



Calhoun: The NPS Institutional Archive

DSpace Repository

Theses and Dissertations

1. Thesis and Dissertation Collection, all items

2019-12

PRACTICAL TOOLS FOR YOUR MORAL TOOLKIT: A LEADERSHIP GUIDE TO GROUP ETHICAL BEHAVIOR

McCarey, Eamonn J.

Monterey, CA; Naval Postgraduate School

http://hdl.handle.net/10945/64022

This publication is a work of the U.S. Government as defined in Title 17, United States Code, Section 101. Copyright protection is not available for this work in the United States.

Downloaded from NPS Archive: Calhoun



Calhoun is the Naval Postgraduate School's public access digital repository for research materials and institutional publications created by the NPS community. Calhoun is named for Professor of Mathematics Guy K. Calhoun, NPS's first appointed -- and published -- scholarly author.

> Dudley Knox Library / Naval Postgraduate School 411 Dyer Road / 1 University Circle Monterey, California USA 93943

http://www.nps.edu/library



NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

PRACTICAL TOOLS FOR YOUR MORAL TOOLKIT: A LEADERSHIP GUIDE TO GROUP ETHICAL BEHAVIOR

by

Eamonn J. McCarey

December 2019

Thesis Advisor: Second Reader: Bradley J. Strawser Matthew R. Zefferman

Approved for public release. Distribution is unlimited.

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188			
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington, DC 20503.						
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE December 2019	3. REPORT TY	TYPE AND DATES COVERED Master's thesis			
4. TITLE AND SUBTITLE5. FUNDING NUMBERSPRACTICAL TOOLS FOR YOUR MORAL TOOLKIT: A LEADERSHIP GUIDE TO GROUP ETHICAL BEHAVIOR5. FUNDING NUMBERS6. AUTHOR(S) Eamonn J. McCarey6. AUTHOR(S) Eamonn J. McCarey						
7. PERFORMING ORGANIZA Naval Postgraduate School Monterey, CA 93943-5000	RESS(ES)	8. PERFORMING ORGANIZATION REPOR' NUMBER	Г			
9. SPONSORING / MONITOR ADDRESS(ES) N/A		10. SPONSORING / MONITORING AGENCY REPORT NUMBER				
11. SUPPLEMENTARY NOTE official policy or position of the I			the author and do not reflect the			
12a. DISTRIBUTION / AVAIL Approved for public release. Dist			12b. DISTRIBUTION COD A	E		
13. ABSTRACT (maximum 200 words) In 2018, the Congressional Research Service (CRS) published a report indicating that the U.S. Congress has a growing concern over misconduct, ethics, and professionalism within the United States Special Operations Command (USSOCOM). This thesis used these concerns as a starting block to answer a much broader question of how leaders can promote an ethical culture within their respective organization. Answering this question was accomplished by employing a qualitative literature review in the fields of evolutionary theory and moral psychology. This research first applied evolutionary thinking to assess how we form, define, and maintain morality at the individual and group levels in order to articulate what relationships, norms, and heuristics we use to determine our appropriate behavior. Second, it used the conclusion is a qualitative list of recommendations leaders can implement at both the personal and organization policy levels using a pluralist moral framework. Although these recommendations are limited to the research explained throughout this thesis, the execution of these actions by a well-respected influential leader can have a strong impact in shaping the moral community they serve.						
14. SUBJECT TERMS Congressional Research Service (CRS), United States Special Operation Comman (USSOCOM), ethics, morality, professionalism, evolutionary theory, moral psycho- leadership, ethical change						
CLASSIFICATION OF REPORTCIPA	B. SECURITY LASSIFICATION OF THIS AGE nclassified	19. SECURITY CLASSIFICAT ABSTRACT Unclassified				

Standard Form 298 (Rev. 2-89) Prescribed by ANSI Std. 239-18

Approved for public release. Distribution is unlimited.

PRACTICAL TOOLS FOR YOUR MORAL TOOLKIT: A LEADERSHIP GUIDE TO GROUP ETHICAL BEHAVIOR

Eamonn J. McCarey Lieutenant, United States Navy BS, U.S. Naval Academy, 2014

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN DEFENSE ANALYSIS (IRREGULAR WARFARE)

from the

NAVAL POSTGRADUATE SCHOOL December 2019

Approved by: Bradley J. Strawser Advisor

Matthew R. Zefferman Second Reader

Kalev I. Sepp Chair, Department of Defense Analysis

ABSTRACT

In 2018, the Congressional Research Service (CRS) published a report indicating that the U.S. Congress has a growing concern over misconduct, ethics, and professionalism within the United States Special Operations Command (USSOCOM). This thesis used these concerns as a starting block to answer a much broader question of how leaders can promote an ethical culture within their respective organization. Answering this question was accomplished by employing a qualitative literature review in the fields of evolutionary theory and moral psychology. This research first applied evolutionary thinking to assess how we form, define, and maintain morality at the individual and group levels in order to articulate what relationships, norms, and heuristics we use to determine our appropriate behavior. Second, it used the research in moral psychology to analyze how we develop our moral judgments and take action upon those judgments, and effective ways leaders can motivate our moral intuitions and reasoning. Provided in the conclusion is a qualitative list of recommendations leaders can implement at both the personal and organization policy levels using a pluralist moral framework. Although these recommendations are limited to the research explained throughout this thesis, the execution of these actions by a well-respected influential leader can have a strong impact in shaping the moral community they serve.

TABLE OF CONTENTS

INT	RODUCTION	1
EVC	OLUTIONARY THEORY	5
А.	THE ENVIRONMENT OF EVOLUTIONARY	
	ADAPTEDNESS AND THE NATURALISTIC FALLACY	5
В.	THE INDIVIDUAL CONSCIOUSNESS	7
C.	OUR ORGANIZATION CONSCIOUSNESS	16
D.	MORAL LEADERSHIP IN ACTION	22
Е.	CONCLUDING THOUGHTS	
MO	RAL PSYCHOLOGY	27
А.	MORAL PLURALISM	
В.	MORAL JUDGMENTS AND MOTIVATION	
C.	MORALS IN ACTION	
	1. Ethical Rational Decision Making	
	2. Understanding Our Moral Intuitions	42
	3. Engaging Our Moral Intuitions through Identity	48
D.	CONCLUDING THOUGHTS	51
CON	VCLUSION	53
А.	FAIRNESS/EQUALITY	54
	1. Individual Action	54
	2. Organizational Policy	54
В.	HARM/ CARE	54
	1. Individual Action	54
	2. Organizational Policy	55
C.	LOYALTY/ BETRAYAL	55
	1. Individual Action	55
	2. Organizational Policy	56
D.	AUTHORITY/ SUBVERSION	56
	1. Individual Action	56
	2. Organizational Policy	57
Е.		
	1. Individual Action	58
	2. Organizational Policy	58
	EVC A. B. C. D. E. MOI A. B. C. D. CON A. B. C. D.	ADAPTEDNESS AND THE NATURALISTIC FALLACY B. THE INDIVIDUAL CONSCIOUSNESS

LIST OF REFERENCES	
INITIAL DISTRIBUTION LIST	65

LIST OF TABLES

Table 1.	Haidt's Moral Foundation Theory	
1 4010 1.	Hunder 5 Mortan I Oundation Theory	

EXECUTIVE SUMMARY

In 2018, the Congressional Research Service (CRS) published a report indicating that the U.S. Congress has a growing concern over misconduct, ethics, and professionalism within the United States Special Operations Command (USSOCOM). From this report, Congress mandated that the Secretary of Defense must conduct a comprehensive study of the ethical and professional programs within USSOCOM while providing tools and metrics for assessing these programs.¹ This thesis uses these concerns as a starting block to answer a much broader question of how leaders can promote an ethical culture within their respective organizations.

Using a cross-discipline qualitative study into the fields of evolutionary theory and moral psychology, this thesis provides a list of recommendations at both the individual and group levels to ways in which leaders can encourage an ethical organizational environment. The application of evolutionary theory assesses how we form, define, and maintain morality from the social and environmental pressures of our deep evolutionary past. By analyzing the ethnographies of hunter-gatherer tribes, this thesis evaluates common characteristics of what we may consider our universal sense of morality. The study of moral psychology provides depth into our understanding of morality, how we form our moral judgements, and the actions we take upon those judgments. From the research in these disciplines, the findings indicate that:

 Due to the Dunbar number, our ability to truly evaluate the character and reputation of members within our moral community is limited to 150 interpersonal relationships.² Members must be constantly shifted into different positions and locations to continue this evaluation process in order to maintain accountability of the organization's moral consensus.

¹ Andrew Feickert, U.S. Special Operations Forces (SOF): Background and Issues for Congress, CRS Report RS21048 (Washington, DC: Congressional Research Service, 2019), https://crsreports.congress.gov/product/pdf/RS/RS21048

² R. I. M. Dunbar, "The Social Brain: Mind, Language, and Society in Evolutionary Perspective," *Annual Review of Anthropology* 32 (2003): 172.

- 2. Individuals should be evaluated and promoted for the attributes of a leader in a hunter-gatherer society. The "mismatch hypothesis" explains that our psychologies and physiologies are more accustomed to the Pleistocene environment over our modern environment.³ Leaders should be chosen by their achieved authority through consensus building, acts of indirect reciprocity, and observed dedication to serving the betterment of the organization and the members involved.⁴
- 3. Because our morality is practically applied in pluralistic fashion, moral dilemmas are a real thing, and they are often a conflict of interest between our five different moral foundations.⁵ Once again, following the 'mismatch hypothesis', leaders must encourage the most prestigious member to invite a dialogue where the group evaluates the context and circumstance in which one foundation outweighs another through group consensus building.

In conclusion, this research was designed to understand how to foster an ethical organization within the context of the ingroup. Further research will need to examine the ethical principles an organization should emulate given the context of the modern environment and the demands that different stakeholders weigh to determine the appropriate ethical behavior expected of that organization.

³ Norman P. Li, Mark van Vugt, and Stephen M. Colarelli, "The Evolutionary Mismatch Hypothesis: Implications for Psychological Science," *Current Directions in Psychological Science* 27, no. 1 (2018): 38–44, https://doi.org/10.1177/0963721417731378.

⁴ Christopher von Rueden and Mark van Vugt, "Leadership in Small-Scale Societies: Some Implications for Theory, Research, and Practice," *The Leadership Quarterly* 26, no. 6 (December 2015): 978, https://doi.org/10.1016/j.leaqua.2015.10.004.

⁵ Jonathan Haidt, The Righteous Mind: Why Good People Are Divided by Politics and Religion. New York: Vintage Books, 2012.

ACKNOWLEDGMENTS

I want to thank my friends and family for the backing that inspired me to study what I find fascinating and what drives my intellectual curiosity. I would also like acknowledge the support by the Department of Defense Analysis here at NPS for offering the faculty and curriculum relevant to the subject at hand. This includes several classes in anthropology and philosophy taught by outstanding professors such as Dr. Siamak Naficy, Dr. Anna Simons, and Dr. Gordon McCormick. Finally, I would like to thank my advisor, Dr. Bradley Strawser, and my second reader, Dr. Matt Zefferman, for providing the critical feedback and support to for me to write this thesis.

I. INTRODUCTION

In October of 2018, the Congressional Research Service (CRS) published a report indicating that the U.S. Congress has a growing concern over the misconduct, ethics, and professionalism within USSOCOM (United States Special Operations Command).¹ From this report, Congress mandated that the Secretary of Defense must conduct a comprehensive study of the ethical and professional programs within USSOCOM while providing tools and metrics of assessing these programs.² The CRS has defined these professional programs as providing the "training, education, initiative or other activities that focuses on values, ethics, standards, code of conduct, and skills as related to the military profession."³ This is to ensure that all members adhere to the compliance of the rules and regulations provided by the UCMJ (Uniform Code of Military Justice) and uphold ethical principles that inform leaders when the rules are not clear.⁴ Assistant Secretary of Defense, Owen West, and Commander of USSSOCOM, General Raymond Thomas, have also indicated their interest in this report. They are curious to find if there are systemic problems within USSOCOM that have led to recent violations in ethical standards and if there are policy measures that must implemented to hold leaders and individuals more accountable.⁵ It is in their belief these recent incidents have the potential to "erode morale of our force, confidence of our allies and partners, and the moral authority of American values."⁶ These leaders believe that USSOCOM is recognized not only in its ability to execute special missions that require elite skills and tactics, but also in its capacity to

¹ Andrew Feickert, U.S. Special Operations Forces (SOF): Background and Issues for Congress, CRS Report RS21048 (Washington, DC: Congressional Research Service, 2019), https://crsreports.congress.gov/product/pdf/RS/RS21048.

² Feickert, 9.

³ Feickert, 9.

⁴ Feickert., 9.

⁵ U.S. Congress. Senate, United States Special Operations Command and United States Cyber Command: Hearing before the Senate Armed Services Committee, Senate, 116th Cong., 1st sess., February 14, 2019, https://www.armed-services.senate.gov/hearings/19-02-14-united-states-special-operationscommand-and-united-states-cyber-command.

⁶ U.S. Congress. Senate, 8.

remain one of the most highly trusted professions in the United States.⁷ Therefore, the value of a discussion on ethical leadership and organizational culture is more prevalent now than ever.

As the CRS finding will provide their own recommendations, I will not be focusing on the policy measures USSOCOM plans to implement to develop their moral community. Instead, this thesis will dive into the questions of what it means to be an ethical human and organization, and how leaders influence their members to adhere to these ethical standards. I will use quantitative and qualitative research in the disciplines of evolutionary theory and moral psychology to answer these questions. First, the purpose of using evolutionary theory is to understand how our distant hunter-gatherer ancestors lived, socialized, organized, and thought in the context of their "tribe." As evolutionary psychology argues that 98 percent of our homo related ancestry lived and died under the African savannah, they believe the majority of our brains' development occurred under such conditions.⁸ Therefore, it is in their belief that "the mind is shaped by the pressure to survive and reproduce; emotions, communication skills and language ability are adaptations that enabled our ancestors to thrive. Often how people react and interact with one another is spelled out in our DNA."⁹ We are all decedents of those that were successful at navigating these challenges of group living. By understanding the challenges our ancestors faced, we can come to better terms on how leaders should ethically act when it comes to the betterment of their people and the success of the organization. Second, I will use the discipline of moral psychology to grasp a deeper understanding of our human decision-making processes in ethical terms. Moral psychology is an interdisciplinary field that takes aspects of both philosophical theories and psychology to observe and analyze human thought and behavior in an ethical

⁷ Niall McCarthy, "America's Most And Least Trusted Professions [Infographic]," *Forbes*, January 4, 2018, https://www.forbes.com/sites/niallmccarthy/2018/01/04/americas-most-and-least-trusted-professions-infographic/.

⁸ "Evolutionary Psychology," *Psychology Today*, accessed March 3, 2019, https://www.psychologytoday.com/basics/evolutionary-psychology.

⁹ "Evolutionary Psychology."

context.¹⁰ In this thesis, I will dissect the problem of moral influence into the categories of how we make moral judgements, how we act upon those judgements, and what tools we can use to motivate individuals into moral action. Finally, at the conclusion of this thesis, I will summarize the main points provided by each theory into a comprehensive set of actions leaders can implement at both the personal and organizational level to foster the moral community they desire. I hope that this cross-discipline thesis will provide new and creative ways for leaders to engage their organization's ethical behavior in a positive manner.

¹⁰ John Doris et al., "Moral Psychology: Empirical Approaches," in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta, Winter 2017 (Stanford, CA: Metaphysics Research Lab, Stanford University, 2017), https://plato.stanford.edu/archives/win2017/entries/moral-psych-emp/.

II. EVOLUTIONARY THEORY

To understand how evolutionary theory will help us promote ethical leadership within our organizations, I will analyze humans at both the individual and organizational levels. I divide this chapter into these two categories. Although these two categories do not include all the different social organizations we find ourselves in, I will treat these two categories as the fundamental building blocks of what it means to be human. The importance of this divide is to show that morality is both an internal individual experience and a social group experience. Both weigh in how we articulate what morality is. This chapter will use the various fields of psychology, anthropology, and cognitive science that apply evolutionary thinking to assess how we form, define, and maintain our morality within a group. By explaining morality in these terms, we will have a better understanding of what human biases are at play, and what practical actions leaders can make to create the ethical culture they aspire to uphold. Although this chapter will end with an explanation of what leaders can do to influence their organization's moral compass, once again, final recommendations will be provided in the last chapter with the combined suggestions from evolutionary theory and moral psychology. For the context of this chapter, morality is "concerned with the principles or rules of right conduct or the distinction between right and wrong"¹¹ of an individual or group behavior within a social organization. A deeper framework of explaining morality will be defined in the moral psychology chapter.

A. THE ENVIRONMENT OF EVOLUTIONARY ADAPTEDNESS AND THE NATURALISTIC FALLACY

Before I discuss how humans form morality at both the individual and group level, I must first explain the concept of the environment of evolutionary adaptedness (EEA) and the notion of the naturalistic fallacy. EEA is a popular theory among evolutionary psychologists that refers to a composite of selection pressures that were responsible for shaping an adaptation over deep evolutionary time. Although EEA is not describing a

¹¹ "Definition of Morals," in *Dictionary.Com*, accessed July 30, 2019, https://www.dictionary.com/browse/morals.

specific time table, every adaptation has a period of evolution that is unique in its development or design.¹² It is hypothesized that many of our unique physical, social, and interpersonal adaptations that have made us distinctly human occurred from our last common ancestor with other living hominids, to the anatomically modern human prior to the agriculture revolution. This is time-lapse of over five million years of our evolutionary history. Based on this hypothesis, it is argued that because 99% of our existence as distinctly human occurred before the advent of agriculture and the domestication of animals, most "human preferences and behavioral decision making algorithms are adapted to the EEA and not necessarily the modern environment."¹³ Although the EEA is a highly debated subject within the field evolutionary thinking, proponents of the theory understand that not all human behavior can be explained by our ancestral past. In the words of the prominent anthropologist Christopher Boehm, evolutionary theory recognizes that although

culture is partly blind habit, it also involves people solving problems. Because so much of social life is flexibly constructed in light of conscious community needs and objectives, it should come as no surprise that as local environments change, people will be deliberately and insightfully modifying their practices to fulfill their needs as they see them.¹⁴

Whether one agrees with the concept of the EEA or not, the significance here is that we must not ignore the impact our ancestral environment has had on our physiology and psychology. Therefore, the focus of this thesis is not to create a reductionist argument by ignore the importance of culture in influencing our perceived and actual sense of morality, but to analyze what all human cultures from our ancestral past have in common, and thereby attempt to find a universal sense of human morality.

¹² David Buss, *Evolutionary Psychology: The New Science of the Mind*, 6th ed. (New York: Taylor and Francis Group, 2019), 35.

¹³ Kevin Bennett, "Environment of Evolutionary Adaptedness (EEA)," in *Encyclopedia of Personality and Individual Differences*, ed. Virgil Zeigler-Hill and Todd K. Shackelford (Cham: Springer International Publishing, 2018), 1–3, https://doi.org/10.1007/978-3-319-28099-8_1627-1.

¹⁴ Christopher Boehm, Moral Origins: The Evolution of Virtue, Altruism, and Shame (New York: Basic Books, 2012), 267.

Finally, some scholars may argue that using evolutionarily derived judgments to evaluate moral judgments is committing the naturalistic fallacy.¹⁵ This fallacy is the idea that "it is illegitimate to move from a claim about the way something is to a claim about the way it *ought* to be."¹⁶ Therefore, it is a highly debated subject as to whether to use evolutionary literature in the service of moral psychology and philosophy.¹⁷ For the purpose of this thesis, that discussion is beyond our analysis. However, to speak on the matter, I will respect the following premise: that the use of evolutionary science in this thesis will not commit this fallacy, first, by refraining from prescribing what our morality should be based on this science, and second, by using this field of academia as an evaluative tool to provide moral philosophers, psychologists, and the reader a way to decipher how best to create our moral community. The philosopher William Lewis promotes the use of evolutionary literature in the service of moral philosophy in arguing that by studying "the evolutionary mechanisms by which ethical judgments are produced will allow us, in a naturalist and pragmatist fashion, to better understand the possibilities for achieving ethical goals."¹⁸ Therefore, in other words, if we understand why evolution promoted an adapted ethical conscious within our species, we should be able to hack this sense of morality and filter it to the service of our individual and organizational ethical goals. With that addressed, we will now draw our attention to literature of our evolved moral conscious.

B. THE INDIVIDUAL CONSCIOUSNESS

The first step in understanding how leaders can promote ethical decision making is to understand how humans form and define morality from an evolutionary psychological perspective. Evolutionary psychology is the study of the human mind under a unifying theoretical framework that explores: why the human mind is designed the way it is; how

¹⁵ William S. Lewis, "Evolutionary Psychology in the Service of Moral Philosophy: A Possible Future for Ethics?," *Journal of Speculative Philosophy* 25, no. 1 (2011): 54, https://doi.org/10.1353/jsp.2011.0006.

¹⁶ Lewis, 54.

¹⁷ Alex Walter, "The Anti-Naturalistic Fallacy: Evolutionary Moral Psychology and the Insistence of Brute Facts," *Evolutionary Psychology* 4, no. 1 (2006): 33–48, https://doi.org/10.1177/147470490600400102.

¹⁸ Lewis, 49.

the mind is designed; what is the mind designed to do; and how does environmental input interact with this design to produce an observable behavior.¹⁹ What makes evolutionary psychology a unique subfield of psychology is that it begins from the premise that our minds are designed to solve adaptive problems in our more distant hunter-gatherer past. It argues that all "human cognition, emotions, and behavior to be products of psychological mechanisms that evolved to solve recurrent survival and reproduction challenges in ancestral environments."²⁰ Therefore, any human emotion and behavior is a proximate mechanism that serves as a survival or reproductive tool. It is important to note that this does not need to be a conscious process (as most are not) to have been selected for and passed on through successive generations.²¹ This key part of this theory is often misunderstood by the general public. However, the alternate hypothesis can rightfully argue that "the evolutionary process also produces by-products as well as residue of noise" that do not solve adaptive problems and are functionless. A human physiological example can be the male nipple. As evolutionary scientists differ in opinion as to what we should regard as an adaptation, by-product, or noise, that dispute is beyond our intellectual engagement in this thesis.²² Instead, we will follow the logic of evolutionary psychology and explain this field's belief in discovering potential adaptations that have produced our sense of morality.

Thus, following this logic, we expect humans, like all living organisms, to hold different reproductive and survival "interests" and to act upon those "interests" in a behaviorally self-serving manner.²³ This behavior is self-serving toward the gene (also

¹⁹ David Buss, *Evolutionary Psychology: The New Science of the Mind*, 5th ed. (London: Routledge, 2016), 3.

²⁰ Norman P. Li, Mark van Vugt, and Stephen M. Colarelli, "The Evolutionary Mismatch Hypothesis: Implications for Psychological Science," *Current Directions in Psychological Science* 27, no. 1 (2018): 38–44, https://doi.org/10.1177/0963721417731378.

²¹ Azar Gat, "Why War? Motivations for Fighting in the Human State of Nature," in *Mind the Gap: Tracing the Origins of Human Universals*, ed. Peter M. Kappeler and Joan B. Silk (Heidelberg: Springer Berlin Heidelberg, 2010), 208, https://doi.org/10.1007/978-3-642-02725-3_9.

²² David Buss et al., "Adaptations, Exaptations and Spandrels," *American Psychologist* 53, no. 5 (1998): 533–48.

²³ Richard D. Alexander, "A Biological Interpretation of Moral Systems," *Zygon* 20, no. 1 (March 1985): 5–6, https://doi.org/10.1111/j.1467-9744.1985.tb00574.x.

referred to as inclusive fitness). Inclusive fitness is an important theory through which biologists understand and explain altruism in nature. As described by Hamilton's Rule, an organism can evolve to act altruistically "if the fitness cost (C) to the donor is less than the fitness benefit (B) to the recipient, discounted by the coefficient of relatedness (r)."²⁴ (rC > B) The coefficient of relatedness is referring to the statistical likelihood that two organisms share a genetic allele relative to the average frequency of the allele in the population.²⁵ The qualitative takeaway of Hamilton's Rule is to describe how altruism can be an inherited behavioral strategy for two organisms that share a common ancestor. Although this explains most altruistic behavior in nature, as well as nepotism in humans, the theory does not expand on how humans are capable of making tremendous sacrifices for a group member who has no genetic relatedness to them. In order to understand this phenomenon, we will attempt to recreate our hunter-gatherer past to evaluate what social and environmental pressures would have enabled humans to act cooperatively and develop a moral conscience.

As it vastly disputed among anthropologists whether we can accurately recreate the social environment of our hunter-gatherer ancestral past, anthropologists such as Christopher Boehm believe it is possible with the ethnographies of over 339 modern hunter-gatherer societies observed in various environments.²⁶ An ethnography is a scientific description of a group of people or culture, primarily conducted by anthropologists to provide empirical data toward their understanding of different human societies. Out of those 339 ethnographies, Boehm examined 150 hunter-gather bands that most closely resembled our ancestral past and found one similarity that all tribes possessed: they all are highly egalitarian. Boehm states that, at a minimum, "all the active hunters (generally the adult males) insist on being seen as equal and that among themselves they tolerated no serious domination—be this in hogging vital food resources or in bossing

²⁴ Ullica C. Segerstrale, "Hamilton's Rule: Biology," in *Encyclopedia Britannica*, accessed August 13, 2019, https://www.britannica.com/science/Hamiltons-rule.

²⁵ Richard McElreath and Robert Boyd, "Alturism and Fitness," in *Mathematical Models of Social Evolution: A Guide for the Perplexed* (Chicago: University of Chicago Press, 2007), 71–97.

²⁶ Boehm, 76–78.

others around."²⁷ A member who gains status as a good hunter can be seen as a leader in the facilitating group consensus, but not necessarily as a maker of group decisions.²⁸ These better hunters are expected to act with humility. If one were to "try persistently to intimidate or tyrannize their peers, or if they actually succeed in doing so, they are quite likely to be killed."²⁹ This form of deterrence is essential to understanding that all social creatures possess rank and status, which generally provides an individual a higher probability of acquiring community resources and reproductive opportunities over other members. However, this characteristic of social creatures does not mean that people seeking leadership positions or esteem from the group are consciously striving for sexual opportunities and resources. Instead, those that do not behave adaptively toward these positions of status have a decreased representation in the next generation, and their behavior is selected out.³⁰ Therefore, there is two evolutionary pressures at play: the first is to climb the dominance hierarchy with behavioral patterns of assertion and aggression, and the second is to act with humility by demonstrating prosocial behavior toward the group.

While these two acts in the right social setting can be compatible, there is generally a battle between two broad behavioral strategies (act selfishly vs. act altruistically), that will be key in understanding what makes us human. It is evident that many of our modern social structures rarely form this type of strict egalitarianism where we aggressively punish self-serving behavior, and explicitly promote prosocial behavior. Most modern organizations indirectly encourage selfish behavior by rewarding members who know "how to get ahead" and treat the work environment as a competition between coworkers. One theory that can help explain the problems that perpetuate the difference in these social structures is what psychologists Norman Li, Mark Van Vugt, and Stephen Colarelli refer to as the "mismatch hypothesis."

²⁷ Boehm, 109.

²⁸ Boehm, 109.

²⁹ Boehm, 47.

³⁰ Gat, 206.

The "mismatch hypothesis" theorizes that because most of our brains' adaptation occurred in the Pleistocene environment, the modern environment has created novel circumstances that we are ill-prepared for. This "adaptive lag" appears when the existing environment fluctuates quicker than the time needed for the psychological mechanisms within the human brain to adapt. An example of a psychological mechanism is our inherent interest in food that is rich in fat and sugar content. Such an adaptation would have reinforced one's survival in the Pleistocene but can be a damaging to one's health in the modern environment.³¹ If we are to apply the mismatch hypothesis to solving ethical organizational problems, we can see that due to the novel contextual complexities of our modern environment, it can be difficult for humans promote an organizational environment that aligns to our "natural" Pleistocene environment. Some of these modern organizational problems include job satisfaction/fulfillment, depression, leadership selection, and favoring of kin.³² Through this hypothesis, it can be reasoned that if leaders align their members' lifestyles and organizational setting to resemble the social and physical environment of our Pleistocene ancestors, leaders can improve many negative aspects that plague our modern organizational atmospheres. Thus, to perform such a task, we should expect far more egalitarian behavior from a leader in the way they adjudicate member's actions through punishment and rewards. In the form of egalitarian punishment, we would expect a leader to use their authority to punish any signs of self-serving boisterous behavior and ostracizing any form of laziness such as someone taking more than their fair share. For egalitarian rewarding, the leader would encourage acts of prosocial behavior where one's contribution to the team is not only evaluated by one's personal accomplishment in team tasks but also by one's involvement in helping others. Therefore, with this "mismatch hypothesis" as a framework for accomplishing ethical change, let us analyze more of the Pleistocene past and turn to the psychological functions that evolutionary theorists believed to help form our sense of morality.

³¹ Li, van Vugt, and Colarelli, 40–41.

³² Li, van Vugt, and Colarelli, 41–42.

Evolutionary psychologists John Tooby and Leda Cosmides argue that our adaptation for coalition psychology was a prerequisite for our adapted sense of morality.³³ This coalition psychology was built out of selective pressure from both intergroup and intragroup conflict, which manifested itself in war, politics, group psychology, and morality.³⁴ They argue that our moral psychologies developed to enhance a group's rapid recruit of members with a common interest, and to have an effective enforcing mechanism of punishment. Humans created "moral games" to structure social interactions and payoffs.³⁵ Tooby and Cosmides argue that these "moral games" evolved with our higher cognitive abilities. The first-order moral games encompassed an individual moralizing right and wrong in reciprocal exchanges between two parties of similar or equal power. While second-order games introduced the elements of multiple parties where an individual needed to navigate the multitude of values and interests of others while expressing their own.³⁶ In forming a group consensus through different social opportunities of bargaining and negotiation, the coalition would enforce a set of values that could be actualized into "moral projects." Due to the cross-culture variation we see today, these "moral projects" show tremendous diversity (from the Aztec ritual of cannibalism to the Jainism prohibition of killing insects) that they seem unlimited in number. Tooby and Cosmides believe we derive these "moral projects" by evaluating responses rather than specific content domains.³⁷ In other words, people generally hold moral values based on how strong the coalition signals a particular value and not on some intrinsic higher moral reasoning (like justice or allocation). However, this is not to say culture can completely short circuit the more primitive moral instincts we hold as a social species. Anthropologist Christopher Boehm found through his ethnographic studies that it is universal among all hunter-

³³ John Tooby and Leda Cosmides, "Groups in Mind: The Coalitional Roots of War and Morality," in *Human Morality & Sociality: Evolutionary & Comparative Perspective*, ed. Henrik Høgh-Olesen (New York: Palgrave MacMillan, 2010), 214.

³⁴ Tooby and Cosmides, 192.

³⁵ Tooby and Cosmides, 214.

³⁶ Tooby and Cosmides, 215–16.

³⁷ Tooby and Cosmides, 217.

gatherer communities to demonstrate moral outrage over anyone "killing another group member without proper cause, or theft or cheating within this primary group."³⁸

With these limitations in mind, even if a group consensus coerced one to follow the defined rules, Tooby and Cosmides believe there has to be a greater psychological mechanism that promotes group coordination. Because humans have inherent opposing interests, values, social relations, loyalties, capabilities, and knowledge, they believe humans adapted a mental coregistration. This coregistration allowed different coalition members to experience parallel inputs to enhance any task that required mental coordination (which is many humans tasks in our ancestral past).³⁹ The theory argues that the larger number of shared experiences by individuals will encourage a greater level of coordination and cooperation between the two members. Thus, this adaptation for coalition psychology naturally extends into our capacity for a moral psychology through shared coregistration of group values and rules.

Finally, scientific research supports that through gene-environmental interaction, our moral sentiments increased in highly predictable stages. In Christopher Boehm's book, *Moral Origins*, he discusses how early infants demonstrate sympathetic feeling for others that is followed by a general sense of rules as they age. By the time these children arrive in grade-school, they have "highly self-conscious shame reactions, which includes blushing when in the wrong."⁴⁰ As humans reach adulthood, there is an expected stage where adults internalize community values in order to most effectively orient themselves to the perceived group values. This stage is what we also refer to as having a conscience. Boehm argues that a "fitness-optimizing conscience" would most likely act with some moral flexibility to not be at a competitive disadvantage (by taking society's rules too literally), but also recognize that one should never bend some rules for it would have lasting reputational damage if discovered.⁴¹ Furthermore, Boehm finds that this conscience is

³⁸ Boehm, 99.

³⁹ Tooby and Cosmides, 204–5.

⁴⁰ Boehm, 98.

⁴¹ Boehm, 176.

adapted to allow a member to connect with the rules in an emotionally "positive way that makes you identify with them, feel ashamed when you break them, feel self-satisfied and moralistically proud when you live up to them."⁴² Therefore, through the socialenvironmental pressure to cooperate and coordinate with the group most effectively, the individual adapted a recognizable moral meter (or conscience). That moral meter would have evolved to internalize and support the community's values, through deliberate and unintentional efforts. These moral games, moral projects, coregistration and fitnessoptimizing conscious would have allowed humans to form their moral community. Although these moral communities would differ throughout the world based on their social-environmental circumstances, Boehm also discovered through his ethnographies, that all groups frown upon and punish "murders, undue use of authority, cheating that harms group cooperation, major lying, theft and socially disruptive sexual behavior."43 Therefore, although our morality may differ in personal beliefs or within our moral communities, there is a consistent pattern of what we may consider as our moral conscience. That is to say that based on the current evidence of our moral origins, morality is not complete relative, and should not be treated as such. Thus, we must find a way to properly define morality.

When describing how to articulate morality, evolutionary psychologists start from the premise that evolution will tend to favor an organism whose norms are somewhat plastic and able to develop and abandon norms based on their utility to the organism.⁴⁴ These organisms can be anything from bacteria to humans. In Robert Wright's book, *The Moral Animal*, Wright follows this logic by arguing that our plastic minds are shaped by cues in the social-environment. We analyze these cues to understand what assets and liabilities we bring to table, in order to create an "optimal behavioral strategy" that will most likely perpetuate our genes.⁴⁵ Wright proposes that this "optimal behavioral strategy"

⁴² Boehm, 114.

⁴³ Boehm, 34.

⁴⁴ Lewis, 58.

⁴⁵ Robert Wright, *The Moral Animal: Evolutionary Psychology and Everyday Life* (New York: Patheon Books, 1994), chap. 15.

is not something we consciously do. Instead, it is a function of our brain to act as a device that can win arguments to not only convince others, but for our own self-deception of the perceived truth.⁴⁶ He reasons, that moral sentiments were an evolutionarily selected adaptation that increased one's conviction of their moral rightness to be correct in the eyes of the group. Although this may be a cynical view of morality, Wright asserts that despite the illusion natural selection plays on us, this sense of morality is a benevolent illusion that attributes to our moral codes of conduct. These forms of moral conduct are what "makes us mindful of the welfare of people other than family and friends, raising society's overall welfare."⁴⁷ In other words, Wright believes that morality is an illusion that is socially constructed to make members of the community far more prosocial.

Additionally, in the study of morality, Tooby and Cosmides suggest that it benefits individuals of equal power to have their preferences moralized and to be privately non-Kantian (that is not rule abiding) but publicly Kantian (act in accordance to rules that one encourages to spread) in this moral game. They argue that "such an adaptation would make the local moral consensus more favorable to realizing the individual's preferences, even though sometimes such outputs are functionless or fitness reducing."⁴⁸ The purpose of this, from a fitness-optimizing perspective, is to even out the playing field. If one is to take societies rules to literally, they will be at a genetic disadvantage. It would rather be fitness-optimizing for a human to behave with some moral flexibility, where bending the lesser rules may be worth the potential costs of being discovered, while recognizing that there are rules that should not be cross, for what follows would be dire consequences.⁴⁹ Boehm, refers to this as an "Alexandrian" opportunistic type conscience where one will calculate (through predictable social reaction from peers) what they can get away with, while maintaining a decent moral reputation.⁵⁰ However, because there is evidence to suggest that our moral psychologies maintain an anti-hypocrisy circuit, an opportunistic type

⁴⁶ Wright, chap. 13.

⁴⁷ Wright, chap. 17.

⁴⁸ Tooby and Cosmides, 222.

⁴⁹ Boehm, 176.

⁵⁰ Boehm, 175.

conscience is something leaders should recognize and avoid. The reasons are two-fold. First, subordinates will feel a sense of moral disgust for the hypocritical and blatant act of manipulation, and second, any action a leader takes that fails to meet the moral precedent (either through their own actions or failing to correct a subordinates actions) will have an effect in deflating the support and willingness for group members to follow an established rule.⁵¹ Thus, if a moral community is to be maintained, a leader should truly be held to a higher ethical standard.

Therefore, although most evolutionary sciences views morality as a socially constructed illusion, we have evolved to adopt moral sentiments for this illusion in order to promote cooperation and prosocial norms within our ingroup. However, calling morality an illusion, is to say that our taste of "spicy" is an illusion. Morality evolved to be a part of our senses, just as our taste buds have.⁵² This sense of morality is what sets us apart as a species. Trust and cooperation, with the backing of our moral sentiments, forced members to conform or prepare to be exiled from the group. We are all decedents of those who went along and promoted this social experiment. Such a view of morality can actually be a positive, for it allows us to socially construct an ingroup that we treat with moral compassion well beyond the boundaries of our friends and family. Thus, from an evolutionary perspective, ethical valorous action is a member acting prosocially toward other group members by performing tasks that are individually fitness reducing for the benefit of the community. Throughout this chapter, we will use prosocial, virtuous, and ethical behavior interchangeably to define the same moral character we strive to perform.

C. OUR ORGANIZATION CONSCIOUSNESS

In order to understand why humans will act in a fitness reducing manner for the group's wellbeing, and maintain/encourage particular moral sentiments within the group, I will analyze what organizational and individual pressures leaders can apply to influence such behavior. One theory that evaluates human cooperation and morality at the

⁵¹ Tooby and Cosmides, 222.

⁵² Jonathan Haidt, The Righteous Mind: Why Good People Are Divided by Politics and Religion. New York: Vintage Books, 2012.

organizational level is the theory of gene-culture coevolution. Proponents of the theory believe that human norms, institutions, and collective action all evolved through a dual process of both genetic and cultural development.⁵³ To understand this theory and its implications, we must first recognize how these theorists define norms and institutions. Norms, are mental representations individuals acquire through some form of learning (thus are not innate), and aim to allow humans to evaluate others' motivations, expectations, and actions. Institutions are self-reinforcing bodies that converge individual norms and arise through group-level interactions, decisions, and learning.⁵⁴ Therefore, institutions are interconnected with the individual norms acquired and expressed by its group members. With these definitions in mind, I will explain how these mutually reinforcing bodies constitute the bedrock of how humans maintain social cooperation and moral sentiments. The first step is considering how we establish norms.

There are several ways individuals attain these norms using learning strategies or heuristics that allow people to adapt to the institution they find themselves in. There are two general strategies an organism can perform when engaging in survival within its environment. The organism can act through a trial and error process, known as individual learning, or it can engage in social learning by observing what others do. As both evolutionary strategies have their advantages, many evolutionary scientists believe that our social learning abilities have permitted us to spread and thrive more than any other species.⁵⁵Although social learning is not unique to humans, we are the only species that have become cultural learner, where an individual or group provides an 'improvement' to the original artifact or practice. Cultural learning can be compounded over time by a continuous modification to create a "rachet effect."⁵⁶ These forms of learning or heuristics

⁵³ Peter Richerson and Joe Henrich, "Tribal Social Instincts and the Cultural Evolution of Institutions to Solve Collective Action Problems," *Cliodynamics* 3, no. 1 (2012): 38–80, https://doi.org/10.21237/C7clio3112453.

⁵⁴ Richerson and Henrich, 40.

⁵⁵ Joseph Henrich and Richard McElreath, "The Evolution of Cultural Evolution," *Evolutionary Anthropology* 12, no. 3 (2003): 124–25, https://doi.org/10.1002/evan.10110.

⁵⁶ Alex Mesoudi and Alex Thornton, "What Is Cumulative Cultural Evolution?," *Proceedings of the Royal Society B: Biological Sciences* 285, no. 1880 (June 13, 2018): 1, https://doi.org/10.1098/rspb.2018.0712.

include, direct observation of the perceived cost and benefit, copy the most successful, copy the majority, and average what the most prestigious people do.⁵⁷ Economists have shown that such strategies are quite rational and fitness maximizing when information about a cost benefit behavior are noisy or error-ridden.⁵⁸ People tend to blend information from multiple models with what they find useful within the context of their situation. To understand this cultural learner, evolutionary thinkers Peter Richerson and Joe Henrich have concluded that an individual will generally pay attention to fitness-relevant information that is useful and is compatible with existing cultural beliefs and norms.⁵⁹ Furthermore, it is documented that social groups will have a cultural leaning bias toward cues of conformity (what is everyone else doing) and prestige (what are the members with the greatest reputations doing).⁶⁰ Therefore, if a leader wants to establish prosocial norms within the group, they must attempt to persuade others through these general heuristics. However, these heuristics are not the only thing that motivates members to maintain group norms.

Significant studies in neuroscience and neuroeconomics have demonstrated that behaving in a manner that is accustom to local norms through cooperation, contribution, and costly punishment stimulates an individual's brain reward circuit and anticipated reward circuit in the same manner as receiving direct cash.⁶¹ These studies also indicate that it actually requires overriding an automatic cognitive response in order to break a

⁵⁷ Richerson and Henrich, 41–42.

⁵⁸ Richerson and Henrich, 48.

⁵⁹ Richerson and Henrich, 42.

⁶⁰ Maciej Chudek and Joseph Henrich, "Culture–Gene Coevolution, Norm-Psychology and the Emergence of Human Prosociality," *Trends in Cognitive Sciences* 15, no. 5 (May 2011): 219, https://doi.org/10.1016/j.tics.2011.03.003.

⁶¹ Alan G. Sanfey et al., "The Neural Basis of Economic Decision-Making in the Ultimatum Game," *Science* 300, no. 5626 (June 13, 2003): 1755–58, https://doi.org/10.1126/science.1082976; Dominique J.-F. de Quervain et al., "The Neural Basis of Altruistic Punishment," *Science* 305, no. 5688 (August 27, 2004): 1254–58, https://doi.org/10.1126/science.1100735; Ernst Fehr and Colin F. Camerer, "Social Neuroeconomics: The Neural Circuitry of Social Preferences," *Trends in Cognitive Sciences* 11, no. 10 (October 2007): 419–27, https://doi.org/10.1016/j.tics.2007.09.002; Golnaz Tabibnia, Ajay B. Satpute, and Matthew D. Lieberman, "The Sunny Side of Fairness: Preference for Fairness Activates Reward Circuitry (and Disregarding Unfairness Activates Self-Control Circuitry)," *Psychological Science* 19, no. 4 (2008): 339–47, https://doi.org/10.1111/j.1467-9280.2008.02091.x.

social norm, and that humans naturally follow their group established norms.⁶² One theory proposed by cognitive science to explain this is the social heuristics hypothesis. The hypothesis asserts that with the internalization of social norms, humans will intuitively act upon those norms (primarily in cooperation) and that a deliberate, reflective process must occur for humans to act against those norms in any effort to achieve better results. Due to the long term reputation advantage of acting intuitively toward these norms, it is highly context-dependent for humans to defect and act against the established norms.⁶³ The implications for this theory is that we can expect a member of the ingroup to act morally unconsciously unless there is a contextual opportunity for some reflection and action against the group's moral norms. With their target audience in mind, leaders can use the conforming majority, the prestigious minority, and the social heuristics hypothesis to maintain established moral sentiments. Although these tools are essential in preserving the agreed-upon moral etiquette, we have yet to answer how a leader can personally influence prestigious members to change a culture to promote more reliable prosocial behavior. One tool a leader can exploit through organizational design is directing the institution to reinforce these desired prosocial norms.

Institutions possess significant incentives to have individuals conform to a given set of principles through a combination of reputation, signaling, costly punishment, costly rewarding, and forms of cultural learning.⁶⁴ Therefore, the first thing an institution must establish is a well-functioning reputational system. Prominent evolutionary thinker Richard D. Alexander believes this reputational system involves a process where everyone in the social group is consistently assessed for acts of indirect reciprocity. Examples of these acts in the modern context include, donations to charity, giving blood, heroism in combat, and assistance to a fellow citizen. Although these acts may associate some form of risk, through potential death or injury, when publicly praise (or gossiped about), these individuals generally enhance their status and prestige, thus earning a reputation as a decent social

⁶² Chudek and Henrich, 224.

⁶³ David G. Rand et al., "Social Heuristics Shape Intuitive Cooperation," *Nature Communications* 5 (April 22, 2014): 1–12, https://doi.org/10.1038/ncomms4677.

⁶⁴ Richerson and Henrich, 50.

trader.⁶⁵ However, it is important to note that a well-functioning reputational system may require to be limited in size in order to sustain this costly behavior.⁶⁶ Anthropologist Robin Dunbar has been one to investigate what size a human group would be effective at maintaining its reputational system. By analyzed several primate social group sizes based on ecological, demographic, and cognitive variables, Dunbar concluded that humans are designed to maintain formal interpersonal relationships with approximately 150 individuals. These relationships are ones in which each party can expect to ask for a favor and provide one in return.⁶⁷ With the advent of language, humans began to "gossip" and create highly accurate expressions of public opinion that calibrated anyone's social reputation within the group. Gossip became used as social control for punishing acts of deviance that would otherwise go unnoticed.⁶⁸ It would also act as a highly useful tool for a member to understand the group's moral consensus. Although most of the social settings we interact in today's modern context exceed this number, interpersonal relationships with members from several other groups can allow a leader to seek the reputational standing of an individual through the age-old gossip routine.

The second tool an institution can use to signal the group's moral consensus is preaching. From warlike to peaceful foraging societies, quantitative research indicates that charismatic preaching to promote sympathetic generosity or what is commonly known as the "golden rule" is practiced in all these societies.⁶⁹ Therefore, preaching must have some effect in persuading members into what is morally right. It is a way for the institution to signal righteous behavior. Additionally, anthropologist Mark Moffett proposes that another form of social control observed in all cultures is shared symbolism. As another form of institutional signaling, these shared symbols of identity allowed humans to create stable

⁶⁵ Richard D. Alexander, "Evolutionary Selection and the Nature of Humanity," in *Darwinism and Philosophy*, ed. Vittoria Hosle and Christian Illies (Norte Dame, IN: University of Norte Dame Press, 2005), 328, http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.549.8800&rep=rep1&type=pdf.

⁶⁶ Richerson and Henrich, 50.

⁶⁷ R. I. M. Dunbar, "The Social Brain: Mind, Language, and Society in Evolutionary Perspective," *Annual Review of Anthropology* 32 (2003): 172.

⁶⁸ Boehm, 239, 243.

⁶⁹ Boehm, 190–93.

social systems that provide them with ingroup/ outgroup distinctions and identifies a "hierarchy of degree of intimacy with which people know one another."⁷⁰ Exposure to these symbols increases social harmony and coordination while providing a sense of group loyalty and belonging. This sense of loyalty to the group allows tribal societies to engage one another as if they were fellow kin. It is also hypothesized that there is a psychological need for an outgroup to identify and maintain the labeling of the ingroup.⁷¹ These innate tendencies are universal in all human cultures. We use signs such as "crosses, uniforms, peace signs, oaths, and other indicators" to demonstrate not necessarily who we are, but what we believe we are.⁷² However, with the formation of any cohesive group, there is always a dark side to dividing the world into ingroup and outgroup membership, which can explain the most horrendous acts in human history. Anthropologists have observed these xenophobic tendencies in contemporary hunter-gatherers (and almost all human groups), where moral sentiments only apply within the group, and outsiders are treated as subhuman. This may account for how outgroup members "may be killed with little compunction"⁷³ as morality is applied differently to intergroup conflict. Therefore, if one were to betray the group, they will most likely be rejected membership and as a form of costly-punishment, be treated as an outsider.

The third tool an institution can provide is a costly-reward. If the institution can show that a long-term favorable gain through rewards provided over the years will outweigh the immediate short-term reward that an individual seeks, the institution can incentivize those that adhere to the established norms.⁷⁴ In the ancestral past, these forms of rewards included prestige and status, as one demonstrates consistent prosocial behavior through a lifetime of effort toward the group's needs. An example of this in the modern context is the U.S. military's pension for twenty-years of honorable service.

⁷⁰ Mark W. Moffett, "Human Identity and the Evolution of Societies," *Human Nature* 24, no. 3 (September 2013): 220, https://doi.org/10.1007/s12110-013-9170-3.

⁷¹ Moffett, 227–28.

⁷² David Berreby, *Us and Them: The Science of Identity* (Chicago: University of Chicago Press, 2008),
17.

⁷³ Boehm, 190–93.

⁷⁴ Richerson and Henrich, 44.

Finally, institutions have tremendous ability to establish the cultural norms of the group and promote them through cultural learning. An example of this is the sense of justice in an "honor culture" versus a "dignity culture." Experiments in collective punishment by social psychologists Fiery Cushman, A. J Durwin, and Chaz Lively indicated that individuals see themselves as morally responsible for actions of a member within their group in honor-based system. "Honor cultures" generally evolve when there is a lack of central authority, and the use of collective punishment deters future wrongdoings from both individual violators of established norms and outside groups. This system sharply contrasts our notions of moral psychology in contemporary western societies (or dignity culture), where each individual is solely held responsible for their actions.⁷⁵ These psychologists expect that many of our ancestral societies promoted this sense of "honor culture" due to their ecological circumstances. Although there are costs associated with implementing an "honor culture," the benefit is that if the institution establishes the right set of cultural norms, there will be a greater adherence to the norms for fear of "letting down" one's members and loss of a suitable reputation. Therefore, if we were to develop institutions with aspects of: a well-functioning reputational system that systematically promotes prosocial preaching; shared symbols of identity; a willingness to reward its member for long-term service and loyalty; and aspects of honor cultures (group accountability); we can expect a stronger consensus of a common moral establishment. However, the institution is not the only system that can contribute to an individual's calculus in performing prosocial norms. Given the evolutionary context of morality described above, we must finally analyze what leaders can personally do to establish and promote a moral consensus.

D. MORAL LEADERSHIP IN ACTION

Leaders' actions have often been the essential tools to change public norms and moral sentiments. When discussing leaders, I am referring to "individuals who have differential influence within a group over the establishment of goals, logistics of

⁷⁵ Fiery Cushman, A. J. Durwin, and Chaz Lively, "Revenge without Responsibility? Judgments about Collective Punishment in Baseball," *Journal of Experimental Social Psychology* 48, no. 5 (September 2012): 1106, https://doi.org/10.1016/j.jesp.2012.03.011.

coordination, monitoring of effort, and reward or punishment strategies."⁷⁶ Although there are general characteristics of leaders, it is important to differentiate what a leader may represent in our modern societies (what we will refer to as a Large-Scale Society) compared to our ancestral societies. Although Small-Scale Societies (SSS) is describing the size of a political organization, to include horticulturalists and pastoralists, I will describe these SSS in reference to hunter-gather tribes which roamed in small bands during the Pleistocene. Leadership in SSS tends to be egalitarian, less institutionalized, and far more situational to the context of events that unfold.⁷⁷ Evolutionary psychologists, to include Pinker, Tooby, and Cosmides, believe that humans evolved decision rules for aligning our behavior as we changes through various stages of reproductive status, levels of energy, social reputation, group structure, interpersonal, and intergroup threats.⁷⁸ These decision rules guide how we view others in the context of local social hierarchy. Several scholars have argued through the "mismatch hypothesis," that the decision rules within the human psyche for establishing leadership and followership roles were programmed for a SSS, not the novel LSS we see today.⁷⁹

The mismatch can create problems where leaders are potentially selected for their ability to lead in a SSS and not an LSS organization. Such selection would create situations where leaders are ill-suited for high-level position in an LSS organization and subsequently make poor decisions. Additionally, this may have the inverse effect of bureaucratically assigning members into positions of authority where they lack leadership qualities to tactfully convince followers to listen to their directive. These leadership qualities in a SSS are trustworthiness, generosity, social connections, and fairness due to the wariness of exploitation in an egalitarian society. In these societies, individual authority is often earned, not received.⁸⁰

⁷⁶ Christopher von Rueden and Mark van Vugt, "Leadership in Small-Scale Societies: Some Implications for Theory, Research, and Practice," *The Leadership Quarterly* 26, no. 6 (December 2015): 978, https://doi.org/10.1016/j.leaqua.2015.10.004.

⁷⁷ von Rueden and van Vugt, 978.

⁷⁸ von Rueden and van Vugt, 979.

⁷⁹ von Rueden and van Vugt, 979.

⁸⁰ von Rueden and van Vugt, 981.

The Tsimane forager-horticulturalist of Bolivia demonstrate an example of leadership in a SSS. The leaders in this society tend to rise during collective action problems to include fishing events and raids. Although leaders tend to be taller, strong, and more socially connected than their peers, their coercive power is limited. Usually, leaders will experience ostracism from the group if they attempt to intimidate other members into action. Therefore, in these egalitarian societies, leaders must find other ways to create a consensus among its members.⁸¹ This consensus may be formed by passive influence, persuasive reasoning, or ascribing approval through social connections and kin.⁸² Because leaders in SSS do not possess the top-down authority expected in LSS, they must genuinely persuade their followers to take action. While this may be inconvenient and time-consuming, this consensus-building improves buy-in from the group, as they feel that they are part of the decision making process.

Additionally, in these SSS, members are far more connected with their group's identity through shared customs, rituals, and language. In modern societies, humans can "maintain an identification with ethnics groups, workforces, clubs, religions, social classes, political parties,"⁸³ which further complicates an individual's loyalty toward the competing groups within their social circumstances. Thus, individuals in LSS will have their social identity change to the context-dependent circumstance they find themselves in.⁸⁴ These social conditions create an extremely difficult challenge for leaders to manage in a LSS. Because people find themselves in different social settings, it is most likely that their sense of morality will also adapt to their social context. This feature is mainly due to our inherent need to be part of the ingroup as social creatures. Fitting within one's moral community is vital to our fitness, where a good social reputation maximizes one's success

⁸¹ Luke Glowacki and Chris von Rueden, "Leadership Solves Collective Action Problems in Small-Scale Societies," *Philosophical Transactions: Biological Sciences* 370, no. 1683 (2015): 9.

⁸² Glowacki and von Rueden, 2.

⁸³ David G. Rand et al., "Social Heuristics Shape Intuitive Cooperation," *Nature Communications* 5 (April 22, 2014): 3677, https://doi.org/10.1038/ncomms4677.

⁸⁴ Paul E. Smaldino, "Social Identity and Cooperation in Cultural Evolution," *Behavioural Processes*, Behavioral Evolution, 161 (April 2019): 108–16, https://doi.org/10.1016/j.beproc.2017.11.015.

within a group.⁸⁵ Therefore, in understanding when an individual fails to meet the moral expectation of the group, one must observe the different social communities that member may be a part of; and how a virtuous act of prosocial behavior may enhance their social reputation in one but not the other.

Although such differences exist between effective leadership in SSS versus LSS, there are still several characteristics that will make a successful leader in both societies. Choosing such a leader will help prevent aspects of the "mismatch hypothesis" between our evolved decision-rules for selecting leaders and those who are generally chosen to climb the bureaucratic chain. These common characteristics include: experience, earned prestige, cooperative, persuasive, socially-connected, prosocial, physically dominant, and selfless.⁸⁶ Because these leaders have a stronger say in the groups established norms through a prestige bias, they have an enhanced ability to create a conformity bias for members to act prosocially and morally toward one another. With an understanding of the established culture and environment they find themselves in, these leaders will have an overwhelming influence of the groups moral sentiments and create buy-in to the system of reward and punishment for good and bad behavior.

E. CONCLUDING THOUGHTS

Evolutionary theory provides a new lens on how we form and define our sense of morality and maintain this morality through the use of our organizational and leadership involvement. Although it does not paint a complete picture of what morality is in our modern social settings, it sheds light on the foundation of our moral aperture by evaluating our moral beginnings and the formation of our sense of morality. The next chapter will discuss ethical leadership from a moral psychology standpoint. And finally, the last chapter will provide a summary of recommendations from both chapters into a comprehensive leadership toolkit for ethical leadership.

⁸⁵ Boehm, 114.

⁸⁶ von Rueden and van Vugt, 979–90.

THIS PAGE INTENTIONALLY LEFT BLANK

III. MORAL PSYCHOLOGY

With an understanding of how we form, define, and maintain our moral beliefs from an evolutionary perspective, the following chapter will use the analytic lens of moral psychology to further our comprehension of how leaders can influence our moral judgments into action for ethical change in an organization. As described before, moral psychology is an interdisciplinary field that takes aspects of both philosophical theories and human psychology to observe and analyze human thought and behavior in an ethical context.⁸⁷This academic field draws on both empirical findings in the social sciences and conceptual debates in the philosophy of ethics.⁸⁸ As these fields contain a plethora of scholarship and data, extensive debate occurs within both disciplines. This thesis will remain focused on how moral psychology views moral motivation and action.

However, I cannot describe moral motivation without articulating what morality is. Although the meta-ethical debate of how we express morality has existed since the dawn of recorded history in both western and eastern philosophy, that dispute is beyond the scope of this thesis.⁸⁹ Instead, due to its alignment with the guiding principles and evidence derived from evolutionary thinking, I will use the pluralist approach to describe morality. With that said, to answer the thesis question of how leaders influence ethical decision making within an organization, I will divide this chapter into three sections. First, this chapter will articulate the viewpoint of the pluralist as a framework for understanding ethical decision making. Second, this chapter will discuss the research on how we form our moral judgments and engage the intellectual debate on what motivates individuals into moral action. Finally, this chapter will describe the psychological studies that demonstrate effective ways to motivate individuals morally. Following this chapter, I will provide final recommendations on what leaders can do to effect ethical behavior from the combined research in evolutionary theory and moral psychology.

⁸⁷ Doris et al., "Moral Psychology," 1.

^{1/23/2020 1:51:00} PM⁸⁸ Doris et al., 1.

⁸⁹ Kevin M. DeLapp, "Metaethics," in *Internet Encyclopedia of Philosophy*, accessed October 16, 2019, https://www.iep.utm.edu/metaethi/.

A. MORAL PLURALISM

Moral pluralism is the view that our values, virtues, and ethical principles are fundamentally diverse, and thus one cannot channel them to a single description of morality. That means that a variation in moral judgments can exist not only between societies but also between different cultures, groups, individuals, and within oneself. Therefore, moral dilemmas are a real thing when deciding between two moral truths. Although there are multiple moral truths, moral pluralism agrees with moral realism, that "we can make objectively valid judgments about values." Where pluralists differ from the realists, is by prescribing that such judgments are not always compatible.⁹⁰ On the other end of the spectrum, a moral relativist believes that "the truth or justification of moral judgments is not absolute, but relative to the moral standard of some person or group of persons." Thus, from their perspective, ethical standards are entirely relative and derive from one's culture or society.⁹¹These relativists question if there are any ethical truths that can be universally described as fundamental to all of humanity. Although the evidence to support each meta-ethical view has its merits (and societal implications for viewing the world in such a manner), examining that evidence is beyond this thesis. To reasonably get to the heart of our discussion of how leaders influence ethical behavior, I will use a pluralist framework to explain what it means to be ethical. That is to say that the existence of moral truths is real, but these truths have a plurality to them in which an individual may emphasize one more than others based on the complex social environment one finds themselves in. Therefore, following this logic, we must ask, what are these moral truths that the pluralists speak of?

Social psychologist Jonathan Haidt investigated this question and discovered a way to articulate human morality from this pluralist standpoint categorically. Described in his book *The Righteous Mind*, Haidt created a moral matrix that represented this moral

⁹⁰ Virginia Held, "Moral Pluralism," in *Encyclopedia of Ethics*, ed. Lawrence C. Becker and Charlotte B. Becker (London: Routledge, 2001), Credo Reference.

⁹¹ Chris Gowans, "Moral Relativism," in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta, Summer 2019 (Metaphysics Research Lab, Stanford University, 2019), https://plato.stanford.edu/archives/sum2019/entries/moral-relativism/.

plurality that can be observed throughout the world and the sense of righteousness each group has of their own behavior. Using the analogy of a tongue with five different taste receptors, Haidt depicted how human morality is analogist to a cuisine:

it's a cultural construction, influenced by accidents of environment and history, but it's not so flexible that anything goes. You can't have a cuisine based on tree bark, nor can you have one based primarily on bitter tastes. Cuisines vary, but they all must please the tongues equipped with the same five taste receptors. Moral matrices vary, but they all must please righteous minds equipped with the same six social receptors.⁹²

Teaming with applied social science researcher Craig Joseph, these men conducted an extensive examination of research in the academic fields of anthropology, evolutionary psychology, and social psychology to formulate a moral matrix. The purpose of this investigation was to create a universally applicable moral matrix with the cross-cultural variation of moral beliefs in mind.⁹³ Haidt's Moral Foundations Theory (MFT) with five moral receptors and the adaptive challenges, triggers, emotions, and virtues that are associated with these receptors is presented in Table 1.⁹⁴

	Care/Harm	Fairness/Cheating	Loyalty/ Betrayal	Authority/Subversion	Sanctity/Degradation
	Protect and care for	Reap benefits of two-	From cohesive	Forge beneficial	
Adaptive Challenge	children	way partnership	coalitions	relationships within	Avoid contaminants
	Suffering, distress, or	Cheating, cooperation,	Threat or challenge to	Signs of dominance and	Waste products,
Original Triggers	neediness expressed by	deception	group	submission	diseased people
	Baby seals, cute cartoon	Maritial fidelity, broken		Bosses, respected	Taboo ideas
Current Triggers	characters	vending machines	Sports teams, nations	professionals	(communism, racism)
			Group pride, rage at		
Characteristic emotions	Compassion	Anger, gratitude, guilt	traitors	Respect, fear	Disgust
		Fairness, justice,	Loyalty, patriotism, self-		Temperance, chastity,
Relevant Virtues	Caring, kindness	trustworthiness	sacrifice	Obedience, deference	piety, cleaniness

Table 1.Haidt's Moral Foundation Theory

93 Haidt, 143–46.

⁹⁴ Haidt, 146.

⁹² Haidt, The Righteous Mind, 133.

⁹⁵Adapted from Haidt, 146.

Therefore, with this moral pluralist model as a way to understand how we crossculturally construct our moral organizations, I will now focus on the research as to how we realize and act upon those moral judgments.

B. MORAL JUDGMENTS AND MOTIVATION

With Haidt's Moral Foundation Theory as a framework in understanding how our different moral truths manifest themselves into our explicit and implicit moral values, this section will evaluate the literature in moral psychology on moral judgments and action. This evaluation will be done by first articulating how we formulate our moral judgments in this framework, and second, by examining the theories that explain how we are motivated to take moral action from the realization of these moral judgments.

Moral judgments are anything that has moral significance and motives people to express, promote, and evaluate others (and themselves) on expected behavior.⁹⁶ Although we may not realize it, we are continually making moral judgments, while others are morally evaluating us. Such assessments may be as mundane as failing to tip a waitress, or as dangerous as driving under the influence. It is all part of our daily routine as social cooperators. One theory that provides a useful way to understand how we develop these moral judgments is the Dual-Processing Model. Based on extensive research in psychology and cognitive science, the Dual-Processing Model argues that two general areas of the brain are engaged during a moral decision. One which is personally based (the brain region associated with emotions are increasingly active), and the other is impersonal (the brain region associated with controlled cognitive processes). Below is an example of a moral dilemma in which experimenters are activating both processes in subjects.⁹⁷

Enemy soldiers have taken over your village. They have orders to kill all remaining civilians. You and some of your townspeople have sought refuge in the cellar of a large house. Outside, you hear the voices of soldiers who have come to search the house for valuables. Your baby begins to cry loudly. You cover his mouth to block the sound. If you remove your hand from his mouth, his crying will summon the attention of the soldiers who

⁹⁶ John Doris and The Moral Psychology Research Group, *The Moral Psychology Handbook* (New York: Oxford University Press, 2010), 113.

⁹⁷ Doris and The Moral Psychology Research Group, 50.

will kill you, your child, and the others hiding out in the cellar. To save yourself and the others, you must smother your child to death. Is it appropriate for you to smother your child in order to save yourself and the other townspeople?⁹⁸

In this study conducted by moral psychologists Joshua D. Greene, Leigh Nystrom, Andrew Engell, John Darley, and Jonathan Cohen, these psychologists found that subjects usually deliberated for a long time before providing an answer, and that answers were split somewhat evenly as to whether to kill the baby. What was insightful from the study was that those who chose to "smother the baby," generally a consequentialist judgment, had to override their emotional response that guides most of us to "not smother the baby," or make a rule-based judgment.⁹⁹

Neuroimaging supports these claims through the discovery that in an extremely difficult scenario such as this one, subjects demonstrate increased neural engagement in both the anterior cingulate cortex (ACC) (which is associated with quick behavioral responses), and even greater engagement in the dorsolateral prefrontal cortex (DLPFC) (linked with cognitive control), while attempting to solve this moral dilemma.¹⁰⁰

As a necessary background for those unaware of the field normative ethics within the academic discipline of philosophy, a consequentialist judgment is usually a conscious wellness maximizing response, while a rule-based judgment is usually an intuitive prohibition of certain types of harm.¹⁰¹ Also referred to as utilitarianism and deontology, in short, these normative ethical theories believe that a utilitarian will support the result that betters the overall outcomes for those involved, while a deontologist will define morality by rules or right and wrong, such as "don't kill people."¹⁰² It is a moral question of 'do the ends justify the means?' or vice versa. It is essential to know these perspectives,

⁹⁸ Joshua D. Greene et al., "The Neural Bases of Cognitive Conflict and Control in Moral Judgment," *Neuron* 44, no. 2 (October 14, 2004): 390, https://doi.org/10.1016/j.neuron.2004.09.027.

⁹⁹ Greene et al 390-91.

¹⁰⁰ Greene et al ,389.

¹⁰¹ Doris and The Moral Psychology Research Group, *The Moral Psychology Handbook*, 66.

¹⁰² Greene et al, 398.

for many psychological and philosophical studies use these 'thought experiments' as an evaluative tool of our moral framework.¹⁰³

Another psychological study specifically investigated response times in moral judgments and confirmed these findings of how we formulate our moral judgments. In this study, psychologist Jonathan Baron and Burcu Gurcay, analyzed the subject's response time to moral dilemmas by asking subjects "whether it is right to kill one person in order to save five others," which is another common thought experiment.¹⁰⁴ Once again, by using the normative theories of utilitarianism and deontology, the authors expected that if the response were to kill, it would fall in the lines of utilitarianism, while if they refrain from killing, it would be a deontological response. The experiment demonstrated that people were "default interventionist," where deontological responses occurred more immediately (largely spark by emotions), while utilitarian response generally took more time (assuming that the subject corrected their intuitions by a more reflective process). The psychologists believe the experiment supported three conclusions. One that a utilitarian response often requires more time, two, that cognitive distractions and time pressure affects these reflective responses, and three, that instructing the participant to be reflective or intuitive affects their responses.¹⁰⁵ Finally, a study by behavioral neurologist Mario Mendez found that subjects with deficits in emotional processing, known as frontotemporal dementia (FTD), show behavioral changes that progress into morally questionable actions such as inappropriate sexual advances, physical assault, and stealing. Thus, this study demonstrated that the ability to make immediate personal based moral decisions seemed to be affected by this neurological condition; which is a behavioral pattern similar to that of a sociopath.¹⁰⁶

¹⁰³ Doris et al., "Moral Psychology," 4.

¹⁰⁴ Jonathan Baron and Burcu Gürçay, "A Meta-Analysis of Response-Time Tests of the Sequential Two-Systems Model of Moral Judgment," *Memory & Cognition* 45, no. 4 (May 2017): 566, https://doi.org/10.3758/s13421-016-0686-8.

¹⁰⁵ Baron and Gürçay, 567.

¹⁰⁶ Mario F. Mendez, Eric Anderson, and Jill S. Shapira, "An Investigation of Moral Judgement in Frontotemporal Dementia," *Cognitive and Behavioral Neurology* 18, no. 4 (December 2005): 193–97, https://doi.org/10.1097/01.wnn.0000191292.17964.bb.

The implication for the Dual-Processing Model is that we can override our moral intuitions through thoughtful, rational discussion, and critical thinking. By having members discuss certain moral dilemmas, where our moral intuitions are promoting one action (that can be interpreted as morally just in the short term), and moral reasoning producing another (weighing in the second, third order effects), we can come to a greater consensus of what right looks like. With the evidence of this model, we will use the Dual-Processing Theory to comprehend how we can effect ethical change. Therefore, with an understanding of how we realize our moral judgments, we will now examine the debate as to how we motivate individuals into moral action.

In *The Moral Psychology Handbook*, moral psychologist Timothy Schroeder, Adina Roskies, and Shaun Nichols describe four familiar theories that attempt to explain what motivates us into moral action. These four theories are (1) instrumentalist, (2) cognitivist, (3) sentimentalist, and (4) personalist. Below is a brief description of each theory.¹⁰⁷

4. The instrumentalists follow the premise that beliefs on how to fulfill preexisting desires, develop moral motivation. Achieving these intrinsic desires are for their own sake. Examples of these desires include, the wellbeing of others, pleasure, and to accomplish the will of God. The instrumentalists contend that once the right condition presents itself, this intrinsic desire will motivate an individual into action.¹⁰⁸ This theory becomes troubling when the evidence in neuroscience supports a different conclusion. Specifically, in cases where patients received discrete lesions on the motor basal ganglia (the region that conducts an internal evaluation of information), there appears to be a lack of desire and motivation. Thus, the brain's rewards system is not the only location where desires are triggered and expressed.¹⁰⁹

¹⁰⁷ Doris and The Moral Psychology Research Group, *The Moral Psychology Handbook*, 72.

¹⁰⁸ Doris and The Moral Psychology Research Group, 75.

¹⁰⁹ Doris and The Moral Psychology Research Group, 84–87.

- 5. The cognitivists affirm that occurrent beliefs of what action would be right is what motivates us into moral action. Thus, the conscious deliberation of a moral belief produces moral action. They argue that it is our understanding of what right looks likes that motivate us into action rather than any particular desire. Although desires exist, they play a lesser role as data points that one considers in acting upon an ethical decision for the morally mature individual.¹¹⁰ This theory is similar to the rationalist model that claims that moral reasoning is a developmental progression that occurs through the application of moral principles or rules to a situation. Thus, by extension, our moral judgments elicit our moral behavior.¹¹¹ Although we will reject this theory because the details of our neural wiring demonstrate that humans do not always favor the power of reason over their intrinsic desires, it is still an important aspect to how we are morally motivated to take action.¹¹² Therefore, we will examine the cognitivists theory of moral reasoning later in this chapter.
- 6. The sentimentalists argue that certain emotions or sentiments perform a causal role in moral behavior. The combination of several different emotions manifests themselves into moral action. Actions cannot constitute as being morally motivated if these sentiments do not exist. An example of one of these sentiments is compassion.¹¹³ Similar to this belief is the intuitionists. Intuitionists claim that what we refer to as reasoning is deeply flawed. They argue that what we account as truth is far more of a justification for our behavior and judgments due to our inherent self-interest

¹¹⁰ Doris and The Moral Psychology Research Group, 76.

¹¹¹ Jan E. Stets, "Rationalist vs. Intuitionist Views on Morality A Sociological Perspective," in *Dual-Process Theories in Moral Psychology: Interdisciplinary Approaches to Theoretical, Empirical and Practical Considerations*, ed. Cordula Brand (Wiesbaden: Springer, 2016), 347–48, https://doi.org/10.1007/978-3-658-12053-5_16.

¹¹² Doris and The Moral Psychology Research Group, *The Moral Psychology Handbook*, 88.

¹¹³ Doris and The Moral Psychology Research Group, 77.

and reputational biases.¹¹⁴ Therefore, we must account for our deep subconscious intuitions when understanding moral motivation. Although emotions have been studied to provide bodily change through release of neurochemicals such as dopamine, the sentimentalist picture is not a complete representation of our neurophysiology.¹¹⁵ However, analyzing moral intuitions is an important part in understanding our moral matrix, and therefore, will be examine these intuitions later in this chapter.

7. Finally, it is the personalists who do not focus on a specific mental state but provide a holistic approach to understanding our moral motivation. Following the Aristotelian prescription of virtue ethics, the personalists believe that the development of good character is fundamental to what drives us to moral action. They state that good character "involves knowledge of the good, wanting what is good for its own sake, longstanding emotional dispositions that favor good action, and long-standing habits of responding to one's knowledge, desires, and emotion with good action." This knowledge of the good does not need to be from some explicit theory but more likely to be recalled through a variety of moral heuristics (do not lie, generosity is good) and a learned sensitivity to the context one finds themselves in. Long-standing cognitive, emotional, and behavioral dispositions (i.e., habits) give rise to our personality and character.¹¹⁶ Although the personalists provide the most complicated explanation of moral motivation, most moral psychologists agree that it reflects the best theory of moral motivation based on the wealth of scientific evidence, to specifically include recent discoveries in neuroscience.¹¹⁷

¹¹⁴ Haidt, The Righteous Mind, 88, 105.

¹¹⁵ Doris and The Moral Psychology Research Group, *The Moral Psychology Handbook*, 88–89.

¹¹⁶ Doris and The Moral Psychology Research Group, 77–78.

¹¹⁷ Doris and The Moral Psychology Research Group, 72.

Although, there is extensive detailed research as to why the personalists theory best reflects the neurophysiology of moral motivation, the research is quite complex and beyond the scope of this thesis. To articulate this neuroscientific research in layman's terms and something we can attempt to comprehend, I will describe what the current research indicates. Neurophysiological data supports that our perceptions and beliefs are realized by both higher cognitive centers of the brain, which evaluate implicit knowledge of the good and explicit knowledge of heuristics, and emotion centers (the amygdala) of the brain, that assess reward signals, thoughts, and desires. These neurological networks communication information to an internal evaluation process (the motor basal ganglia) to form habits. This area of the brain releases moto commands that manifest themselves into behavioral action.¹¹⁸ From this explanation, we can understand that there is a complex web of information processes' that produce moral motivation.

I will conclude that while the personalist's theory does not settle whether it is our subconscious intuitions or our rational thinking that provides more weight to our moral character and behavior, the results of that debate does change the way in which leaders can influence moral behavior. The important takeaway from this theory, is that it possible to influence both centers of the brain to engage in moral action we desire. Therefore, through the consideration of our emotional dispositions, defining what is good, and evaluating our short-term and long-term desires, we can create habits that align with virtues behavior.¹¹⁹ The last section of this chapter will now articulate different psychological studies that attempt to examine and influence these factors that contribute to our moral judgments and actions.

C. MORALS IN ACTION

With a pluralist framework as our meta-ethical foundation, a theory that explains how we develop our moral judgments, and a general consensus of how we are morally motivated to take action, this final section will introduce psychological studies that

¹¹⁸ Doris and The Moral Psychology Research Group, 89.

¹¹⁹ Doris and The Moral Psychology Research Group, 89.

demonstrate methods in which we may engage our rational and intuitive moral processes. By engaging these moral processes, we will have a strong influence on member's habits and moral character. To best explain these methods, I will divide this section on moral action into three sub-sections. First, I will discuss how to leaders can change ethical behavior using moral reasoning. As this has been one of the more well-discussed subjects among philosophers, I will keep this section limited by explaining the most popular model for moral reasoning and expand on the conversation by adding a potential alternative to that model. Second, I will focus on clarifying what moral intuitions are. As this has become a more recent subject of interest among moral psychologists, we will dive into the research that attempts to understand our moral intuitions (as they are often difficult to detect and analyze). Finally, we will dedicate the last sub-section in providing a potential approach to engage these moral intuitions from a leadership standpoint. However, before we examine these conscious and subconscious moral processes', the reader must be aware that due to the roll in what the personalists refer to as our moral character, it is often a complex combination of these influences that form and shape our moral psychologies. Therefore, for the most significant effect, these methods should be used simultaneously and in conjunction with one another.

1. Ethical Rational Decision Making

In order to direct ethical change in an organization, a leader must learn the art and science of moral reasoning to help guide his/ her members to the logical conclusion of appropriate ethical behavior. One can describe moral reasoning in many ways. However, philosophers generally articulated moral reasoning in the three dimensions of "practical/ theoretical; internal/ external, and, when internal conscious/ unconscious."¹²⁰ Keeping with the theory of the Dual-Processing Model, I will focus on moral reasoning that is practical, external, and consciously driven. That is to say, reasoning that supports the logical discussion of practical ways to cause change. Such moral reasoning should help provide an answer to our ethical problems within an organization.

¹²⁰ Doris and The Moral Psychology Research Group, 213.

One popular method of moral reasoning among philosophers is the deductive model. The deductive model follows the assumptions that:

- 1. People believe the conclusions of deductive arguments.
- 2. That believing the premises will cause a person to support the conclusion.
- 3. That the premises are independent of one another, and that some premises can be constituted as morally neutral.
- 4. The argument must fit the classical view of concepts, which is the definition in terms of sufficient conditions.¹²¹

Although, many of these assumptions may be confusing to a reader who is not familiar with the philosophical logic behind the deductive model, a deeper explanation of this logic is beyond the scope of this thesis. Rather, we will focus on how the deductive model was applied in psychological experiments to demonstrate its applicability. An example of a deductive model may be the following argument:

- (P1) Cheating is always morally wrong except in extreme circumstances.
- (P2) This act is cheating.
- (P3) This circumstance is not extreme.

Therefore, (C) this act is morally wrong.¹²²

Developmental psychologist Lawrence Kohlberg introduced the deductive model into his famous experiments on children and adolescence. Kohlberg created a structural development model (1981), where he assessed different stages of moral reasoning by age. As a psychologist, Kohlberg was a maverick of his time by bridging the gap between psychology and philosophy. Much of his work is considered the foundational research to

¹²¹ Doris and The Moral Psychology Research Group, 214.

¹²² Doris and The Moral Psychology Research Group, 213.

the discipline of moral psychology.¹²³ In Kohlberg's studies, Kohlberg examined subject's ability to give abstract reasoning on hypothetical moral dilemmas. Generally, if the subjects were more educated and older, their reasoning would exhibit greater complexity. Kohlberg describes the highest stage of moral reasoning as postconventional, as it rarely appeared in subjects without a post-secondary education.¹²⁴ Below is the list of Kohlberg's six stages of moral reasoning:

- Level A: Preconventional
- Stage 1= Punishment and Obedience
- Stage 2= Individual Instrumental Purpose
- Level B: Conventional
- Stage 3= Mutual Interpersonal Expectations and Conformity
- Stage 4= (Preserving) Social Order
- Level C: Postconventional and Principled Level
- Stage 5= Prior Rights and Social Contract or Utility
- Stage 6= Universal Ethical Principles¹²⁵

Although these studies are interesting in how our reasoning becomes more sophisticated through age and education, philosophers Gilbert Harman, Kelly Mason, and Walter Sinnott-Armstrong believe there is little empirical evidence to suggest that in most real situations, we participate in this type moral reasoning and form our moral judgements in such a manner.¹²⁶ Therefore, with much skepticism in the deductive model, we must look at other ways in which moral philosophers and psychologist can improve our moral reasoning.

One strategy proposed by cognitive-behavioral psychotherapist Donald Robertson, is to combine the evidence-based clinical practice of cognitive behavioral therapy (CBT) with the ancient texts of Stoic philosophical therapy.¹²⁷ Robertson believes that the

¹²³ Haidt, The Righteous Mind, 12.

¹²⁴ Cheryl Armon and Theo L. Dawson, "Developmental Trajectories in Moral Reasoning Across the Life Span," *Journal of Moral Education* 26, no. 4 (December 1997): 433–53, http://dx.doi.org/10.1080/0305724970260404.

¹²⁵ Doris and The Moral Psychology Research Group, 216.

¹²⁶ Doris and The Moral Psychology Research Group, 217.

¹²⁷ Donald Robertson, *The Philosophy of Cognitive-Behavioural Therapy (CBT): Stoic Philosophy As Rational and Cognitive Psychotherapy* (London: Routledge, 2010), 5, ProQuest.

importance of using both the ancient scripts and the modern therapeutic techniques can be articulate in the following five reasons described in Robertson's book *The Philosophy of Cognitive-Behavioral Therapy (CBT): Stoic Philosophy as Rational and Cognitive Psychotherapy*.

- 1. Early psychotherapists of the 20th century can trace the origins of their theories to the ancient therapeutic exercises of Socratic philosophy. Thus, psychology has always been an extended body of knowledge from philosophy in understanding the human condition.
- 2. The qualities of virtuous character and the conception of the philosophical "sage" provide a means to model excellence and guide our moral actions.
- 3. Concepts of affirmation, autosuggestion, and verbal coping statements used in CBT are surprisingly similar to the rehearsal and memorization of sayings and maxims in philosophy.
- 4. The use of mindfulness meditation within CBT is analogist to the "mindfulness of our own faculty of judgment, and the internal dialogue, in the 'here and now'" preached by Stoics.
- 5. And finally, resolving faulty thinking or cognitive distortion in CBT relates to "the objective analysis of our experience into its value-free components, by suspending emotive judgments and rhetoric," which is popular among the stoics.¹²⁸

Robertson argues that this application of philosophy and psychology allows the wisdom of these disciplines to proliferate beyond the halls of our academic institutions and encourages the "ordinary person" to apply these concepts "to their own problems in the form of individual counseling or group sessions with a quasi-therapeutic style."¹²⁹ Although, I encourage the reader to examine the different writing of Stoicism and how they relate CBT, that discussion is beyond the scope of this thesis. Instead, I will focus specifically on the last point Roberson makes and examine the therapeutic techniques clinical psychologists use to resolve cognitive distortions and how such techniques relate to moral reasoning.

¹²⁸ Robertson, xxv.

¹²⁹ Robertson, xx.

CBT is a form of psychotherapy that assists patients in treating disturbing emotions by replacing those emotions with healthy, rational, and proportionate ones. The term cognitive-behavioral, identifies that therapists are using some form of rationalization to target peoples' beliefs, intuitions, and emotions.¹³⁰ This form of therapy recognizes that our brains are a complex combination of interactions between these systems. With over 325 clinical trials and 16 separate meta-analysis studies on CBT, this form of treatment has become one of the leading techniques in treating anything from anxiety disorder to chronic pain.¹³¹ Below is an example of steps a cognitive therapist may take when treating a patient with depression.

- 1. To monitor his negative automatic thoughts, or cognitions.
- 2. To evaluate the relationship between thoughts, feelings, and actions;
- 3. To carefully evaluate the evidence for and against his distorted or maladaptive cognitions;
- 4. To generate alternative cognitions and to substitute them for the negative ones;
- 5. To identify and modify underlying dysfunctional assumptions and beliefs which predispose him to negative automatic thoughts.¹³²

Although CBT is clinically used to treat criminal misbehavior through Moral Resonation Therapy,¹³³ in my research, I have yet to find any application of CBT to our specific topic of changing ethical behavior within one's organization. It seems we must fill this gap through future studies in moral psychology and its application. While there is no data to prove my point, I hypothesis that because this is a leadership problem, leaders are not going to possess the experience or tools of a psychotherapist. At least in the military, a leader has the power to refer a subordinate to a therapist after he or she has engaged in a morally questionable act (ex. DUI). However, if for example, a leader notices a subordinate

¹³⁰ Robertson, 3.

¹³¹ Brandon A. Gaudiano, "Cognitive-Behavioral Therapies: Achievements and Challenges," *Evidence-Based Mental Health* 11, no. 1 (February 2008): 5–7, https://doi.org/10.1136/ebmh.11.1.5.

¹³² Robertson, 4.

¹³³ Harvey Milkman and Kenneth Wanberg, *Cognitive-Behavioral Treatment: A Review and Discussion for Corrections Professionals* (Washington, DC: National Institute of Corrections, 2007), https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=240869.

with a potential drinking problem where their decision making skills are in question, a therapist may be both invasive and counterproductive if the subordinate has yet to commit any inappropriate act. This therapy may be seen as invasive, for people do not like to be psychoanalyzed (at least formally) in an involuntary manner when they have done nothing wrong; and counterproductive, for most people will likely refuse to let a therapist observe their inner thoughts, and thus prevent the therapist to treat their potential issue. Therefore, in my humble opinion, if a leader wants to be proactive rather than reactive to morally questionable behavior, the techniques of CBT will work best if a leader disguises it as something else. Through opportunities of engagement, such as one-on-one mentorship sessions or general social events, a leader can get the ethical pulse of their subordinates and provide course corrections by using the methods of CBT. By providing an environment that is relaxed, informal, and open to discussion, a leader can hear the ground truth and engage in discussion over potential cognitive distortions. Although I have yet to see any clinical trials that tests of this form of moral reasoning, I believe it can achieve tangible results as it has worked well within the field of psychotherapy in solving many peoples' psychological problems. In concluding this discourse of moral reasoning, I will now attempt to unpack the complex idea of what is describe as our moral intuitions.

2. Understanding Our Moral Intuitions

One of the more challenging tasks a leader must face in changing an organization's ethical climate is influencing its members' moral intuitions. Moral intuitions are moral beliefs that are strong, stable, and immediate to access.¹³⁴ They remain hidden from our conscious selves through fast, reliable heuristics that help us through everyday situations.¹³⁵ Based on the intuitionists' perspective in moral motivation, moral intuitions must exist before any form of moral reasoning, and moral deliberation must serve a social function rather than an epistemic desire for moral truth. These moral deliberations include "managing social impressions, convincing others to adopt one's view about a moral issue

¹³⁴ Doris and The Moral Psychology Research Group, 246.

¹³⁵ Doris and The Moral Psychology Research Group, 257.

and rationalizing one's own moral intuitions to oneself."¹³⁶ Although this is a highly debated topic within the Association for Moral Education (AME), that debate will not be discussed in this thesis.¹³⁷ Instead, this section, will articulate the social psychological studies that demonstrate the potential existence of these moral intuitions. Following this section, we will end this chapter of moral psychology on ways to shape these moral intuitions.

In a set of studies performed by social psychologists Peter Ditto, David Pizarro, and David Tannenbaum, the authors conducted extensive research in the examination of our moral intuitions in the form of biases.¹³⁸ Based on the intuitionist model, they hypothesized that we morally judge in a preferred direction by first, "adjusting perceptions of an actor's accountability for a moral act," and secondly, "by altering the principles brought to bear in evaluating the morality of the act itself."¹³⁹ That is to say, that humans are motivated to make moral judgments that fit their preconceived ideological moral framework. To analyze and trigger these motivational moral biases, the authors used Haidt's general description of the moral positions of American liberals versus American conservatives. Using the Moral Foundation Theory, Haidt describes how social liberals tend to be concerned with the principles of care/harm and fairness/cheating; while social conservatives generally emphasize loyalty/betrayal, authority/subversion, and sanctity/degradation within their moral matrix.¹⁴⁰ Below is the description of these studies that demonstrated our moral biases.

First, the researchers wanted to examine how individuals adjust the actor's level of responsibility for a morally permissible act. When referencing 'responsibility,' the authors

¹³⁶ Bruce Maxwell and Darcia Narvaez, "Moral Foundations Theory and Moral Development and Education," *Journal of Moral Education* 42, no. 3 (2013): 271–80, https://doi.org/10.1080/03057240.2013.825582.

¹³⁷ Bruce Maxwell and Darcia Narvaez, 271–280.

¹³⁸ Peter H. Ditto, David A. Pizarro, and David Tannenbaum, "Motivated Moral Reasoning," in *The Psychology of Learning and Motivation*, ed. Daniel M. Bartels, et al. (Burlington, MA: Academic Press, 2009), 307–38, https://doi.org/10.1016/S0079-7421(08)00410-6.

¹³⁹ Ditto, Pizarro, and Tannenbaum, 314.

¹⁴⁰ Haidt, The Righteous Mind, 351–57.

used the criteria widely supported by normative philosophical and legal theorists that claim that we should hold individuals morally responsible if "that act should have been caused, controllable, and intended by the actor."¹⁴¹ The first study tested the hypothesis that American political conservatives would act upon this bias by viewing American service members in a positive manner, based on ingroup loyalty (or patriotism). Once again, the purpose of the study was to demonstrate how prior moral dispositions would affect how individuals viewed the same information and judged the moral intentions of the actors. Below is a description of the hypothetical scenarios provided to participants.

Participants received one of two military scenarios. Half of the participants received a scenario describing American military leaders deciding to carry out an attack to stop key Iraqi insurgent leaders in order to prevent the future deaths of American troops. The other half read about Iraqi insurgent leaders deciding to carry out an attack to stop key leaders of the American military in order to prevent future deaths of Iraqi insurgents. In both cases, it was explicitly stated that the attackers (whether American or Iraqi) did not want nor intend to cause civilian casualties, but in both cases the attack did. After reading the scenario, participants were asked to indicate whether the military leaders had intentionally harmed the innocent civilians, and to indicate their political ideology on a standard 7-point liberal-conservative scale.¹⁴²

The results indicated that liberal participants did not differ on intentional judgments based on the nationality of the subject. However, conservatives on the other hand, were more likely to view the death of civilians as deliberate if it was caused by an Iraqi compared to American service members. Though both scenarios clearly articulated that the innocent deaths were unintentional, over 77% of participants who viewed the death of innocent civilians as intentional, used the military leader's foreknowledge as a justification. Additionally, 95% of those that defended the leader's decision for collateral damage, referenced the leader's "goal-directed mental states" as a moral explanation.¹⁴³ Other studies on moral judgments by psychologist Alan Leslie, Joshua Knobe, and Adam Cohen, have confirmed that we are more likely to judge an act intentional when seen as

¹⁴¹ Ditto, Pizarro, and Tannenbaum, 315.

¹⁴² Ditto, Pizarro, and Tannenbaum, 321–22.

¹⁴³ Ditto, Pizarro, and Tannenbaum, 321.

morally bad, but unintentional when seen as morally good.¹⁴⁴ Therefore, the first moral bias we must be aware of is that we are likely to change the perception of the actor's accountability to the act to fit our moral framework.

The second bias studied by these psychologists was to observe whether our ideological intuitions motivationally influenced our moral reasoning. This is to ask if we situationally alter our moral principles due the context of the scenario to support our moral intuitions. For clarity, "principles" are thought to be "foundational rules that, while not always fully universal, are at least widely applicable across a defined set of situations."¹⁴⁵ Using the previous discussed normative theories of deontology and consequentialism, the researchers created two experiments where the subjects endorsed one of the principles based on their response to the moral dilemma. The idea was to 'trigger' subjects to provide a bias response based on their intuitions of moral righteousness.¹⁴⁶ Below is a description of the first scenario provided by the study:

College students were present with a modified version of the trolley/ footbridge dilemma, in which the morality to pushing one man into the tracks to save the lives of many others must be assessed. Our key modification was to include in the scenario extraneous information that we believed would evoke differing affective reactions depending on the student's political ideology...We therefore decided to vary the race of the characters in the trolley scenario (subtlety and between-subjects) to see whether this would influence participants' judgment concerning the appropriate moral action. Specifically, half of the participants were faced with a decision about whether to push a man named 'Tyrone Payton' onto the tracks to save '100 members of the New York Philharmonic,' while the other half had to decide whether to push a man named 'Chip Ellsworth III' onto the tracks to save '100 members of the Harlem Jazz Orchestra.' It should be clear that our goal was to lead our subjects, without using actual racial labels, to infer that in the first case their decision involved whether to sacrifice one African-American life to save 100 that were mostly White, and

¹⁴⁴ Alan M. Leslie, Joshua Knobe, and Adam Cohen, "Acting Intentionally and the Side-Effect Effect: Theory of Mind and Moral Judgment," *Psychological Science* 17, no. 5 (2006): 421–27, https://doi.org/10.1111/j.1467-9280.2006.01722.x.

¹⁴⁵ Ditto, Pizarro, and Tannenbaum, 323.

¹⁴⁶ Ditto, Pizarro, and Tannenbaum, 325.

in the second case whether to sacrifice one White life to save 100 that were mostly African-American.¹⁴⁷

With a 'overall consequentialism index' and a 'standard liberal-conservative scale' as quantitative variables for statistical analysis, the results indicated that this racial manipulation had a significant effect on the subjects' moral action.¹⁴⁸ First, participants had a general tendency to approve of a consequentialist rationalization for sacrificing a man with a typical White name over a typical African-American name. However, what was revealing, was when adding a regression line of political orientation, conservatives showed no effect, while liberals had a far a higher propensity to assess Chip's sacrifice in consequentialist terms over Tyrone's sacrifice.¹⁴⁹ This study was replicated several times with different audiences and different moral dilemmas ("lifeboat" dilemma) to support the same conclusions.¹⁵⁰ The authors believe that they manipulated American liberals' general bias to a sensitivity toward racial inequality in the perceived negative outcome of sacrificing a African-American man over a White man.¹⁵¹ In a second study, these authors replicated these biases in American conservatives. Through the same military scenario described previously, the authors results indicated that conservatives were far more likely to take a consequentialist approach to justify American soldiers harming civilians over Iraqi insurgents harming civilians for the same objectives.¹⁵² This likely demonstrates conservatives' sensitivity toward ingroup loyalty.

From this research, the authors believe that our selective reliance on these moral intuitions is due to the fact that there are often conflicting standards of appropriate action (i.e., rock in a hard place), and our motivational biases are difficult to detect by others and ourselves (i.e., self-deception). They argue that this research supports the premise our moral conclusions are more like "hired gun attorneys" looking to direct judgments for our

¹⁴⁷ Ditto, Pizarro, and Tannenbaum, 327.

¹⁴⁸ Ditto, Pizarro, and Tannenbaum, 327.

¹⁴⁹ Ditto, Pizarro, and Tannenbaum, 327.

¹⁵⁰ Ditto, Pizarro, and Tannenbaum, 328.

¹⁵¹ Ditto, Pizarro, and Tannenbaum, 329.

¹⁵² Ditto, Pizarro, and Tannenbaum, 329.

preferred outcomes, rather than a "Supreme Court Justice" who analytically adjudicates the objective "truth."¹⁵³ That is to say that we have motivated moral reasoning that "describe situations in which judgements are motivated by a desire to reach a particular moral conclusion."¹⁵⁴ However, the studies also showed that when people were made aware of their inconsistencies to a standard principle in a timely manner, the responses changed.¹⁵⁵ The psychologists discovered this finding in an alteration to the racial study. If a liberal participant received the Chip scenario before receiving the Tyrone scenario, the participant was more likely to remain consequential toward both Chip and Tyrone with a correlation index score of .98. These responses were thus more consequential toward Tyrone than the previous liberal responses (where participants only received one scenario).¹⁵⁶ It seems the need for consistency can override this bias impression.

Thus, the point of this research is not to pontificate why each political ideology response to these moral dilemmas differently, but rather demonstrate that our motivational moral biases effect our moral reasoning. This is due to our moral intuitions, which follow our ideological preferences, that stems from the challenges of group living.¹⁵⁷ Under the premise that our morality serves more as a social function than a truth-seeking device,¹⁵⁸ the authors hypothesize that our moral judgments express themselves this way to engage in the best forms of cooperation, coordination, and trust within our ingroup.¹⁵⁹ They argue the best way to combat these biases is to first be aware of their existence, and second, promote a diverse ideological organization where moral matters are openly questioned and critiqued by colleagues for their judgmental biases. This method of approach can be quantitatively supported by several studies in social psychology, that indicates that there is an inherent tendency for us to view our own opinions as objective while viewing others'

¹⁵³ Ditto, Pizarro, and Tannenbaum, 309–10.

¹⁵⁴ Ditto, Pizarro, and Tannenbaum, 312.

¹⁵⁵ Ditto, Pizarro, and Tannenbaum, 324.

¹⁵⁶ Ditto, Pizarro, and Tannenbaum, 331.

¹⁵⁷ Ditto, Pizarro, and Tannenbaum, 313, 333.

¹⁵⁸ Jonathan Haidt, "The New Synthesis in Moral Psychology," Science 316, no. 5827 (2007): 998.

¹⁵⁹ Ditto, Pizarro, and Tannenbaum, 313.

judgments as influenced by biases.¹⁶⁰ Therefore, with an understanding of how our moral intuitions express themselves, I will now describe ways leaders' can shape these moral intuitions.

3. Engaging Our Moral Intuitions through Identity

One way to understand how people are morally motivated to take action based on their moral intuitions is what sociologists refer to as the identity theory. The identity theory proposes that the individual may have multiple identities in which these respective identities are tied to either

- 1. A group or category that a person is a member of in society (ex. Christian)
- 2. A role that a person occupies in society (ex. parent)
- 3. A set of characteristics that distinguish the person as different from others in society (ex. principled)¹⁶¹

These sociologists believe that certain identities are activated situationally when a person needs to act in that capacity (ex. parent), while other identities may stay active continually as a 'core' identity. With different commitments and allegiances, these identities can constantly be shifting and aligning as the environment changes.¹⁶² Sociologists have conducted dozens of empirical studies through surveys and laboratory experiments to prove the validity of this theory.¹⁶³ However, research in moral identity as a 'core' identity has been limited to the moral meanings of fairness and caring, and thus, does not include the other moral foundations within Haidt's model (loyalty, authority, sanctity).¹⁶⁴ Because of this limitation and the true complexity of morality, it is difficult to use the identity theory as a way to articulate and encapsulate one's moral identity.

¹⁶⁰ Emily Pronin, "How We See Ourselves and How We See Others," *Science* 320, no. 5880 (May 30, 2008): 1178, https://doi.org/10.1126/science.1154199.

¹⁶¹ Stets, "Rationalist vs. Intuitionist Views on Morality A Sociological Perspective," 352.

¹⁶² Stets, 353.

¹⁶³ Stets, 361.

¹⁶⁴ Stets, 354.

Rather, this theory can be utilized by leaders in a way to make membership to an organization (a group/ category), a viable 'core' identity that influences a member's behavior and action. If we use Dual-Processing Model, we can assume that a member will develop a consistent heuristic, or automatic process, to act under with the perceptions, behaviors, and situations that provide the same meaning to their identity standard. Sociologist Jan Stets offers that we can shape this automatic process by providing an 'input error,' or disturbance, where the "individual perceives that others do not see them in a way that is consistent with the meaning in their identity standard."¹⁶⁵ This 'input error' forces the individual to break their automatic process and engage in deliberate reasoning for an alternate behavior that follows the perceived identity standard. ¹⁶⁶ We may then use of tools of moral reasoning to convince a member of their expected identity standard. However, changing the identity an individual, often requires convincing by more than a boss providing an "input error." What is stronger, is the influence of the group in shaping the individual's identity.

Based on several studies in social psychology, group identity has a substantial effect on how we engage in moral action. Demonstrated in the studies on self-determination, social psychologist Decharms, Deci, and Ryan, found that an actor is intrinsically motivated to commit to action if they have a sense of power over their circumstance. Whether this sense of control is an illusion or an actual choice, people are increasing motivated to enhance their performance when accomplishing a task they chose to do.¹⁶⁷ This is probably why a sense of empowerment and buy-in among subordinates in vital any successful enterprise. However, this finding generally holds in Western individualistic cultures. In what cultural anthropologists refer to as collectivist cultures, where identity is more of a distinction between ingroup and outgroup versus self and others, people are far more motivated to meet the demands and expectations of the social ingroup rather than the

¹⁶⁵ Stets, 357.

¹⁶⁶ Stets, 357.

¹⁶⁷ Sheena S. Iyengar and Sanford E. DeVoe, "Rethinging the Value of Choice: Considering Cultural Mediators of Intrinsic Motivation," in *Nebraska Symposium on Motivation*, vol. 49 (Lincoln, NE: Univ. of Nebraska Press, 2003), 132, http://www-

^{2.}rotman.utoronto.ca/facbios/file/Iyengar%20and%20DeVoe,%202003.pdf.

self.¹⁶⁸ This collectivism would work well in an organization where one does not always have the option to give its members a choice on policy matters. In a culture of collectivism, a leader can influence a group to take considerable intrinsic action for what the social group demands, rather than for their personal benefit. Furthermore, this research has shown that these interdependent members prefer a provided decision when the socially acceptable act is unclear. Such a decision eliminates the burden of identifying the socially sanctioned decision and increases a sense of belonging and loyalty for following the clearly articulated rule.¹⁶⁹ Consistent with this theory, cross-cultural studies have indicated that these collectivist cultures usually have a duty-based system. This system requires an individual to be morally obligated to their social duties in order to achieve ingroup social harmony. Additionally, these cultures emphasize the interpersonal obligation of the individual to their identity and the importance of contextual sensitivity.¹⁷⁰ Although anthropologist Richard Shweder describes the difference of this collectivist versus individualist cultural paradigm based on geographical (country/ regional) location, further research indicates that these differences are not bound by geography alone.¹⁷¹

Social Psychologist Jonathan Haidt conducted a research experiment with 360 subjects to examine Shweder's theory by observing the moral difference of certain groups based on location (US and Brazil), social class (high and low), and age (children and adults). The experiment was designed to test how subjects distinguished moral violations (a girl shoves a boy off a swing) versus what some may refer to as conventional violations (a boy refusing to wear a uniform to school). The initial hypothesis was that a more socio-centric society such as Brazil would see most conventional violations as moral violations, while an individualistic society (the United States) would distinguish the two. Although there was a significant difference between the two countries, the largest effect size was surprisingly in the social classes. Participants who were well-educated in both countries were far more similar to one another than their lower-class neighbors. The difference was

¹⁶⁸ Iyengar and DeVoe, 133–34.

¹⁶⁹ Iyengar and DeVoe, 135–36.

¹⁷⁰ Iyengar and DeVoe, 136–37.

¹⁷¹ Haidt, The Righteous Mind, 17.

that the lower class were more likely to judge the conventional violation as a moral violation.¹⁷² In terms of understanding the cultural differences in morality, the implications of this study are two-fold. For one, having superficial commonalities (wealth, profession, age, marital status) may actual bring a better moral understanding of one another; and two, the cross-cultural difference within our own society (or our delta) may be greater than the differences in geographically separated societies. Therefore, forming an organization that follows the tenets of collectivism is still possible in a W.E.I.R.D. (Western, Educated, Industrial, Rich, Democratic) society, such as the United States.¹⁷³ Although a collectivist culture is a complex array of customs, norms, traditions and institutions, social psychologist studies on collectivism have indicated that by investing in both vertical and horizontal relationships, tradition, stability of the ingroup, and group goals, an organization can promote the tenets of collectivism.¹⁷⁴

D. CONCLUDING THOUGHTS

Therefore, by changing the organizational environment to where one can easily identify their "core" identity to that of the group and fostering an emphasis toward the social duties expected in a collectivist culture, a leader may have a strong influence on its members' moral intuition and ethical behavior. Promoting this 'core' identity and collectivist ethos to the moral standard one wishes to uphold may be easier said than done. But by first understanding the power our moral intuitions and the details that create those intuitions, we can achieve our goal of moral persuasion. Additionally, by engaging in the prescribed forms of moral reasoning, a leader can help mold any cognitive distortions subordinates may have to the ethical standard the organization expects. I believe with the expanding literature on these forms of moral intuition and reasoning, the more we will realize that the personal decisions and actions leaders make have always had a lasting effect

¹⁷² Haidt, 24–25.

¹⁷³ B. Azar, "Are Your Findings 'WEIRD'?," *Monitor on Psychology* 41, no. 5 (May 2010), https://www.apa.org/monitor/2010/05/weird.

¹⁷⁴ Harry Triandis et al., "Individualism and Collectivism: Cross-Cultural Perspectives on Self-Ingroup Relationship," *Journal of Personality and Social Psychology* 54, no. 2 (1988): 323–38, https://doi.org/10.1037/0022-3514.54.2.323.

of discouraging and incentivizing specific behavior that creates the ethical climate of that organization. Thus, solid performing leaders of moral character are fundamental to the principles that any group wishes to stand for. Now in the final chapter of this thesis, I will articulate a framework that leaders can use to promote this principled organization, provided by the body of knowledge we have discussed from evolutionary theory and moral psychology.

IV. CONCLUSION

With an understanding of how leaders influence their ethical climate to the standards and expectations of their moral community based on evolutionary theory and moral psychology, I will now summarize the points made throughout this thesis into practical actions leaders can implement. Although we should use overt moral reasoning with our CBT model to critically engage the logic behind our moral values, the focus of many of these recommendations are designed to influence our moral intuitions. Based on Haidt's Moral Foundation Model, I have divided the recommendations under our five moral pillars. If we use our sensitivity to these pillars as a guideline to how we mold our moral intuition, we can create a better framework to engage the problem of influencing these intuitions. Additionally, within each pillar, I have split the suggestions into what actions leaders should implement at the personal level and the organizational policy level. This divide is important, for we must recognize that it is both the interpersonal and established group rules/ norms that affect how individuals calculate their appropriate action and behavior. It is with the establishment of these norms to which individuals will use several heuristics (cost/benefits, copy the most successful, copy the majority, etc.) to make an informed decision as a cultural learner. Lastly, I have limited each category to the most influential three recommendations discovered within my research. As there may be a mismatch between our modern and ancestral environments, these recommendations are designed to promote the moral community that we have been physiologically adapted to create. Although these moral communities can evolve into different forms (or cuisines) through the pluralist architecture of morality, the way we emphasize each pillar gives us the power to direct our moral community. Therefore, with the implementation of these recommendations, I believe a respected prestigious leader through earned authority will have a strong capability to shape their moral community to the highest ethical standards expected by that organization.

A. FAIRNESS/EQUALITY

1. Individual Action

- In regard to creating an environment that closely resembles our EEA (Environment of Evolutionary Adaptedness), treat every member with respect and dignity regardless of rank.
- Although competitive human nature can divide an organization, foster an environment where the competition for status is reflected by those who demonstrate the most prosocial behavior.
- Punish any signs of cheating or laziness as it will undermine the community value of fairness due to our sensitivity to free-riders.

2. Organizational Policy

- When time permits, allow members to overtly (vote) or covertly (survey) express which members demonstrate the highest consistency of prosocial behavior.
- Punish nepotism as it gives the benefactor an undeserved advantage over others and thus undermines fairness within the organization.
- Promote a diverse ideological organization where we can reflect on our motivational biases through humble leadership and engaged membership.

B. HARM/ CARE

1. Individual Action

• Award medals and forms public recognition to those who act prosocially through self-sacrifice and fitness reducing tasks. Also encourage prosocial behavior through individual positive feedback.

- Punish those who lack effort towards group goals and demonstrate overt self-serving behavior. Punishments may include ostracism, demotion, negative feedback, and firing.
- Take advantage of our anti-hypocrisy circuit by demonstrating to people their inconsistencies in a timely manner.

2. Organizational Policy

- Encourage a Pleistocene environment where members have the time to take care of their psychological and physiological needs through leisure time, workout periods, proper rest, and health coaches.
- Demonstrate that the organization is a family by engaging in costlyrewarding. This costly-rewarding includes long-term benefits for dedicated membership (pensions) and acts of assistance when members are troubled, regardless of temporary loss of productivity and output.
- When promoting leaders, be willing to sacrifice some level of performance for those that demonstrate good moral character. As this may be difficult to judge through quantitative results, leaders must evaluate these quality characteristics through personal observation in long-standing habitual acts of prosocial or virtuous behavior.

C. LOYALTY/ BETRAYAL

1. Individual Action

Individuals will act with some moral flexibility for the lesser rules.
 Concern oneself with the rules that are associated with membership to the group. Emphasizing these rules will define what betrayal is to the organization. This emphasis can be accomplished by harshly enforcing such rules and establishing a standard punishment guideline. This guideline should be well-known and regularly discussed throughout the organization. Additionally, by following clearly articulated rules, members

will feel a sense of belonging and loyalty due to the pride one takes in following a rule that defines membership.

- Create a coalition consensus of what are the group's ethical principles, through passive influence, persuasive reasoning, and ascribed approval by one's social connections.
- Be wary of our natural tendencies to have a cultural learning and conformity bias towards ingroup membership. These biases may have the power to undermine our ethical standards.

2. Organizational Policy

- Maintain a well-functioning reputational system (Dunbar number), where members move throughout the larger organization and know the reputation of others they have yet to meet through the age-old gossip routine.
- These positive forms of gossip will create an environment where members are consistently assets for acts of indirect reciprocity.
- Create aspects of both an honor and collectivist culture, where one will 'let everyone down' if they do not hold to the standards and expectations of the group. These social pressures can be the greatest form of psychological punishment if the member strongly identifies with the group.

D. AUTHORITY/ SUBVERSION

1. Individual Action

• Leaders should act with confidence and authority while also demonstrating a profound sense of humility. Authority should be earned, not received. If leaders keep the organization and its members their top priority, while encouraging input from subordinates when time permits, they may accomplish this earned authority. Additionally, if a leader wants a subordinate to be truly committed to doing their job to their best ability, a leader needs to spend the time to genuinely persuade a subordinate of the importance of their job to the success of the organization.

- Leaders should be held to a higher ethical standard, for they represent the foundation and integrity of the organization. Due to our anti-hypocrisy circuit, any ethical failures by a leader will have a downward effect of encouraging unethical behavior.
- Individual autonomy and authority over one's actions is an integral part of the cultural norms within W.E.I.R.D. (Western, Educated, Industrial, Rich, Democratic) societies. Use this norm to allow members to take ownership of their responsibilities (thus avoiding micromanaging) and use one's authority when collective action problems arise.

2. Organizational Policy

- Promote leaders who demonstrate common characteristics of leadership in LSS (Large-Scale Societies) and SSS (Small-Scale Societies). These include experience, earned prestige, cooperative, persuasive, sociallyconnected, prosocial, physically dominant, and selfless.
- Through our prestige bias, the most well-respected members have the greatest capability to undermine ethical standards. Severely punish these prestigious members that stray from the established ethical standards by the group.
- As leaders are expected to make policy decisions that may incentivize or discourage certain ethical standards, it should be encouraged for leaders to be reflective in their decision-making process. As we have learned from the Dual-Processing Model, our reflective responses take time. Leaders must engage in thoughtful, rational discussions where one weighs in the second and third-order effects for a policy decision.

57

E. SANCTITY/PIETY/TRADITION

1. Individual Action

- Allow individuals to establish shared customs, rituals, and language (colloquialisms) that create a strong sense of group identity.
- Allow the most prestigious members to preach what it means to be a member of the community (especially in times of ethical failure).
- Encourage discussion of what right looks like and what the community stands for. An example can be a simple vignette of a member who has committed a substantial sacrifice for the group and how their character represents the positive ideals of the moral community.

2. Organizational Policy

- Encourage uniforms, oaths, and insignia that identify group membership to the organization. Make a tradition out of earning and maintaining these shared symbols of meaning.
- Moral values will be largely based on how strongly the coalition emphasizes certain rules. This emphasis is overtly observed by how members hold each other accountable for their actions and behavior.
- Make membership to the group a 'core' identity where one creates a collectivist culture in which members feel morally obligated to their social duties. Provide an 'input error' for those members that need to change their ethical behavior.

LIST OF REFERENCES

- Alexander, Richard D. "A Biological Interpretation of Moral Systems." Zygon 20, no. 1 (March 1985): 3–20. https://doi.org/10.1111/j.1467-9744.1985.tb00574.x.
- . "Evolutionary Selection and the Nature of Humanity." In *Darwinism and Philosophy*, edited by Vittoria Hosle and Christian Illies, 301–48. Norte Dame, IN: University of Norte Dame Press, 2005. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.549.8800&rep=rep1&t ype=pdf.
- Armon, Cheryl, and Theo L. Dawson. "Developmental Trajectories in Moral Reasoning Across the Life Span." *Journal of Moral Education* 26, no. 4 (December 1997): 433–53. http://dx.doi.org/10.1080/0305724970260404.
- Azar, B. "Are Your Findings 'WEIRD'?" *Monitor on Psychology* 41, no. 5 (May 2010). https://www.apa.org/monitor/2010/05/weird.
- Baron, Jonathan, and Burcu Gürçay. "A Meta-Analysis of Response-Time Tests of the Sequential Two-Systems Model of Moral Judgment." *Memory & Cognition* 45, no. 4 (May 2017): 566–75. https://doi.org/10.3758/s13421-016-0686-8.
- Bennett, Kevin. "Environment of Evolutionary Adaptedness (EEA)." In Encyclopedia of Personality and Individual Differences, edited by Virgil Zeigler-Hill and Todd K. Shackelford, 1–3. Cham: Springer International Publishing, 2018. https://doi.org/10.1007/978-3-319-28099-8_1627-1.
- Berreby, David. Us and Them: The Science of Identity. Chicago: University of Chicago Press, 2008.
- Boehm, Christopher. *Moral Origins: The Evolution of Virtue, Altruism, and Shame*. New York: Basic Books, 2012.
- Buss, David. *Evolutionary Psychology: The New Science of the Mind*. 5th ed. London: Routledge, 2016.
- Buss, David, Martie Haselton, Todd K. Shackelford, April Bleske, and Jerome Wakefield. "Adaptations, Exaptations and Spandrels." *American Psychologist* 53, no. 5 (1998): 533–48.
- Chudek, Maciej, and Joseph Henrich. "Culture–Gene Coevolution, Norm-Psychology and the Emergence of Human Prosociality." *Trends in Cognitive Sciences* 15, no. 5 (May 2011): 218–26. https://doi.org/10.1016/j.tics.2011.03.003.

- Cushman, Fiery, A. J. Durwin, and Chaz Lively. "Revenge without Responsibility? Judgments about Collective Punishment in Baseball." *Journal of Experimental Social Psychology* 48, no. 5 (September 2012): 1106–10. https://doi.org/10.1016/j.jesp.2012.03.011.
- "Definition of Morals." In *Dictionary.Com*. Accessed July 30, 2019. https://www.dictionary.com/browse/morals.
- DeLapp, Kevin M. "Metaethics." In *Internet Encyclopedia of Philosophy*. Accessed October 16, 2019. https://www.iep.utm.edu/metaethi/.
- Ditto, Peter H., David A. Pizarro, and David Tannenbaum. "Motivated Moral Reasoning." In *The Psychology of Learning and Motivation*, edited by Daniel M. Bartels, Christopher W. Bauman, Linda J. Skitka, and Douglas L. Medin, 307–38. Burlington, MA: Academic Press, 2009. https://doi.org/10.1016/S0079-7421(08)00410-6.
- Doris, John, Stephen Stich, Jonathan Phillips, and Lachlan Walmsley. "Moral Psychology: Empirical Approaches." In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta, Winter 2017. Stanford, CA: Metaphysics Research Lab, Stanford University, 2017. https://plato.stanford.edu/archives/win2017/entries/moral-psych-emp/.
- Doris, John, and The Moral Psychology Research Group. *The Moral Psychology Handbook*. New York: Oxford University Press, 2010.
- Dunbar, R. I. M. "The Social Brain: Mind, Language, and Society in Evolutionary Perspective." *Annual Review of Anthropology* 32 (2003): 163–81.
- Psychology Today. "Evolutionary Psychology." Accessed March 3, 2019. https://www.psychologytoday.com/basics/evolutionary-psychology.
- Fehr, Ernst, and Colin F. Camerer. "Social Neuroeconomics: The Neural Circuitry of Social Preferences." *Trends in Cognitive Sciences* 11, no. 10 (October 2007): 419–27. https://doi.org/10.1016/j.tics.2007.09.002.
- Feickert, Andrew. U.S. Special Operations Forces (SOF): Background and Issues for Congress. CRS Report RS21048. Washington, DC: Congressional Research Service, 2019. https://crsreports.congress.gov/product/pdf/RS/RS21048.
- Gat, Azar. "Why War? Motivations for Fighting in the Human State of Nature." In *Mind the Gap: Tracing the Origins of Human Universals*, edited by Peter M. Kappeler and Joan B. Silk, 197–220. Heidelberg: Springer Berlin Heidelberg, 2010. https://doi.org/10.1007/978-3-642-02725-3_9.

- Gaudiano, Brandon A. "Cognitive-Behavioral Therapies: Achievements and Challenges." *Evidence-Based Mental Health* 11, no. 1 (February 2008): 5–7. https://doi.org/10.1136/ebmh.11.1.5.
- Glowacki, Luke, and Chris von Rueden. "Leadership Solves Collective Action Problems in Small-Scale Societies." *Philosophical Transactions: Biological Sciences* 370, no. 1683 (2015): 1–13.
- Gowans, Chris. "Moral Relativism." In *The Stanford Encyclopedia of Philosophy*, edited by Edward N. Zalta, Summer 2019. Metaphysics Research Lab, Stanford University, 2019. https://plato.stanford.edu/archives/sum2019/entries/moralrelativism/.
- Greene, Joshua D., Leigh E. Nystrom, Andrew D. Engell, John M. Darley, and Jonathan D. Cohen. "The Neural Bases of Cognitive Conflict and Control in Moral Judgment." *Neuron* 44, no. 2 (October 14, 2004): 389–400. https://doi.org/10.1016/j.neuron.2004.09.027.
- Haidt, Jonathan. "The New Synthesis in Moral Psychology." *Science* 316, no. 5827 (2007): 998–1002.
 - —. *The Righteous Mind: Why Good People Are Divided by Politics and Religion.* New York: Vintage Books, 2012.
- Held, Virginia. "Moral Pluralism." In *Encyclopedia of Ethics*, edited by Lawrence C. Becker and Charlotte B. Becker. London: Routledge, 2001. Credo Reference.
- Henrich, Joseph, and Richard McElreath. "The Evolution of Cultural Evolution." *Evolutionary Anthropology* 12, no. 3 (2003): 123–35. https://doi.org/10.1002/evan.10110.
- Iyengar, Sheena S., and Sanford E. DeVoe. "Rethinging the Value of Choice: Considering Cultural Mediators of Intrinsic Motivation." In *Nebraska Symposium on Motivation*, 49:129–74. Lincoln, NE: Univ. of Nebraska Press, 2003. http://www-2.rotman.utoronto.ca/facbios/file/Iyengar%20and%20DeVoe,%202003.pdf.
- Leslie, Alan M., Joshua Knobe, and Adam Cohen. "Acting Intentionally and the Side-Effect Effect: Theory of Mind and Moral Judgment." *Psychological Science* 17, no. 5 (2006): 421–27. https://doi.org/10.1111/j.1467-9280.2006.01722.x.
- Lewis, William S. "Evolutionary Psychology in the Service of Moral Philosophy: A Possible Future for Ethics?" *Journal of Speculative Philosophy* 25, no. 1 (2011): 48–63. https://doi.org/10.1353/jsp.2011.0006.

- Li, Norman P., Mark van Vugt, and Stephen M. Colarelli. "The Evolutionary Mismatch Hypothesis: Implications for Psychological Science." *Current Directions in Psychological Science* 27, no. 1 (2018): 38–44. https://doi.org/10.1177/0963721417731378.
- Maxwell, Bruce, and Darcia Narvaez. "Moral Foundations Theory and Moral Development and Education." *Journal of Moral Education* 42, no. 3 (2013): 271– 80. https://doi.org/10.1080/03057240.2013.825582.
- McCarthy, Niall. "America's Most And Least Trusted Professions [Infographic]." Forbes, January 4, 2018. https://www.forbes.com/sites/niallmccarthy/2018/01/04/americas-most-and-leasttrusted-professions-infographic/.
- McElreath, Richard, and Robert Boyd. "Alturism and Fitness." In *Mathematical Models* of Social Evolution: A Guide for the Perplexed, 71–97. Chicago: University of Chicago Press, 2007.
- Mendez, Mario F., Eric Anderson, and Jill S. Shapira. "An Investigation of Moral Judgement in Frontotemporal Dementia." *Cognitive and Behavioral Neurology* 18, no. 4 (December 2005): 193–97. https://doi.org/10.1097/01.wnn.0000191292.17964.bb.
- Mesoudi, Alex, and Alex Thornton. "What Is Cumulative Cultural Evolution?" *Proceedings of the Royal Society B: Biological Sciences* 285, no. 1880 (June 13, 2018): 1–8. https://doi.org/10.1098/rspb.2018.0712.
- Milkman, Harvey, and Kenneth Wanberg. *Cognitive-Behavioral Treatment: A Review and Discussion for Corrections Professionals*. Washington, DC: National Institute of Corrections, 2007. https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=240869.
- Moffett, Mark W. "Human Identity and the Evolution of Societies." *Human Nature* 24, no. 3 (September 2013): 219–67. https://doi.org/10.1007/s12110-013-9170-3.
- Pronin, Emily. "How We See Ourselves and How We See Others." *Science* 320, no. 5880 (May 30, 2008): 1177–80. https://doi.org/10.1126/science.1154199.
- Quervain, Dominique J.-F. de, Urs Fischbacher, Valerie Treyer, Melanie Schellhammer, Ulrich Schnyder, Alfred Buck, and Ernst Fehr. "The Neural Basis of Altruistic Punishment." *Science* 305, no. 5688 (August 27, 2004): 1254–58. https://doi.org/10.1126/science.1100735.
- Rand, David G., Alexander Peysakhovich, Gordon T. Kraft-Todd, George E. Newman, Owen Wurzbacher, Martin A. Nowak, and Joshua D. Greene. "Social Heuristics Shape Intuitive Cooperation." *Nature Communications* 5 (April 22, 2014): 1–12. https://doi.org/10.1038/ncomms4677.

- Richerson, Peter, and Joe Henrich. "Tribal Social Instincts and the Cultural Evolution of Institutions to Solve Collective Action Problems." *Cliodynamics* 3, no. 1 (2012): 38–80. https://doi.org/10.21237/C7clio3112453.
- Robertson, Donald. *The Philosophy of Cognitive-Behavioural Therapy (CBT): Stoic Philosophy As Rational and Cognitive Psychotherapy*. London: Routledge, 2010. ProQuest.
- Rueden, Christopher von, and Mark van Vugt. "Leadership in Small-Scale Societies: Some Implications for Theory, Research, and Practice." *The Leadership Quarterly* 26, no. 6 (December 2015): 978–90. https://doi.org/10.1016/j.leaqua.2015.10.004.
- Sanfey, Alan G., James K. Rilling, Jessica A. Aronson, Leigh E. Nystrom, and Jonathan D. Cohen. "The Neural Basis of Economic Decision-Making in the Ultimatum Game." *Science* 300, no. 5626 (June 13, 2003): 1755–58. https://doi.org/10.1126/science.1082976.
- Segerstrale, Ullica C. "Hamilton's Rule: Biology." In *Encyclopedia Britannica*. Accessed August 13, 2019. https://www.britannica.com/science/Hamiltons-rule.
- Smaldino, Paul E. "Social Identity and Cooperation in Cultural Evolution." *Behavioural Processes*, Behavioral Evolution, 161 (April 2019): 108–16. https://doi.org/10.1016/j.beproc.2017.11.015.
- Stets, Jan E. "Rationalist vs. Intuitionist Views on Morality A Sociological Perspective." In Dual-Process Theories in Moral Psychology: Interdisciplinary Approaches to Theoretical, Empirical and Practical Considerations, edited by Cordula Brand, 345–66. Wiesbaden: Springer, 2016. https://doi.org/10.1007/978-3-658-12053-5_16.
- Tabibnia, Golnaz, Ajay B. Satpute, and Matthew D. Lieberman. "The Sunny Side of Fairness: Preference for Fairness Activates Reward Circuitry (and Disregarding Unfairness Activates Self-Control Circuitry)." *Psychological Science* 19, no. 4 (2008): 339–47. https://doi.org/10.1111/j.1467-9280.2008.02091.x.
- Tooby, John, and Leda Cosmides. "Groups in Mind: The Coalitional Roots of War and Morality." In Human Morality & Sociality: Evolutionary & Comparative Perspective, edited by Henrik Høgh-Olesen, 191–234. New York: Palgrave MacMillan, 2010.
- Triandis, Harry, Robert Bontempo, Marcelo Villareal, Masaaki Asai, and Nydia Lucca. "Individualism and Collectivism: Cross-Cultural Perspectives on Self-Ingroup Relationship." *Journal of Personality and Social Psychology* 54, no. 2 (1988): 323–38. https://doi.org/10.1037/0022-3514.54.2.323.

- U.S. Congress. Senate. United States Special Operations Command and United States Cyber Command: Hearing before the Senate Armed Services Committee, Senate, 116th Cong., 1st sess., February 14, 2019. https://www.armedservices.senate.gov/hearings/19-02-14-united-states-special-operations-commandand-united-states-cyber-command.
- Walter, Alex. "The Anti-Naturalistic Fallacy: Evolutionary Moral Psychology and the Insistence of Brute Facts." *Evolutionary Psychology* 4, no. 1 (2006): 33–48. https://doi.org/10.1177/147470490600400102.
- Wright, Robert. *The Moral Animal: Evolutionary Psychology and Everyday Life*. New York: Patheon Books, 1994.

INITIAL DISTRIBUTION LIST

- 1. Defense Technical Information Center Ft. Belvoir, Virginia
- 2. Dudley Knox Library Naval Postgraduate School Monterey, California