted for five months or five years. It also does not matter to the researcher if her experience in the simulation was positive or negative because permanent non-existence nullifies the value of her now-extinguished conscious experience.

The connection between this example and our own lives is that, in both cases, permanent non-existence following a period of consciousness nullifies those experiences that are then lost to the individual who ceases to exist. In the hypothetical case, the simulation permanently ends and the events of the simulation ultimately make no difference to anyone, especially not the consciousness that has passed away. Similarly, when people die, they can no longer value their lives any more than a hypothetical person who was never born can value his.

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Argument for the Rationality of the Fear of Death

Having briefly explained why I believe that the fear of death is rational given the unique nature of non-existence, I will provide a formal reconstruction of my argument for the sake of clarifying my conclusions. I will then address each premise and defend it.

- (P1) When we die, we cease to exist forever.
- (P2) We cannot experience anything when we do not exist.
- **(P3)** Something only has value if we can individually experience it.
- (C1) Our lives have no value to us as individuals upon death.
- (P4) It is rational to want our lives to have value.
- (C2) It is rational to prefer not to die.

The first premise of my argument is that we cannot experience anything when we do not exist. Again, I am referring to non-existence in the context of mental consciousness. While a dead person's body may still exist, his mind has been destroyed; the part of him required for consciousness no longer exists. Likewise, when a patient is anesthetized for surgery, his body may be perfectly healthy, but his consciousness and senses have been suspended temporarily. For our purposes, we can say the person does not exist. Those who agree with Lucretius will likely agree with this premise because they often argue that death could not be unpleasant if we experience nothing while we are dead (Konstan).

My second premise—death results in permanent non-existence may be a valid target for criticism. Those who hold religious beliefs do not agree that death marks the end of experience or existence; they therefore avoid the conclusion that their lives have no value if they die. There also may be valid arguments for the existence of an immortal soul, but I will not address them here because this issue is outside the scope of this paper.

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It is not my intention to argue that there is no life after death but only to prove that the fear of death would be rational if this were the case. For the purposes of this paper, I will assume that there is not an immortal soul and that we permanently cease to exist upon death.

I take my third premise from the Epicureans. Those who wish to soothe anxieties about death often argue that death is nothing to him who has died because a dead person cannot experience anything (Konstan). I argue that, for the same reason, life is nothing to him who has died. Konstan describes Epicurus' view that death "is nothing to us, since... when our death occurs, we do not exist" (Konstan). I build on the idea that existence is necessary for something to be experienced as negative by saying that something can only be pleasant or beneficial if we exist to experience that thing. If we do not exist, nothing has any value to us positive or negative.

From these premises, I am led to the conclusion that people's lives have no value to them once they no longer exist to value those lives. To support this argument, I have offered the hypothetical example of a fivemonth-long computer simulation. After all, what is the point of taking a vacation or eating a delicious ice cream if you will not remember the experience? The Epicureans already know the answer. Just as they assert that positive experiences of which we are deprived due to death are of no value to us because we do not exist to experience that deprivation (Warren), I assert that positive experiences obtained during life are of no value to us once we have died because we do not exist to experience the memory of them. If we cannot remember an experience, it may just as well have never happened, and if it may just as well have never happened, it does not have any value to us. True value is not in the temporary sensations of an experience but in what we retain in our memory. If death brings eternal non-existence in which we can experience nothing, and if that which we cannot experience is of no value to us, then life is of no value to him who has died. If we accept the three premises that I asserted, we are

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therefore led to the conclusion that our lives have no value to us as individuals upon death.

Many people seek to mitigate their fear of death through selfless actions that continue to affect others positively after they have died. This is a good way to secure a legacy, be remembered, and make an impact, but these things that occur after death make no difference to the person who has died. While alive, a charitable, selfless person may be secure in the knowledge that her memory will live on through the fruit of her living works, but whether they do or not is ultimately immaterial to someone who does not exist. Take the case of Vincent van Gogh, a painter who died believing himself to be a failure and his paintings to be forgotten. Years after his death, his work was discovered, received great acclaim, and now hangs in the finest museums in the world. Does van Gogh derive any benefit from this postmortem praise? No, he does not. It is possible for one's life to have value for the world even after one's death, but the individual who dies retains no internal value after death.

Death's power of erasure having been established, the question then turns to the rationality of the fear of death. The framework of rationality that I use to evaluate attitudes towards death is based on selfinterest: rational people do and want what is good for them and do not do or want what is bad for them. Because the fear of death, as I have pointed out, refers not just to the apprehension towards death but generally to the desire not to die, the question of the rationality of the fear of death is whether or not it is in someone's interest for one's life to have value.

A rationally self-interested person would want his life to have value. The value of one's life is not important only in a hypothetical sense; it represents that accumulation of all the enjoyment and accomplishment of each individual's existence. When death nullifies the value of a person's life, it reduces the experience of an individual who may have had an extraordinary life to that of someone who never existed to experience anything in the first place. Just as a cure for a rare disease may as well have never been invented if it is lost, a person may as well never be born if he dies. If someone can truly be apathetic about whether or not he would ever exist in the first place, he is not rational. Furthermore, the perception that one's life has value is of immediate importance to the psychological well-being of all people.

The field of psychology has established a link between the perception that one's life has meaning and health and mental wellness outcomes. Zika and Chamberlain found that there is a "substantial and consistent relation between meaning in life and psychological well-being" (135). Their study "found life meaning consistently to relate more strongly to the positive dimensions of well-being than to the negative dimensions" (Steger et al. 143) acknowledge perceived meaning in life as an "important aspect of well-being, highlighted particularly in humanistic theories of the counseling process" (80). Other research has shown that, following the loss of a loved one, those who are able to find meaning in the death are better able to recover from the tragedy (Davis et al.). These studies show that there is a tangible benefit to a purposeful life, and this benefit is manifested in the well-being of individuals.

Given its clear importance in physical health and psychological well-being, it is obvious why a rationally self-interested person would, ceteris paribus, prefer that her life has value and meaning than not. The perception of meaning in one's life provides the motivation and direction we need to work hard and achieve goals, helps us to make sense of and deal with hardships in our lives, and even renders health benefits. It is rational to want not to die in part because death is a major challenge to one's sense of meaning and purpose, which we know is a cornerstone of a happy and productive life.

If death nullifies the value of life, anyone who wants to experience the value of life will also be rational to want not to die. The happy moments in our lives, time with family, professional achievement, vacations, and so on, are pleasant only because we can experience them. We fear death because, so long as we die, we will ultimately have no memory of the pleasant parts of life, and therefore they will ultimately have no value to 14

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us. As Miguel de Unamuno wrote, "nothing is real that is not eternal" (36). Assuming that rational people are self-interested, one would expect people generally to want to receive value if it is greater than the cost to receive it, and one would also expect people to be against whatever would nullify the value that they receive. The harm of death is deprivation of the value of life. Insofar as it is rational to want not to have value taken away from you, it is rational to want not to die.

CONCLUSION

The fear of death is rational because it is important to most people that their lives have value, but permanent non-existence nullifies life. The fact is now clear that death, though similar in terms of the suspension of consciousness and senses, differs from pre-birth on the basis of its permanence. Pre-birth is a period of non-existence that must necessarily precede living existence, making it inherently temporary. On the other hand, permanence is the defining feature of death; what is dead can, by definition, never exist again. If Nature holds up pre-birth as a mirror to show us what lies beyond our lifespans, that mirror must be distorted because death dwarfs pre-birth in duration. This stark contrast between the non-existence on either side of life greatly challenges the symmetry argument and lies at the heart of Lucretius' logical failure. This nonequivalence also speaks to the frightening nature of death. If permanent non-existence is inevitable, life will soon be nothing to us in the same way death is. Our life experiences and accomplishments will ultimately come to nothing. This is an upsetting prospect indeed, and it is why all rationally self-interested people are right to want not to die.

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WORK CITED

- "Art: 'Van Gogh and the Birth of Cloisonism'." The New York Times, 27 Jan. 1981, www.nytimes.com/1981/01/27/arts/art-van-goghand-the-birth-of-cloisonism.html.
- Carus, Titus Lucretius. *Lucretius on the Nature of the Universe*. Translated by R. E. Latham, Penguin Books, 1951.
- Christopher G. Davis, Camille B. Wortman, Darri, Davis. "Searching For Meaning In Loss: Are Clinical Assumptions Correct?" *Death Studies*, vol. 24, no. 6, 2000, pp. 497– 540. doi:10.1080/07481180050121471.
- Kagan, Shelly. Death. Yale University Press, 2012.
- Konstan, David. "Epicurus." *Stanford Encyclopedia of Philosophy*. Stanford University, 16 Apr. 2018. Web. 09 May 2018.
- Lacy, P. H. De. "Lucretius and the History of Epicureanism." *Transactions and Proceedings of the American Philological Association*, vol. 79, 1948, p. 12, doi:10.2307/283350.
- Luper, Steven. "Death." *Stanford Encyclopedia of Philosophy*, Stanford University, 17 Oct. 2014, plato.stanford.edu/entries/death/.
- Simon, Jeremy R. "Playing the Odds: A New Response to Lucretius Symmetry Argument." *European Journal of Philosophy*, vol. 18, no. 3, 2010, pp. 414–424. doi:10.1111/j.1468-0378.2009.00357.x.
- Steger, Michael, et al. "Assessing Meaning in Life on an International Scale: Psychometric Evidence for the Meaning in Life

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Questionnaire-Short Form among Chilean Households." *International Counseling Psychology*, vol. 53, no. 1, 2006, pp. 80—93. doi:10.1037/00222-0167.53.1.80.

Unamuno, Miguel de. Tragic Sense of Life. Dover Publications, 1954.

Warren, James. *Facing Death: Epicurus and His Critics*. Oxford University Press, 2004.

Zika, Sheryl, and Kerry Chamberlain. "On the Relation between Meaning in Life and Psychological Well-Being." *British Journal* of Psychology, vol. 83, no. 1, 1992, pp. 133–145., doi:10.1111/j.2044-8295.1992.tb02429.x.

PHYSICIAN ASSISTED DYING: DEFINING THE ETHICALLY AMBIGUOUS

Chandler James O'Leary

Abstract: In states where Physician Assisted Dying (PAD) is legal, physicians occasionally receive requests for this form of end-of-life care. Here, I describe the ethically ambiguous sphere and why PAD falls into it. I argue that, given the ethical ambiguity of PAD, physicians should consider patient autonomy as the highest value in the four principles approach and act as informers and educators.

INTRODUCTION

Physician Assisted Dying (PAD), or Physician Assisted Suicide (PAS), is legal in a few states. The most notable example of PAD legislation is in Oregon via the Death with Dignity Act of 1997. This act makes it legal for a physician to prescribe lethal medication to competent adult patients who have a terminal illness and are within six months of dying (Dahl and Levy 335-338; O'Brien, Madek, and Ferrera 329-365). In states where PAD is legal, doctors must decide how to respond to requests for more information on PAD. This decision can be difficult for three reasons: PAD is legal but not required, there is no agreement across society if PAD is ethical, and there is no consensus in the field of medical ethics about how doctors should respond. I argue that, for these three reasons, physicians in states where PAD is legal should honor patient autonomy by taking on the roles of informers and educators and by allowing the patients to decide which course of action they prefer.

First, I will discuss a hypothetical case published in the AMA Journal of Ethics titled "Physicians' Role in Physician-Assisted Suicide Discussions" (Johnston and Bascom). Second, I will introduce the ideals of the four principles approach: justice, beneficence, nonmaleficence, and autonomy (Beauchamp and Childress 417). Third, I will describe why a framework is needed to rank the four principles when two or more are in conflict. I will then describe three spheres of ethics: the unambiguously ethical, the unambiguously unethical, and the ethically ambiguous. In the following section, I will describe why PAD falls into the ethically ambiguous sphere. Next, I will describe why, given the ethical ambiguity of PAD, patient autonomy must be considered superior to maleficence, beneficence, and justice and why, in this sphere, doctors should take on the roles of informers and educators. I will then describe a probable objection and end with an analysis of what would have happened in the hypothetical case if Dr. Ferris had understood the relationship between the physician and the ethically ambiguous.

CASE SUMMARY

The AMA case presents a physician responding inadequately to a patient's request for more information on PAD. In the case, Dr. Ferris' patient asks to be prescribed life-ending medication. The patient, JohnathanWitlaw, is in the late stages of amyotrophic lateral sclerosis (ALS), a neurodegenerative disease. Mr. Witlaw only has a few months left to live, and during his final few weeks, he will likely experience a complete loss of mobility and the ability to communicate. Mr. Witlaw does not seem highly informed about the options available to him for end-oflife care, but Mr. Witlaw gives a few arguments for the decision to end his life and says he believes that in his circumstance, the request is "a sane one" (Johnston and Bascom). The conversation ends awkwardly when Dr. Ferris tells Mr. Whitlaw that although he cannot argue with any of his points, he believes it is against his duty as a physician to prescribe medication to end his patients' lives. Dr. Ferris should have begun by discussing other options for end of life care, and, if pressed, he should have directed Mr. Witlaw to someone else who could provide more information about PAD. Dr. Ferris failed to see the ethical ambiguity of PAD, and by refusing his request and stopping the conversation, he effectively forced his personal belief about PAD onto Mr. Witlaw.

THE FOUR PRINCIPLES APPROACH

To understand why Dr. Ferris should have taken on the role of an informer, I will begin with the four principles approach, one of the main ethical guides used in medical ethics (Gillon 307-312). It is based on the four principles of beneficence, non-maleficence, autonomy, and justice. Beneficence is the act of doing good for the patient, and non-maleficence is the act of not causing further harm to the patient. Autonomy is the freedom a patient has to make a decision based on whatever value he or she wants. Justice is the philosophical consideration of deserts, i.e. what is fair or what a person deserves. The four principles approach weighs each of these principles in order to form an ethical decision.

The four principles approach is a common and well respected approach in medical ethics (Page 9-10). The four principles are useful as a starting point to develop an argument in medical ethics because of the generalizable nature of the principles, but problems arise when two or more of the principles are in apparent conflict with each other (Gillon 111-116). For example, in the hypothetical case there is a conflict between nonmaleficence and autonomy. The physician's desire not to cause physical harm to the patient is in conflict with the patient's desire not to suffer at the end of his life. When the principles are in conflict with each other in this way, there must further clarification to allow the broad principles to be useful in a particular situation (Beauchamp 3-5). In this circumstance, I propose that they must be ranked, and a decision must be made based on the highest principle. As I will show in the next section, the four principles should be ranked differently depending on which sphere the ethical problem falls into.

THREE SPHERES OF ETHICS

In order to narrow down how one should use the four principles in this situation, I propose three loosely defined spheres of ethics: the unambiguously ethical, the unambiguously *un*ethical, and the ethically ambiguous. Within each sphere, autonomy occupies a different role in the hierarchy of the four principles. Within the sphere of the unambiguously ethical or the unambiguously unethical, autonomy cannot be ranked at the top of the four principles. Take the ethically unambiguous situation of a minor suffering from a potentially life-threatening but curable bacterial infection. This case falls into the sphere of the ethically unambiguous because it is non-controversial to say that the child should immediately be prescribed the relevant antibiotics. In this simple case, neither the autonomy of the minor nor his or her parents' autonomy is taken as the foremost value. Clearly both beneficence and justice outrank autonomy in this example and in other similarly intuitive examples. Healing the child and understanding that it is unfair to let a child suffer are more important than adhering to the subjective desires of the child or the parents.

Within the sphere of the unambiguously *un*ethical, autonomy should also not be taken as the foremost value. For example, take the case of a patient requesting opioids without any need for them. It is unambiguously unethical to prescribe opioids to a patient who does not need them because they are highly addictive and potentially lethal (Weiss and Rao 54). In this simple case, it is non-controversial to say that the patient's autonomy is outranked by values of non-maleficence and justice.

These two examples present situations that are unambiguous, either ethically or unethically. The spheres of the ethically unambiguous and unethically unambiguous are characterized by the agreement of society, medical ethics, and the law. In the example of the sick child, the intuitions of society, medical ethics, and the law all align. A physician is legally and ethically obligated by society and by the ethics of medicine to help the child (Harrison 99-114). In the example of the unambiguously unethical, public opinion, the field of medical ethics, and the law all agree that the harms to a society of loosely prescribing opioids outrank the autonomy of any one individual (King et al. 32). Both of these examples are in contrast to the sphere of the ethically ambiguous.

Ethical questions in the sphere of the ethically ambiguous are characterized by ambiguity across three domains. First, they are

ambiguous because they are legal but not required. Second, they are characterized by a lack of a societal consensus as determined by polls. Third, they are ambiguous because there is no clear consensus across the field of medical ethics on how a physician should behave. Doctors are often faced with navigating the sphere of the ethically ambiguous, and they must decide what to do when their preferred course of action is not what the patient wants. Take the example of a doctor whose patient refuses to receive a hip replacement despite the doctor's belief that doing so would increase his or her quality of life. There is no legal imperative, societal imperative, or any consensus in the field of medical ethics requiring a doctor to perform this surgery ("American College" 19-34). Given these three qualifications, we can deduce that such a case falls into the sphere of the ethically ambiguous and that the patient's autonomy outranks the other values.

PAD is, at present, ethically ambiguous for the three aforementioned reasons: it is legal but not required, public opinion on PAD is split, and there is no clear consensus across the field of medical ethics. This analysis assumes the physician is in a state where PAD is legal, such as Oregon. National polls reveal that support for PAD has been split since the 1990s (Emanuel et al. 79-90; White III 247-257), and within the field of medical ethics, there is, at present, no clear consensus on how physicians should handle PAD requests (Emanuel et al. 79; Dickinson et al. 43-52). Given the ethical ambiguity of PAD, the physician should take the role of the informer and educator and leave the decision to the patient. The physician should rank the value of autonomy as chief among the four principles.

PROBABLE OBJECTION

Some have suggested that a problem with ranking autonomy above the other values in the four principles approach is that it leads to moral relativism (Gillon 307-312). For example, one could imagine making the claim that PAD for non-terminal patients is ethically analogous to PAD for terminal patients because they can both be justified by citing patient autonomy. However, a closer look at PAD for non-terminal patients reveals that it fails all three of the qualifications to be considered ethically ambiguous. It is illegal in every state in the United States (The Patients' Rights Council), polling data indicate that most Americans condemn suicide by non-terminal patients as immoral (Rottman, Kelemen, and Young 217-226), and the field of medical ethics condemns this practice (Nunes and Rego). PAD for non-terminal patients falls into the category of the unambiguously unethical, and in this domain, autonomy cannot and should not outrank the other three values. Autonomy should not always be ranked as the highest value in medicine, but if it is limited to the sphere of the ethically ambiguous, it can help to navigate away from the other extreme of moral imperialism (i.e. situations where physicians force their opinions on patients) (Gillon 307-312). Further, autonomy is central to the practice of ethical medicine and plays a part in almost every common theory in modern medical ethics (Cook et al. 1615-1620; Taylor 1-9). Any major critique of autonomy would therefore have to be significant in order to change the established role of autonomy in medicine.

CONCLUSION

In the case study previously mentioned, Dr. Ferris stops the conversation about PAD and effectively forces his belief about PAD on his patient. What Dr. Ferris has failed to realize is that PAD falls into the realm of the ethically ambiguous. The ethical ambiguity of PAD changes the ethical obligation of Dr. Ferris from informing his patient about *the* way forward to informing his patient about the *possible* ways forward. In other words, the autonomy of Mr. Witlaw is superior to the preferences of Dr. Ferris in the sphere of the ethically ambiguous. Dr. Ferris may voice his opinions about PAD, and he may even refer Mr. Witlaw to another physician, but he must ensure that that his patient's autonomy is respected above other principles.

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WORK CITED

- "American College of Surgeons Statements on Principles." *Bulletin of the American College of Surgeons*, vol. 101, no. 9, 2016, pp. 19-34.
- Beauchamp, Tom L. The 'Four Principles' Approach to Health Care Ethics, edited by Ashcroft, Richard E., et. al, 2007. Wiley Online Library, https://onlinelibrary.wiley.com /doi/book/10.1002/9780470510544.
- Beauchamp, Tom L., and James F. Childress. *Principles of Biomedical Ethics*. Oxford University Press, New York, 2009.
- Cook, T., et al. "Respect for Patient Autonomy as a Medical Virtue." *Cardiology in the Young*, vol. 25, no. 8, 2015, pp. 1615-1620.
- Dahl, E., and N. Levy. "The Case for Physician Assisted Suicide: How can it Possibly Be Proven?" *Journal of Med Ethics*, vol. 32, no. 6, 2006, pp. 335-338.
- Dickinson, George E., et al. "US Physicians' Attitudes Concerning Euthanasia and Physician-Assisted Death: A Systematic Literature Review." *Mortality*, vol. 10, no. 1, 2005, pp. 43-52.
- Emanuel, Ezekiel J., et al. "Attitudes and Practices of Euthanasia and Physician-Assisted Suicide in the United States, Canada, and Europe." *JAMA: Journal of the American Medical Association*, vol. 316, no. 1, 2016b, pp. 79-90.

- Gillon, R. "Defending the Four Principles Approach as a Good Basis for Good Medical Practice and Therefore for Good Medical Ethics." *Journal of Medical Ethics*, vol. 41, no. 1, 2015, pp. 111-116.
- Gillon, R. "Ethics Needs Principles—Four can Encompass the Rest—and Respect for Autonomy Should be 'First among Equals."" *Journal of Medical Ethics*, vol. 29, no. 5, 2003, pp. 307-312.
- Harrison, C. "Treatment Decisions regarding Infants, Children and Adolescents." *Paediatrics & Child Health*, vol. 9, no. 2, 2004, pp. 99-114.
- Johnston, W. S., and P. Bascom. "Physicians' Role in Physician-Assisted Suicide Discussions." AMA Journal of Ethics, vol. 6, no. 8, 2004. http://journalofethics.ama-assn.org/2004/08/ ccas1-0408.html.
- King, N. B., et al. "Determinants of Increased Opioid-Related Mortality in the United States and Canada, 1990-2013: A Systematic Review." *American Journal of Public Health*, vol. 104, no. 8, 2014, pp. 32.
- O'Brien, C. N., G. A. Madek, and G. R. Ferrera. "Oregon's Guidelines for Physician-Assisted Suicide: A Legal and Ethical Analysis." *University of Pittsburgh Law Review*, vol. 61, no. 2, 2000, pp. 329-365.
- Page, Katie. "The Four Principles: Can They be Measured and do They Predict Ethical Decision Making?" *BMC Medical Ethics*, vol. 13, 2012, p. 10.
- Nunes, R, and Rego, G. "Euthanasia: A Challenge to Medical Ethics." Journal of Clinical Research & Bioethics, vol. 7, no. 4, 2016, pp. 1-5. doi: 10.4172/2155-9627.1000282 2016.
- Rottman, Joshua, Deborah Kelemen, and Liane Young. Tainting the Soul: Purity Concerns Predict Moral Judgments of Suicide. vol. 130, 2014.
- Taylor, R. M. "Ethical Principles and Concepts in Medicine." *Handbook* of Clinical Neurology, vol. 118, 2013, pp. 1-9.

ALETHEIA

- The Patients Rights Council. "Assisted Suicide Laws in the United States." 01/06/2017, http://www.patientsrightscouncil.org /site/assisted-suicide-state-laws/.
- Weiss, Roger, and Vinod Rao. "The Prescription Opioid Addiction Treatment Study: What have we Learned." *Drug and Alcohol Dependence*, vol. 173, no. Supplement 1, 2017, pp. 54.
- White III, Frederick J. "Lessons from Recent Polls on Physician-Assisted Suicide." *National Catholic Bioethics Quarterly*, vol. 17, no. 2, 2017, pp. 247-257.

CAN UTILITARIANISM OR RETRIBUTIVISM JUSTIFY SOLITARY CONFINEMENT?

Katherine Sawczyn

Abstract: Solitary confinement increases negative consequences by severely damaging criminals physically and psychologically. In the philosophy of punishment, utilitarianism argues that a punishment is justified if it maximizes good consequences, while retributivism argues that a punishment is justified if it corrects the wrongful act. Neither utilitarianism nor retributivism can provide strong arguments for the practice of solitary confinement because this form of punishment does not maximize good consequences and is disproportionate to the crime.

INTRODUCTION

Solitary confinement is a punishment used throughout the United States that can be enacted in response to a criminal's unsatisfactory behavior. Although the conditions of solitary confinement vary among states and correction centers, general practices include isolation for 23-24 hours a day, sensory deprivation, restricted personal property, extensive surveillance and control, and little or no access to rehabilitative or educational programs (Metzner & Fellner 104). These conditions can last anywhere from days to decades and occur in segregated areas of regular prisons or in special facilities called supermax prisons (104). Solitary confinement is a controversial punishment, and much speculation surrounds its justification.

Utilitarianism and retributivism are the two prevailing views in the philosophy of punishment (Brandt 489). These theories provide different reasons for why governments punish citizens, different goals of punishments, and different preferred types of punishments. Utilitarianism is categorized as forward-thinking: it is concerned with the consequences of punishment. Utilitarians examine the possible outcomes of punishment to determine whether a punishment should be applied, and they always seek to maximize good consequences. In contrast, retributivism is categorized as backward-thinking: it is concerned with the punishment of past acts. Retributivists do not weigh the possible outcomes when choosing a punishment; rather, they examine the wrongdoing to determine a proportionate punishment. Neither utilitarianism nor retributivism can provide strong arguments for the practice of solitary confinement in the United States because this practice does not maximize good consequences and is often disproportionate to the crime.

UTILITARIANISM: THE GREATEST GOOD

Utilitarianism is a philosophy that emphasizes the greatest good. It claims that the purpose and guidelines of punishment should maximize good consequences and that an action is justified if it serves to benefit the highest number of people. It strives to reach the best outcome: a crimeless society. Proponents of utilitarianism value the good of society over the good of the prisoner. However, solitary confinement does not maximize good outcomes, as it does not reform prisoners and increases threats to safety.

Utilitarianism: Increasing Good Outcomes

According to utilitarians, if solitary confinement can maximize good outcomes, the prisoner's discomfort is justified. John Stuart Mill, a classic utilitarian, says, "the only purpose for which power can be rightfully exercised over any member of a civilized community, against 28 his will, is to prevent harm to others. His own good, either physical or moral, is not a sufficient warrant" (3). Utilitarians, like Mill, seek to maximize good consequences for the majority. In 1829, Quakers introduced solitary confinement to the United States, believing that "prisoners isolated in stone cells with only a Bible would use the time to repent, pray, and find introspection" (Sullivan). Quakers knew isolation was not a pleasurable experience, but they thought if a prisoner felt remorse and was dissuaded from further crime, the punishment was ethical. Solitary confinement would benefit the majority by reforming criminals and thus decreasing further crime. Quakers, like other utilitarians, believed that good consequences for the majority are the most important aspect of punishment. The discomfort of the prisoner is for the sake of the good of the majority.

Solitary Confinement: Decreasing Good Outcomes

Although utilitarianism attempts to justify solitary confinement, the history of this form of punishment along with recent data run counter to this theory's main objective: to maximize good consequences. While the goal of utilitarians is to benefit the majority by decreasing crime, "an increasing number of studies show a connection between isolating prisoners and higher rates of recidivism" (Eilperin). One study found that prisoners who were in solitary confinement not only had a 20-25% higher rate of recidivism, but the type of crime they committed after release was more likely to be violent (Eilperin). Quakers introduced solitary confinement to reform criminals and deter them from committing future crimes. However, even the Quakers abandoned the practice, as they found it ineffective, and the side effects experienced by prisoners made them worse (Sullivan). The modern research shown here echos those outcomes, revealing that solitary confinement does not maximize utility because it is not beneficent for the majority of society, including the inmate.

Utilitarianism: Increasing Safety

Utilitarianism argues that solitary confinement maximizes the greatest good by keeping the most people safe. Occasionally, initial imprisonment is not sufficient to deter individuals from misbehaving while in prison, and prisoners are put into solitary confinement as punishment for acts they committed in prison. Correction officers insist isolation is a necessary tool to protect individuals within the prison system, such as prisoners, guards, and other staff (Zwillich). Utilitarianism argues that solitary confinement is worth the discomfort of the prisoner, since the outcome is the greatest good for the rest of the internal prison population, including guards and other prisoners.

Solitary Confinement: Decreasing Safety

However, solitary confinement can increase threats to safety, not only for prisoners themselves but also for the general population. Solitary confinement may cause unusual outbursts of anger (NYT); for example, one study found that 90% of inmates in solitary confinement experienced irrational anger, as opposed to 3% of the general population (Gawande). Not only do prisoners who have irrational anger and violent outbursts pose a threat to prison guards; if released from prison, may also direct that anger and violence toward the majority of society. In addition to threatening the safety of others, prisoners in solitary confinement pose a threat to themselves; they are more prone to self-harm. One study found a third of participants in solitary confinement were acutely suicidal (Breslow). In light of this research that suggests solitary confinement creates negative consequences for the majority of society, utilitarianism cannot support the use of isolation as a second punishment within prison.

RETRIBUTIVISM: CORRECTING THE PAST

Within the realm of punishment, retributivism is a theory focused on correcting a past mistake, often disregarding the future effects of punishment. In order to correct the wrongful act, the punishment must be in proportion to the act committed. Retributivists also believe that 30

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punishing a person respects their autonomous decision to commit a crime. However, solitary confinement does not correct past mistakes and is not respectful because it is not a proportionate punishment and dehumanizes the prisoner.

Retributivism: Proportionality

In regards to retributivism, proportionality is the notion that criminals undergo a punishment that corresponds in degree to the harm caused to others; it can be summed up in the age-old saying of "an eye for an eye" (Corlett 286). A retributivist argument is that if the crime warrants isolation, then that is what the punishment should be. If a criminal has hurt someone, a proportionate punishment may be to remove them from human contact, therefore justifying the use of solitary confinement. A prisoner may be placed in solitary confinement for the crime he or she committed within the prison or outside its confines.

Solitary Confinement: Disproportionality

The negative psychological and physical effects of solitary confinement undermine the retributivist argument because the effects are disproportionate to the crime. The acts are not proportionate because there are no standard guidelines for placing prisoners in solitary confinement. Acts that have been punished with isolation include a variety of offenses such as fighting with prisoners or guards, possessing contraband, ignoring orders, refusing to cut one's hair, accessing Facebook, and using profanity (Rodriguez). Guards are increasingly using solitary confinement to manage difficult prisoners, many of whom have a serious mental illness and whose actions are uncontrollable (Metzner & Fellner 104). Solitary confinement is not reserved for "the worst of the worst" or extremely dangerous prisoners whose violence may warrant short-term isolation. Some prisoners are placed in solitary confinement for years simply because the prison needs to fill those cells, and this is clearly not done in response to the crime they committed (Zwillich). LGBTQ individuals, children in adult prisons, and the mentally ill may live in solitary

confinement indefinitely, as guards label them "vulnerable populations" who can be protected in solitary confinement (Rodriguez). As this evidence shows, solitary confinement is often disproportionate as a punishment to the crime committed. Therefore, retributivism cannot support solitary confinement.

Retributivism: Respect

When retributivists punish, they claim they are respecting the criminal's humanity and acknowledging that the criminal has the ability to understand the punishment. For example, Immanuel Kant, a central figure in moral philosophy, says whoever "wills a crime, also wills that he be punished— he has done the crime *to* himself" (Flanders 317). If we follow this line of reasoning, then we can conclude that withholding punishment means failing to respect a person's decision to commit a crime.

Solitary Confinement: Disrespect

Solitary confinement does not respect the criminal because the method of punishment is deeply dehumanizing. Spending long stretches of time alone is not normal, and to withhold human contact is to withhold a very important thing. Touch is "truly fundamental to human communication, bonding, and health," and to deny someone that ability to interact with others is, in a way, to deny him or her the basic aspects of one's humanity (Williams). An inmate at Oregon State Penitentiary describes his time in solitary confinement in the following way: "What is the most difficult part about isolation? I think not being able to see somebody face to face like I'm looking at you; to communicate, to touch, to hug, to feel loved, to feel human" (Lenzner). Retributivists argue that punishing a criminal respects his or her choice and humanity, yet the practice of solitary confinement is clearly inhumane in itself; retributivists therefore cannot use isolation as a means of respecting the criminal's autonomy.

Scientific studies and anecdotal evidence of prisoners' health during and after solitary confinement reveal the profound physical and mental impacts of isolation. For example, solitary confinement aggravates and even creates mental illness, including depression and paranoia (NYT). In addition to known mental illnesses, prisoners can also experience a unique set of symptoms: "solitary can cause a specific psychiatric syndrome, characterized by hallucinations; panic attacks; overt paranoia; diminished impulse control; hypersensitivity to external stimuli; and difficulties with thinking, concentration and memory" (Breslow). Aggravating or creating mental illness is unethical and disregards the prisoner's health, as they are at an increased risk of self-harm and suicide.

Other studies show further psychological harm to the prisoner. Not only can solitary confinement disrupt psychological functioning, but it can also create a long-term cognitive impairment or abnormality similar to traumatic brain injury (Gawande). Solitary confinement changes a person's brain structure and functioning to the point where some experience chronic apathy and cannot behave normally (Breslow). A military study of POWs in Vietnam found that, for many of the prisoners, social isolation was "as torturous and agonizing as any physical abuse they suffered" (Gawande). Solitary confinement thus creates a psychological handicap with which a person must live for the rest of his or her life, beyond the confines of prison. Retributivism dictates that criminals should receive punishment that is proportionate to the crimes they committed and that the punishment respect the humanity of the criminal. As this argument has shown, because solitary confinement is a severe and inhumane punishment with long-lasting effects, retributivists cannot justify this form of punishment.

CONCLUSION

Neither the utilitarian nor the retributivist argument can justify solitary confinement. The punishment does not fulfill the goal of utilitarianism: to maximize good consequences for the majority of society. It does not deter crime by creating a more disciplined prisoner but rather

creates a prisoner more prone to violence and anger. The negative outcomes for all involved groups far outweigh the positive ones, which is the opposite of utilitarianism's goal. Nor does solitary confinement fulfill the goal of retributivism: to correct a wrongful act proportionally while respecting the person's autonomous choice to commit a crime. Rather, the punishment dehumanizes the prisoner and is disproportionate to the crime. As I have shown, solitary confinement severely punishes a person psychologically and physically, which causes lasting effects that are not justifiable through the two main philosophical theories of punishment.

The implications of this argument are far-reaching for the thousands of prisoners that suffer in solitary confinement in the United States each year. Should the United States eliminate solitary confinement, correctional officers would need to use a different method to achieve the utilitarian and retributivist goals of punishment (maximum positive outcomes, safety, respect, and proportionality). Further research needs to be done on the best alternatives to solitary confinement for the sake of fulfilling those goals. A suggestion that is easy to implement is revoking T.V. or other privileges, but I would argue that the best alternative to solitary confinement is the treatment of underlying behavioral problems through individual and group counseling, art therapy, and other forms of constructive activities. While these treatments require more effort and demand the United States to rethink how it views prisons, the country must find an alternative to solitary confinement if punishment is to fulfill the goals of utilitarianism or retributivism.

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WORK CITED:

- Brandt, Richard. "Retributive Justice and Criminal Law." *Ethical Theory: The Problems of Normative and Critical Ethics.* Prentice Hall, Inc, 1959, pp. 489-501.
- Breslow, Jason M. "What Does Solitary Confinement Do To Your Mind?" *PBS*, FRONTLINE, 22 April 2014, https://www.pbs.org/ wgbh/frontline/article/what-does-solitary-confinement-do-toyour-mind/.
- Corlett, J. Angelo. "Making More Sense of Retributivism: Desert as Responsibility and Proportionality." *Cambridge University Press* on behalf of Royal Institute of Philosophy, vol. 78, no. 304, April 2003, pp. 279-287.
- Eilperin, Juliet. "Obama bans solitary confinement for juveniles in federal prisons." *The Washington Post*, 26 Jan. 2016, http://www.washingtonpost.com/politics/obama-bans-solitaryconfinement-for-juveniles-in-federal-prisons/2016/01/25 /056e14b2-c3a2-11e5-9693933a4d31bcc8_story.html?noredirect =on&utm_term=.797313f828df.
- Flanders, Chad. "Can Retributivism be Saved?" *BYU Law Review*, vol. 2014, no. 2, 2014, pp. 309-362.
- Gawande, Atul. "Hellhole." *The New Yorker*, 30 Mar. 2009, https://www.newyorker.com/magazine/2009/03/30/hellhole.
- Lenzner, Emily. "Solitary Confinement: How Effective Is It?" *National Public Radio*, 25 July 2006, https://www.npr.org/about/press/ 060725.solitary.html.
- Metzner, J. & Fellner, J. "Solitary Confinement and Mental Illness in U.S. Prisons: A Challenge for Medical Ethics." *The Journal of the American Academy of Psychiatry and the Law*, vol. 38, no. 1, 2010, pp. 104-108.

- Mill, John Stuart. "On Liberty." *London: Longman, Roberts, & Green Co.*, 4th ed., Library of Economics and Liberty, 1869.
- Rodriguez, Sal. "FAQ." *Solitary Watch*, 2015. http://solitarywatch.com/ facts/faq/.
- Sullivan, Laura. "Timeline: Solitary Confinement in U.S. Prisons." *National Public Radio*, 26 July 2006, https://www.npr.org/ templates/story/story.php?storyId=5579901.
- The Editorial Board. "Pulling Back on the Barbaric Use of Solitary Confinement." *The New York Times*, 5 Aug. 2017, https://www.nytimes .com/2017/08/05/opinion/sunday/solitaryconfinement-prison-juveniles.html.
- Williams, Ray. "8 Reasons Why We Need Human Touch More Than Ever." *Psychology Today*, Sussex Publishers, 28 Mar. 2015.
- Zwillich, Todd. "Making the Case: Arguments For and Against Solitary Confinement." *The Takeaway*, 12 Jun. 2013, *WYNC*, https://www.wnyc .org/story/306356-making-case-argumentsand-against-solitary-confinement/.

ANALYSIS OF THE PREVAILING VIEWS REGARDING THE NATURE OF THEORY-CHANGE IN THE FIELD OF SCIENCE

Jonathan Martinez

Abstract: One of the best responses to the controversial 'revolutionary paradigm-shift' theory posited by Thomas Kuhn is the theory, posited by Larry Laudan, that paradigm-shifts occur in the form of piecemeal changes. In this essay, I analyze these two positions and provide an account of why Laudan's response to Kuhn is inadequate; Laudan's response relies on both a limited, erroneous interpretation of historical events and an inductive argument structure that cannot guarantee that future paradigm-shifts will not be revolutionary.

INTRODUCTION

The prevailing philosophical views regarding the nature of theorychange in the field of science fall into two major categories: Kuhnian and non-Kuhnian. In *The Nature and Necessity of Scientific Revolutions* (1970), Thomas Kuhn articulated the Kuhnian perspective and argued that scientific theory-changes occur in a revolutionary fashion (Kuhn 86-88). This process makes individual scientific paradigms only assessable internally because the tools of evaluation (i.e.values) of each paradigm change at the beginning of each successive paradigm (Kuhn 94-96). As such, the practitioners of a previous paradigm cannot evaluate the validity (i.e. its correspondence with reality) of new paradigms because they have no evaluatory tools in common with practitioners of the new paradigm.

This asymmetry has led the philosophical and scientific communities to hold that if Kuhn's theory obtains, theory-changes in science may be nothing but arbitrary changes in the field, as the continuity of the field has been completely disrupted and as all tools of appraisal are rendered useless. In his essay Dissecting the Holist Picture (1986), Larry Laudan objects to the view expressed by Kuhn and proposes an alternative view: the possibility of individual, "piecemeal" changes within the elements of a scientific paradigm. While Laudan's non-Kuhnian theory provides a novel account of how theory-changes in science occur in a rational manner, it is ultimately ineffective because 1) the view's reliance on inductive reasoning does not prohibit the possibility of a revolutionary paradigm-shift, even assuming Laudan's interpretation of history to be correct, and 2) there are good reasons for calling Laudan's interpretation of the history of scientific theory-change into question, i.e. historical occurrences that either are unaccounted for or contradict Laudan's assertions.

THE PHILOSOPHICAL LANGUAGE OF SCIENTIFIC THEORY-CHANGE

In this section I will be discussing the meanings of each of the three elements of a paradigm, all of which are terms that must be grasped in order to understand the language of this essay. In addition to this, I will also discuss the "problem of induction," as an understanding of the particulars of the problem will be necessary to understand my critique of Laudan's view in the latter part of the essay.

Kuhn claims that every scientific paradigm consists of three elements: ontology, methodology, and values. "Ontology" refers to the totality of held beliefs (in other words, all things taken to be the case). It may be helpful to think of this term as roughly synonymous with "theory." However, because of the semantic ambiguity that arises when referring

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either to the individually-held beliefs of a theory vs. "the Theory," which may consist of more than one scientific theory's set of beliefs, ontology is a far more efficacious term. For example, the theory of gravity contains within it a multitude of assumptions about the world (e.g. that gravity functions in a uniform manner across the cosmos, the gravitational constant is equal to roughly 6.674 x 10^{-11} m³kg⁻¹s⁻², etc.). Likewise, the theory of electromagnetism hold a number of beliefs about the nature of the world (e.g. charged particles are subject to the electrostatic force¹). The totality of these beliefs comprises the paradigm's ontology.

"Methodology" refers to the totality of the methods a paradigm uses to gather data and make observations about the relevant phenomena. These methods include all of the tools of computational analysis (e.g. individual formulas that provide a means of predicting phenomena or computations that prove the existence of non-visible entities/forces), which comprise the way a paradigm goes about its tasks or the way it solves its problems. For example, in Newtonian physics, one of the fundamental computational tools at the disposal of a physicist are the formulas associated with the laws of thermodynamics. These laws provide the practitioners of Newtonian physics a common means of computation, with which they can solve the problems they desire to solve. For example, if one needs to determine the work done by a system,² one ought to utilize the first law of thermodynamics.

The term "values," as used by Kuhn in the context of scientific revolutions, refers to what the practitioners of a paradigm would consider the acceptable qualifications for scientific knowledge. In other words,

¹ The electrostatic force in the study of electromagnetism is used to determine the force of repulsion or attraction between two charged particles. It can be computed using Coulomb's law.

² Note than when I use the example of "work done by a system" I am referring to "work" as the concept articulated in Newtonian physics, i.e. the measurement of energy transferred as some mass is moved over a specified distance by an external force.

"values" refers to the types of knowledge that a paradigm would deem as *valid*. This term is used in the literature of the philosophy of science interchangeably with the terms "goals," "standards," and "axiological commitments." An example of this term is the acceptance of highly corroborated knowledge as a standard of the practice in science. Currently, science values (accepts as a goal) knowledge that is merely highly corroborated (i.e. science deems highly corroborated knowledge as an acceptable goal). By extension, this valuing of highly corroborated knowledge entails that infallible knowledge is not a value of science (i.e. it is not a goal sought after) due to its being deemed unrealistic.

Finally, inductive reasoning is the style of reasoning in which a person posits the existence of a *universal*, which is a principle that obtains in all states of affairs, based off *particular observations*, which are a *finite set* of observations based on experiences. The problem with this line of reasoning is that it often gives rise to inconsistencies stemming from the fact that particular observations (no matter how numerous) cannot justify a universal statement. Many attempts have been made to resolve this problem, e.g. Reichenbach's appeals to history or Armstrong's use of inference to the best explanation.³ However, they have all failed due to the fact that to the fact that the only means of justifying the principle of induction are by further use of induction, which yields an infinite regress (Popper 427-428).

The most common example given to illustrate issues with inductive reasoning is the "swan example." Consider the following:

P1) All observed swans have been white.

C1) All swans are white. (Popper 426).

³ Hans Reichenbach and David Armstrong are both philosophers, well known for their work on metaphysics, who have proposed "solutions" to the problem of induction.

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This example is a usage of inductive reasoning in which the observations in P1 are certainly true, but it nonetheless leads to a false conclusion. Nonwhite swans do exist.

ANALYSIS OF KUHN'S "REVOLUTIONARY" THEORY

Kuhn's major contribution to the philosophical discussion about the nature of scientific theory-change is his claim that, based off his interpretation of history, scientific theories change in the form of revolutionary paradigm-shifts. These paradigm-shifts involve distinct, simultaneous changes in all of the three components of a paradigm (ontology, methodology, and values). Kuhn argues that because all three of these elements undergo changes simultaneously, each paradigm has no means to assess the validity of the next paradigm. As such, each paradigm is only assessable internally (i.e. each paradigm can only assess the validity of its own elements). In this manner, each paradigm will be used to argue in its own defense (Kuhn 88). It is impossible for any paradigm to assess any other paradigm because 1) the individual ontologies have changed, which makes the paradigm seem to be a completely incoherent set of beliefs from the perspective of other paradigms, 2) the ways that they compute their data is entirely different, and 3) what the paradigm takes as being scientifically valid knowledge has changed.

These circumstances surrounding Kuhn's theory led many in the scientific community to proclaim that Kuhn has proven theory-change in science to be an irrational process. Fervent in their belief in the rationality of theory-change in science, many philosophers of science raced to disprove Kuhn's theory and prove that scientific theory change is a rational process. Among the best and more well-known of these theories was made by Larry Laudan in his essay *Dissecting the Holist Picture*.

ANALYSIS OF LAUDAN'S "PIECEMEAL" THEORY

In response of Kuhn's theory, Laudan claims that paradigm-shifts in science are not necessarily revolutionary and posits an alternative view. In contrast to the revolutionary view, Laudan proposes a concept known as "piecemeal change between paradigms," where the elements of a scientific paradigm (ontology, methodology, and values) can change between paradigms on an individual basis (Laudan 145-147). This allows the adjustment of a single element of a scientific paradigm (such as the accepted ontology of the field) without a change in the other two elements of the field.

Laudan believes this sort of piecemeal theory-change to be historically corroborated in science. That is, he claims that paradigm-shifts that may seem to be revolutionary at first glance are more likely the result of being piecemealed over a period of time. Furthermore, due to the narrow scope of our historical perspective, he says we often mistakenly assume that paradigm-shifts are instantaneous and revolutionary (Laudan 148). The narrow scope of our historical perspective will be of great importance for my critique of Laudan's theory later on, though my critique will deal with issues relating to Laudan's failure to take on a broader historical perspective.

The assumption that what appears to be revolutionary is actually the result of a longer process is common in our evaluation of changes throughout history. For example, it is easy to look at the evolution of hominins, the genealogy comprised of modern humans and their ancestors, throughout the fossil record and assume that the taxonomic features exhibited by modern humans developed rapidly over the course of only a few species. However, upon closer inspection, and upon further archaeological discoveries, it becomes clear that these changes occurred slowly and rarely in more than one adaptive change at a time.

The underlying goal of Laudan's theory is to provide an account of scientific theory-change that is rational in a way that Kuhn's theory is not, through the use of piecemeal changes. Laudan is concerned with ensuring that the process of theory-change in science is understood as a rational and logical process. The necessity of this stems from the fact that, if Kuhn's theory is correct and no compelling alternative account of the nature of theory-change in science can be produced, revolutionary theory-42

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change will stand as the prevailing view of theory-change in science. This would condemn the work of scientists to being merely the product of circular affirmation and arbitrary theory-changes that do not bring the field closer to the truth.

Laudan proposes a view about the nature of theory-change in which paradigms maintain a degree of resemblance to one another for the purpose of comparison and evaluation of merit. Laudan believes this view not only to be beneficial for preserving our view of science as being guided by rational processes but also to be the correct interpretation of the historical facts of theory-change in science. Because paradigm-shifts can occur as piecemeal changes in Laudan's account, the possibility remains for comparison between the two paradigms. This allows scientists to assess the merit of one theory over the other. Consider following example:

- Paradigm 1: Ontology₁, Methodology₁, Values₁
- Paradigm 1¹: Ontology₂, Methodology₁, Values₁
- Paradigm 2: Ontology₂, Methodology₂, Values₂. (Laudan 143).

In this case, an individual change occurred in the form of a change in ontology while leaving both methodology and values the same. In the next step, the methodology and the values of the paradigm changed, but the ontology remained the same.

Laudan's view accounts for the way paradigm-shifts can be rationally justified by showing that paradigms shift via incremental changes (no more than two of the elements of the paradigm at a time), which allows for rational comparison along each of the changes. That is, the paradigms still possess common features that can be used as tools for evaluation (Laudan 153). Had all of the elements of the paradigm changed at once, the successive paradigm would have been completely dissimilar from its predecessor. A revolutionary change would have ensured that no comparisons could be drawn between the paradigms. This leads to the possibility that the paradigm-shift in question occurred without any sort of rational justification as well as to the impossibility of assessing which

theory corresponds more closely with the truth. Laudan claims to have solved these issues through piecemealing theory; however, as we will see in the next section, his theory retains significant issues because of the way Laudan justifies his claims.

CRITIQUE OF LAUDAN'S THEORY

Laudan's theory offers a fairly robust account of rational theorychange in the field of science, but there are significant shortcomings to the theory. Nothing in Laudan's theory *prohibits* the possibility of concurrent paradigm-changes across all three elements in future scientific theorychanges; it is certainly possible that piecemeal changes could simultaneously occur across all three elements, which would lead to a paradigm-shift that is fundamentally irrational (a Kuhnian revolutionary paradigm-shift). Laudan's theory, despite its best efforts, leaves open the possibility for revolutionary paradigm-shifts (i.e., changes along all three of the elements of scientific theory).

Given his view that what appears to be a revolutionary shift is more likely the result of a longer process of piecemeal change, Laudan would likely attempt to defend his view by claiming that in the history of scientific theory-change, there has never once been a revolutionary paradigm-shift. He may say that we should therefore take such events as either exceedingly rare or simply impossible. The evidence Laudan provides in favor of this claim is that there has only been one value-change in science throughout all of its history: a change from valuing infallible knowledge (knowledge that cannot be doubted) to valuing highly probable knowledge sometime in the late 19th century (Laudan 152-153). If this is true, then, given that there must be change among all three of the elements of the paradigm in order for a revolutionary paradigm-shift to occur, the only opportunity to have a revolutionary paradigm-shift was passed up. Although the values of science changed, the ontology and methodology of the field did not change along with it.

However, this response to my claim that positing the existence of piecemeal changes does not necessitate that changes must occur in a piecemeal fashion highlights two important issues: 1) the limited scope of Laudan's concept of values and 2) Laudan's problematic commitment to inductive reasoning. To claim that the singular goal of science is the pursuit of either infallible or highly probable knowledge is a hasty generalization of the field (Laudan 152). Science certainly seeks out knowledge that is as highly corroborated as possible by the available evidence, but to say that this is the only value of science (or at least the only one to have undergone change) is too narrow-minded. Take for example the shift in value from innate/occult properties to mechanical explanations in the aftermath of Einstein's postulations. Science formerly accepted innate properties as a viable means of explaining phenomena (e.g. gravity being an innate quality possessed by all objects composed of matter). However, after Einstein proposed a mechanical explanation for the processes of gravity (i.e. general relativity), scientists abandoned explanations involving innate qualities, judging them invalid, and deemed mechanical explanations as scientifically appropriate. This change is clearly a shift in what the field of science takes to be a scientifically valid explanation (a value), and it is distinct from the example that Laudan provides, which he claimed to be the sole value-change in the field's history. It may be a matter of interpretation what qualifies as a value of science, but more than the single one identified by Laudan exists.

As a result of the fact that the field of science certainly seems to possess multiple values, a significant amount of additional historical work seems necessary in order to ensure that some of the other value-changes in the field science did not also coincide with changes in both ontology and methodology. If this is the case, then philosophers of science would have an even greater reason to fear the shortcomings of Laudan's theory because its validity is contingent upon the fact that revolutionary paradigm-shifts are not corroborated by history.

In addition to the problems associated with Laudan's erroneous interpretations of the history of scientific theory-change, the inductive nature of Laudan's reasoning severely undermines his theory. Even if we take Laudan's interpretations of history to be correct, the fact that Laudan's reasoning is inductive inadvertently leaves open the possibility for revolutionary paradigm-shifts in the future. Laudan is trying to dispel the possibility of revolutionary paradigm-shifts by appealing to his interpretations of history (a set of particular observations), but this guarantees neither the universal claim that historical trends will remain the case in the future nor the universal claim that all theory-changes have always been non-revolutionary. In other words, because of the problems inherent in using induction to form theories (i.e. it does not offer a compelling account of why universal claims are necessitated by particular observations), Laudan's theory cannot provide an account of how theorychanges in science necessarily undergo piecemeal changes. Much like in Popper's analogy where observations of some swans cannot necessitate any universal claim about observations of swans in the future. Laudan cannot use the history of scientific paradigm-shifts to assert that there is any necessary relationship between past paradigm-shifts and what will happen in future paradigm-shifts. If this is the case, then Laudan's perspective merely adds the possibility that piecemeal changes can occur in paradigm-shifts, but he does not provide an adequate account that explains why revolutionary paradigm-shifts will not occur.

CONCLUSION

The most grievous problems with Laudan's perspective lie not in his postulation that piecemeal changes lead to paradigm-shifts over time but in his usage of history (and an erroneous view of history at that) as the sole means of justifying this claim. Laudan simply adds another possibility to the question of how theories change in the field of science without fully disproving the occurrence of the revolutionary paradigm-shifts discussed by Kuhn. Laudan's failure to indicate why paradigm-shifts *will* be of the piecemeal variety, coupled with the erroneous nature of Laudan's

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interpretation of the values that science has held throughout history, leads to the fact that the problems created by revolutionary paradigm-shifts are left wholly unresolved by Laudan. Revolutionary paradigm-shifts remain a problem in Laudan's theory in spite of the possibility that much theorychange in science may occur in a piecemeal fashion.

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WORK CITED

- Kuhn, Thomas. "The Nature and Necessity of Scientific Revolutions." *Philosophy of Science: The Central Issues*, edited by Martin Curd and J.A. Cover, New York: W.W. Norton and Company, Inc., 1998, pp. 86-101.
- Laudan, Larry. "Dissecting the Holist Picture." *Philosophy of Science: The Central Issues*, edited by Martin Curd and J.A. Cover, New York: W.W. Norton and Company, Inc., 1998, pp. 139-167.
- Popper, Karl. "The Problem of Induction." *Philosophy of Science: The Central Issues*, edited by Martin Curd and J.A. Cover, New York: W.W. Norton and Company, Inc., 1998, pp. 426-431.

THE PERVASIVE QUALITY OF SELF-DECEPTION

Douglas Dohmeyer

Abstract: J. Fernández claims in his paper titled "Self-Deception and Self-Knowledge" that first-order motivationalism cannot fully explain a type of self-deception characterized by its so-called "conflict" aspect. A first-order motivationalist account can explain why this kind of selfdeception has the "conflict" aspect if an additional fifth sufficient condition requires a self-deceived subject to lack sufficient motivation to know the truth-value of the proposition that is the object of deception. With my addition of a fifth sufficient condition to first-order motivationalism, we have a formulation of a position that survives Fernández's criticism and satisfies his desiderata.

INTRODUCTION

Philosophical analyses of self-deception are based on the following question: How can one believe something to be the case and then convince oneself otherwise by one's own doing? In his paper titled "Self-Deception and Self-Knowledge," Fernández identifies at least two different features of self-deception: the so-called "normativity" and "conflict" qualities (Fernández 382). The type of self-deception discussed by Fernández (a type that has both features) is the same type that is to be discussed in this paper. I show how my modified version of first-order

motivationalism, one particular account of self-deception, can explain why the peculiar type of self-deception identified by Fernández has the "normativity" and "conflict" aspects. This type of self-deception is a result of an indifference to knowing the truth or a lack of motivation to know the truth. As I will show, the modified first-order motivationalist account survives Fernández's criticism and satisfies his desiderata for an explanation of why both aspects of the type of self-deception that he addresses arise.

The second section analyzes the type of self-deception to be discussed in this paper and provides an overview of two accounts of selfdeception. In the third section, I will provide a brief analysis of the "normativity" and "conflict" qualities of self-deception and identify the requirements for a satisfactory explanation of why these aspects arise. The fourth section gives context for the mechanism by which the necessary behavior for the "conflict" aspect is attained. I refer to this mechanism as a "filter" since it resembles one in effect. In the fifth section, I will show that my new formulation of the first-order motivationalist account does provide a causal explanation of both aspects of self-deception if understood in conjunction with Fingarette's observations of the mind. In the fifth section, I also show that first-order motivationalism may only explain self-deception if the subject is indifferent to knowing or has no motivation to know the truth of the matter, and I demonstrate how this relates to Fernández's criticism. The sixth section contains a review of what is discussed and some concluding remarks about the implications of this argument.

THE CLASSIC ACCOUNTS

I begin by exploring the vignettes of Bill, Jack, and Tom to introduce the type of self-deception of interest here. This leads us to an analysis of the three vignettes and to the "normativity" and "conflict" qualities of self-deception. I then mention intentionalism, which gives us a "methodological lesson" that motivates Fernández's desiderata

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(Fernández 385). First-order motivationalism is presented along with Fernández's criticism of the position. I then identify the question that needs answering if the first-order motivationalist account is to explain why the "conflict" aspect of self-deception arises, specifically, "How can a desire for P not to be the case also cause a subject S to avoid information regarding P?"

The "Normativity" and "Conflict" Qualities

The type of self-deception discussed in Fernández's paper is not the garden-variety type of self-deception. The type in question possesses two aspects, namely the "normativity" and "conflict" qualities. In brief, the "normativity" aspect is the intuition we have to hold the self-deceived subject culpable for the deception, and the "conflict" aspect is the tension between the self-deceived subject's stated belief and the belief an observer attributes to the self-deceived subject due to the subject's observed behavior.

To clarify the distinction between the aspects, we can take Fernández's vignettes of Bill, Jack, and Tom:

Case 1: Bill's love life

Bill fancies Kate. Bill has asked her out on many occasions, and Kate has always declined going on a date with him. In addition to this, Kate has complained to some common friends that she finds Bill obnoxious, which they have mentioned to him. Bill, however, continues pursuing Kate. Noticing this behavior, Bill's friends have asked him whether he really believes that Kate fancies him. Bill claims, quite confidently, that Kate does fancy him, and she is just 'playing hard to get.'

Case 2: Jack's health

Lately Jack has been avoiding reading any magazine or newspaper article on medical issues. If they appear on a TV

program that he is watching, he immediately switches channels. If they come up in a conversation to which he is a party, he changes the topic. He has been scheduled to have a regular check-up with his doctor several times, but it is proving difficult for him to get this done. Each time the appointment is scheduled, Jack forgets about it and misses the appointment. Eventually, Jack's relatives have asked him whether he believes that he is sick, but Jack sincerely denies believing that.

Case 3: Tom's marriage

Tom has been trying to read his wife's e-mail correspondence for a few weeks. He has also attempted to overhear her conversations on the phone. He has checked her text messages on her mobile. He has sometimes followed her from a distance when she goes out. And he often asks her to give him a detailed account of her daily activities while she has not been in the house. Noticing some of this behavior, Tom's friends have asked him whether he believes that his wife is hiding something from him, but Tom honestly claims not to believe that. (Fernández 380-381).

In the case of Bill, there is no "conflict" quality since an observer has no trouble attributing to Bill the belief that Kate fancies him. This is because Bill's stated belief and his behavior both suggest that Bill believes Kate fancies him. In the case of Jack, his behavior suggests that he believes himself to be sick, yet he claims to believe that he is not sick. Likewise, in the case of Tom, his behavior suggests that he believes his wife is unfaithful, yet he claims to believe that she is not unfaithful. Thus, the "conflict" quality of self-deception can be found in the cases of Jack and Tom but not in the case of Bill. The "normativity" aspect shows in all three cases because it is easy to sense that Bill, Jack, and Tom are culpable for their self-deception. Note again that the "normativity" aspect is a commonsense intuition to hold a self-deceived subject responsible and that the

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"conflict" aspect is the tension between the belief suggested by one's behavior and the stated belief.

With these two aspects in mind, I move on to the classic accounts of self-deception and see if they can explain the presence of both aspects in Jack's case. Fernández considers three classic accounts of selfdeception in his paper, and the two that I address here are intentionalism and first-order motivationalism. I will provide brief summaries of these accounts and their inadequacies according to Fernández.

Intentionalism

An analysis of intentionalism motivates Fernández's desiderata, which are desiderata for all explanations of self-deception. Intentionalism assumes that self-deception is similar to the interpersonal equivalent where some subject A intentionally deceives some subject B. So, on this account, self-deception amounts to a subject intentionally deceiving himself or herself about the truth-value of a proposition P. Fernández puts it more precisely:

If a subject S is self-deceived, then there is a proposition P such that:

(1) S believes that P is not the case.

(2) S has the intention to get herself to believe that P.

(3) S believes that P.

(4) S's intention is causally responsible for her forming the belief that P. (Fernández 383-384).

If correct, this position explains why the two aspects of selfdeception identified by Fernández arise. The "normativity" is expressed because the subject has been dishonest with herself, and being dishonest with oneself is intuitively objectionable. The "conflict" is expressed because the subject's set of contradictory beliefs cause the incongruent behavior.

There are two problems with this position, and these problems come in the form of paradoxes named the "static paradox" and the "dynamic paradox" (Mele). The "static paradox" requires us to answer the question, "How is it possible for a subject to hold two contradictory beliefs about the same proposition at the same time?" The "dynamic paradox" requires us to answer the question, "How is it possible for a subject intentionally to deceive himself into believing something that he already believes to be false?" Fernández argues that the "static" and "dynamic" paradoxes present powerful arguments in opposition to the intentionalist position for two reasons. First, paradoxical reasoning is a deeply flawed form of argumentation. Second, although Fernández claims that these objections are not definitive, he says that it is difficult to see how these paradoxes are resolved (Fernández 384). He argues that other accounts should avoid both the "static paradox" and the "dynamic paradox" for the same reasons.

Fernández's Desiderata

Fernández's analysis of intentionalism furnishes valuable insights. Unless one intends to resolve the static and dynamic paradoxes, one should avoid using intentions to explain how self-deception works. Naturally, "these problems suggest a certain methodological lesson" (Fernández 385). According to Fernández, explanations of self-deception should:

- 1. Avoid the "static paradox."
- 2. Avoid the "dynamic paradox."

3. Avoid using any ad hoc resources.

4. Use as few intellectual resources as possible (parsimony). (Fernández 385).

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These desiderata serve to arbitrate between competing explanations of self-deception (Fernández 385). In other words, the explanation that meets these desiderata is a candidate for the best account of self-deception. With this in mind, we move on to consider first-order motivationalism.

First-Order Motivationalism

The first-order motivationalist claims that self-deception is the result of a false belief formed while the subject is under the influence of a motivational state. According to this account, a subject S believes some proposition (P), and there exists a motivational state E such that one believes P is not the case; S is in E, so S believes P is not the case (not-P). This motivational state E is the result of a desire for some state of the universe to obtain, and E is causally responsible for S's belief that P is not the case. This state causes the subject to consider evidence in a motivationally-biased way.

For first-order motivationalism, Fernández provides Alfred R. Mele's proposed set of sufficient conditions for a subject S forming the belief that P:

(1) S's belief that P is false.

(2) S treats data relevant, or at least seemingly relevant, to the truth-value of P in a motivationally biased way.

(3) This biased treatment is a non-deviant cause of S's acquiring the belief that P.

(4) The body of the data possessed by S at the time provides greater warrant for not-P than for P. (Fernández 385).

First-order motivationalism can explain why the "normativity" quality of self-deception arises. If the first-order motivationalist, for instance, spells out the case of Jack, then Jack's belief that he is not sick is easily explained because his motivationally-biased treatment of

evidence leads him to believe that he is not sick. What we find intuitively objectionable in Jack's case is his biased consideration of evidence. The objection is not against Jack's intention to deceive himself; the motivationalist view avoids intention as an explanation. The normative objection regards the fact that Jack considers evidence in a motivationallybiased way even though he does not want to be sick and thus forms a false belief about his health.

There is a problem, however, with explaining why the "conflict" of self-deception arises. According to Fernández, if we attribute to Jack a desire not to be sick, the first-order motivationalist has no recourse to explain Jack's avoidance behavior; you would expect Jack to be very interested in knowing whether he is sick or not. The problem with firstorder motivationalism is that one would expect that someone who wants not to be sick would also be interested in knowing whether he is, in fact, sick. Would we not expect a desire for the world to be a certain way, or at least a different desire, to result in some motivation to know the truth and thus cause Jack to seek medical help? The question is, "How can a desire for P not to be the case also cause a subject S to avoid information regarding P?" In other words, how does Jack avoid medical information if he simply wants not to be sick, and why would he do so? This is the question I intend to answer in this paper because an answer to this question would amount to an explanation of the "conflict" of self-deception in terms of the first-order motivationalist account and would therefore show that first-order motivationalism survives Fernández's criticism

RECAP OF THE "NORMATIVITY" AND "CONFLICT" QUALITIES OF SELF-DECEPTION

The "normativity" of self-deception is the quality that we have an intuition that the self-deceived subject is morally culpable and personally responsible for the deception. Usually we agree that self-deception is objectionable as a matter of common sense, but we may have trouble explaining exactly why we have this sense. So, an account of self-

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deception must explain why this sense arises because it is the commonsense view that self-deception is morally objectionable. We must have grounds for accusing the self-deceived subject of being irrational in order to account for an instance of self-deception.

The "conflict" quality of self-deception is merely an observed disagreement between one's stated belief and that which one's behavior suggests. S claims to believe that P is the case; however, S's behavior provides justification for an external observer to conclude that S believes not-P. It is conceivable that the cause of this disagreement is the result of some *motivation* aimed at obtaining P (for the universe to be a way such that P is true), which simultaneously causes S to behave in a way such that the belief that not-P can be attributed to S.

If this analysis of the "conflict" quality is correct, then an explanation of how some *motivation* of S for P to obtain causes behavior that justifies attributing to S the belief that not-P would explain why the "conflict" aspect arises and at the same time satisfy Fernández's desiderata. First-order motivationalism already avoids (1) and (2) of the desiderata because it avoids the use of intention. First-order motivationalism also does not use ad hoc resources; hence, (3) is satisfied. The addition of only one condition would be in keeping with (4), so a slightly modified version of first-order motivationalism is a good candidate for a consistent explanation of self-deception.

FINGARETTE'S OBSERVATIONS OF THE MIND

In order to understand how first-order motivationalism can explain self-deception, we must first take note of Fingarette's observations of the mind. My aim is to analyse Fingarette's observations and apply the conclusion to first-order motivationalism. I intend to show in later sections how this application works in explaining why the "conflict" of selfdeception arises. In this section I examine the passive processing of the mind and observe that it "filters" irrelevant sense-data, which enables the mind to focus on more important tasks. The link between the filter and an account of the "conflict" of self-deception lies in the filter causing the observed behavior of the self-deceived subject.

In Fingarette's essay, "Self-Deception Needs No Explaining," he argues that a more complete understanding of the way the mind works would dissolve the problems philosophers find with cases of self-deception (Fingarette). In short, "all these discussions have been fundamentally misguided from the very start" (Fingarette 289), and the strange workings of the mind are responsible for self-deception. He observes that humans have the capability unconsciously to take account of and process sensory information unrelated to the task in which they are actively engaged. For example, I am writing these clauses, and at the time that I am focused on writing, there are sense-data with which I am faced. These sense-data include the angle at which I hold the pen, the thoughts colliding with my mind, and the hum and rattle of the AC. Even though the AC noises are irritating, I manage to stay focused on writing and sometimes even forget about it. Some part of my mind *filters* the hum and rattle from my sensory experience.

What is puzzling is that this filtering is not indiscriminate. Whereas some part of me can filter a mildly irritating but irrelevant noise from my conscious sensory experience, the filter would not attenuate the sound of a fire alarm as easily. This is not entirely due to the nature of the sound a fire alarm makes but due to the indication that the building may be on fire. Living is more important than finishing the paper, so the focused part of the mind is made aware of the situation. This passive information-processing and the response to the relevant items is the intelligent adaptable behavior that Fingarette observes in his paper.

The behavior, as previously described, can be considered "intelligent" because it accounts for some variance in the sensory information, the causal origin, and what the information means. Think of the fire alarm and how it is associated with life-threatening danger. This association would not be present if the fire alarm were regularly triggered

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in the absence of real danger, and it would become like the AC's irritating noises—something to be ignored. The "adaptable" part responds to the information by shifting one's attention. Thus, humans have some capability that allows them, without focusing, to take account of and at the same time respond to events in a way that could be described as intelligently adaptable. Alone, this passive ability is not enough to explain *how* the deception is achieved. In section five, it will be shown that this passive ability combined with motivational states can explain how the deception is achieved.

IN DEFENSE OF FIRST-ORDER MOTIVATIONALISM

In order for an account to survive Fernández's criticism, I must show that it is possible and non-contradictory for a subject S to state the belief that P and behave as if S believes not-P. I intend to show that a new set of sufficient conditions for self-deception allows first-order motivationalism to explain why a case of self-deception has the "conflict" and "normativity" aspects. In demonstrating such, I aim to prove that this new formulation of first-order motivationalism does survive Fernández's criticism and satisfy his desiderata.

Given that indifference is a state of motivation, consider the following statements:

- I want it to be the case that P is true.
- I wish that P were true. (An alternate, less rigorous, formulation of that above.)
- I am indifferent to the actual truth-value of P.

I assert that there is no contradiction in the aforementioned statements. Although it would be counterproductive to say one wants to accomplish something and at the same time not want to know if that thing is indeed being accomplished, I can find no reason why such motivations are mutually exclusive. Hence, I find no reason why a desire for P to obtain necessitates some motivation to know if P has indeed obtained. If I am correct, the following set of sufficient conditions for firstorder motivationalism holds:

(1) S's belief that P is false.

(2) S treats data relevant, or at least seemingly relevant, to the truth-value of P in a motivationally-biased way.

(3) This biased treatment of data is a non-deviant cause of S's acquiring the belief that P.

(4) The body of the data possessed by S at the time provides greater warrant for not-P than for P.

*(5) S does not possess a sufficient motivation to know what the truth-value of P actually is.

If S satisfies conditions 1, 2, 3, and 4, then this fifth condition may be added without fear of contradiction. As I will show, this fifth statement along with Fingarette's observations of the mind are jointly necessary for the first-order motivationalist to explain why the "conflict" of self-deception arises.

Fernández identifies the problem with first-order motivationalism as its inability to explain why the "conflict" of self-deception arises. How can the first-order motivationalist account for Jack's avoidance behavior? The first-order motivationalist explains that Jack deceives himself by being in a state E that causes him to consider evidence in a motivationallybiased way, and he thus comes to believe that P is the case when P is actually not the case. However, his behavior suggests he believes that P is not the case. Fernández expects that, in the case of Jack, someone who wants not to be sick would be interested in knowing whether one is, in fact, sick (387).

If Jack is, in fact, interested in knowing whether he is sick, then Jack must also be in some way motivated to know. How else could he be

interested in the matter of knowing? To expect that Jack is interested in knowing whether he is sick is to presuppose that Jack has a motivation to know what the truth of the matter is. As I have argued earlier, it is not necessarily true that a desire not to be sick results in a motivation to know the truth of the matter. First-order motivationalism cannot explain self-deception if the subject has a motivation to know the truth of the matter since a motivation to know the truth of the matter would cause behavior that is consistent with one's stated belief. First-order motivationalism may only explain why the "conflict" aspect of self-deception arises if the subject is indifferent to or has no motivation to know the truth of the matter.

Let us suppose that Jack is indifferent to knowledge of the truth of the matter; we can now make sense of his avoidance behavior. The firstorder motivationalist can now say that the motivational state E (note that state E may include many motivations) causes Jack to consider evidence in a motivationally-biased way even after he has come to believe P. The state E persists because the causal desire persists, namely the desire for P to obtain. Because Jack is indifferent to knowing the truth-value of P, Jack has no reason to do anything that would lead to knowing the truth-value of P. Because Jack is motivated for P to obtain and now believes that it has obtained, he has reason to avoid information relevant to the truth-value of P. The reason for Jack avoiding information regarding the truth-value of P is that such information may challenge his belief and cause him to be irritated. Note that since Jack is indifferent to knowledge of the truth-value of P and already believes that P, additional information relating to the truth-value of P will appear to him irrelevant at best and irritating at worst. Thus, E is causally responsible for Jack's avoidance behavior because Jack is indifferent to knowledge of the truth of the matter and because Jack is motivated to have P obtain.

Thus, the first-order motivationalist explains Jack's avoidance behavior as a result of being in the state E and therefore explains why the "conflict" of self-deception arises. This is all predicated on Jack's lack of

a sufficient motivation for knowledge because Jack's avoidance behavior cannot be explained otherwise. If he was motivated to know if he was really sick, he would have reason to seek medical help.

This brings us to an extremely important question: How does Jack achieve avoidance behavior? Surely, Jack is not constantly thinking about the relation between the evidence that he happens to encounter and his self-deception because Jack does not constantly or actively think about his self-deception. However, according to Fingarette's observations and this "filter" concept, Jack has the capability passively to take account of information and engage in intelligent adaptable behavior.

This intelligent adaptable behavior allows Jack to achieve his avoidance behavior and therefore results in the "conflict" of selfdeception. There exists a mental state E such that Jack considers evidence in a biased way; Jack is in E, and Jack's passive intelligent adaptable behavior identifies evidence related to Jack's self-deception. Some part of Jack is constantly considering evidence even when his attention is not focused on his self-deception. This consideration is simply being done passively and mediates his focused and conscious considerations. Jack's biased motivation culminates in his avoidance behavior because he has no sufficient motivation to know the truth that would prevent this avoidance behavior. Thus, first-order motivationalism accounts for the "conflict" of self-deception.

Moreover, this notion of "passive analysis" is not counterintuitive. Suppose, for instance, that you want to boil water on the stove so you can cook some pasta. All you need to do to start the process is turn the heat on (you have already put the water in the pot and the pot on the stove). You turn one of the knobs on the stove clockwise and form the belief that the heat is turned on under the pot of water. Further suppose that you shift your focus to preparing the sauce to go with the pasta. After some time, you glance at the pot of water, and you notice that no perceptible change has occurred. You then realize that you had turned on the incorrect burner

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and form the belief that the pot is not being heated. You believed the pot of water was being heated but were not actively checking to see if it was. After considering evidence suggesting that the pot was not being heated, you came to believe that the pot was not being heated. By way of intelligent adaptable behavior, you passively identified evidence that implied the pot was not being heated and reached a particular conclusion about the state of the pot.

So, if you, the subject, had engaged in self-deception—if you had wanted the pot to get hot and did not want to know if it was getting hot then you would have simply disregarded the evidence suggesting that the pot was not being heated and continued preparing the sauce rather than rectifying the belief about the pot being heated. Evidence relating to the state of the water is, at this point, irrelevant since you have no reason whatsoever to consider it. The point is, this passive intelligent adaptable behavior allows us constantly to identify relevant evidence and relate that evidence to some belief that is already possessed. It is by this mechanism that Jack achieves his avoidance behavior since, to Jack, the evidence relating to the state of his health is irrelevant and may be filtered from his conscious sensory experience.

Why does Jack engage in this self-deception? As the first-order motivationalist account suggests, Jack's self-deception is caused by a motivational state E, which results from a desire for the universe to be a certain way, and this state causes Jack to consider evidence in a motivationally-biased way. Jack desires merely not to be sick. In other words, a subject S is in E and therefore desires that some proposition P has a certain truth-value. This is not equivalent to desiring to *know* the truth-value of some proposition P. The desire not to be sick does not necessitate a sufficient motivation to know the truth of the state of one's health.

Suppose that a subject S has achieved self-deception according to the new first-order motivationalist account. Subject S possesses a desire for the truth-value of a proposition P to obtain, and S, after considering

evidence in a biased way, believes that P. What reason does S have to consider additional evidence relevant to the truth-value of P if S has no motivation to do so? Because S already believes falsely that P, any additional evidence relevant to P can suggest either P is true or suggest P is false. In the case that the evidence suggests that P is true, then S further confirms belief in P, which does not warrant S to change the belief that P. In the case that the evidence suggests that P is false, S is confronted with evidence that does warrant S to change the belief that P, and this evidence would would probably irritate S and be filtered out of S's considerations.

It makes sense why Jack would avoid medical information. Because Jack merely desires not to be sick and because Jack already believes that he is not sick, Jack has no reason to consider evidence. Jack actually has a reason to avoid evidence because it can, at best, not challenge his belief and, at worst, challenge his belief. This is the reason why Jack behaves in a way such that an observer would have justification to attribute to him the belief that he is sick when Jack really just is not motivated to know the truth of the matter.

THE "NORMATIVITY" QUALITY AND THE FIFTH CONDITION

This account still explains why the "normativity" aspect of selfdeception arises, which is required for an explanation of the commonsense moral intuition. Is there anything intuitively objectionable about wanting a situation to be some way and at the same time not wanting to know if the situation actually is that way? I say yes. The moral objection is to the motivationally-biased consideration of evidence. An additional objection would be that an indifference to the truth is counterproductive to achieving that which a subject is motivated to do.

There is something intuitively wrong about not wanting to know how something is and at the same time wanting that thing to be some way. Here are some examples:

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- I want my bike to work, but I do not necessarily want to know if it will work.
- I want the final exam to be on Monday, but I do not necessarily want to know if it will be on Monday.

Intuitively enough, the person making these statements would be culpable for his or her own trouble. We now have grounds for accusing the subject of irrationality, so why the "normativity" quality of self-deception arises can be explained in the new account.

With the how and why answered and the first-order motivationalist account amended, it has been shown that the first-order motivationalist account survives Fernández's criticism. This is because (1) unamended first-order motivationalism already satisfies the desiderata, and because (2) this section has shown that the new set of sufficient conditions holds for the specific type of self-deception characterized by "conflict" and "normativity."

CONCLUSION:

The new set of sufficient conditions allows first-order motivationalism to explain forms of self-deception including those characterized by "normativity" and "conflict." The philosophical position of first-order motivationalism has survived Fernández's criticism while at the same time satisfying the desiderata. I amended first-order motivationalism by adding the condition that the subject does not possess a sufficient motivation to know what the truth-value of P actually is. With this amendment, first-order motivationalism survives Fernández's critique because this new formulation of first-order motivationalism can explain why the "conflict" aspect of self-deception arises and because it satisfies the desiderata.

In an ideal world, motivation for some outcome to obtain should be coupled with a motivation to know the relevant circumstances necessary for the achievement of that outcome; the lack of such motivation may lead to unintentional "filtering" of pertinent information. This also

indicates that one can avoid self-deception even if one desires a situation to be some way as long as one also desires to know and is thus easily motivated to know how the situation actually is. Merely hoping that a situation is some way is not a sufficient condition for avoiding selfdeception. One must avoid indifference toward the truth so that one may truly prevent self-deception.

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WORK CITED

- Fernández, Jordi. "Self-Deception and Self-Knowledge." Philosophical Studies: An International Journal for Philosophy in the Analytic Tradition, vol. 162, no. 2, 2013, pp. 379–400.
- Fingarette, Herbert. "Self-Deception Needs No Explaining." *Philosophical Quarterly*, vol. 48, no. 192, 1998, pp. 289-301.
- Mele, Alfred R. "Real Self-Deception." *Behavioral and Brain Sciences*, vol. 20, no. 1, 1997, pp. 91–102.

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aletheia: (ἀλήθεια) is a Greek word meaning "the state of not being hidden; the state of being evident." It is variously translated as "unclosedness," "unconcealedness," disclosure," or "truth."

The use of the prism on the cover conveys how a unique perspective often reveals that the world is far more complex than previously thought.



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