#### **LUCK: AN INTRODUCTION**

## IAN M. CHURCH & ROBERT J. HARTMAN

Luck permeates our lives. Perhaps you were lucky to be born into a country experiencing relative political stability, whereas others were born into countries experiencing horrible civil wars. Many of us are lucky to enjoy the benefits of modern medicine and technology, as opposed to a medieval theory of humours. Precious few people are lucky to have won the lottery. In a very real sense, everyone reading this book is lucky to live in an age and time when information is so widely available and accessible, and to live in societies with enough resources that we can specialize enough so as to make things like academia possible. All current life-forms on earth are lucky that our planet wasn't formed slightly closer or slightly further away from the sun.

These observations raise interesting questions. Perhaps preeminently, what *is* luck? When we attribute luck to people, circumstances, or events, what are we attributing? Are events lucky primarily because they're not within our control? Or does luck have something to do with probabilities or relevant modal space? And what is the relationship between luck related notions such as risk, fortune, uncertainty, ignorance, and accidentality? To what extent is deserving praise or blame affected by good or bad luck? Do we have any political obligations to people who are less fortunate to mitigate their relative bad luck? Although acquiring a true belief by an uneducated guess involves a kind of luck that precludes knowledge, does all luck undermine knowledge? And how accurate are our luck attributions anyway? Do we simply misattribute luck to things we don't understand? What can psychology and cognitive science tell us about our perceptions of luck?

While many of these questions have ancient pedigrees, the academic literature on issues surrounding epistemic luck, moral luck, and the science of luck have enjoyed a flurry of academic interest in the past few decades across several disciplines. One of the central aims of this Handbook is to bring together this interdisciplinary body of research into a single volume and to provide a basic and accessible overview of some of central debates and issues that have developed in the philosophical and scientific literature in recent years. The Handbook is broken down into six parts: (i) the history of luck and its importance, (ii) the nature of luck, (iii) moral luck, (iv) epistemic luck, (v) the psychology and cognitive science of luck, and (vi) areas of future research. We will now, in very broad strokes, consider some of the central themes and issues to be explored in each section, and provide brief summaries of the chapters themselves.

### Part 1: The History of Luck and Its Importance

There has been a broad range of interest in luck throughout the history of philosophy. Aristotle, the Stoics, Thomas Aquinas, Immanuel Kant, Adam Smith, John Stuart Mill, Edmund Gettier, Bernard Williams, and Thomas Nagel, for example, have made some of the most important contributions to our understanding of luck, and to the place it should have in metaphysics, ethics, epistemology, and political philosophy. Paying attention to this history is not only valuable for its own sake, but can help to inform and challenge various features of contemporary debates. Here are some key questions to be considered in this section:

- 1. How do important historical figures think about luck? In what ways have views of luck changed over time?
- 2. How does luck fit within the broader philosophical projects of these important historical figures?
- 3. In what ways have historical contributions shaped contemporary debates about the metaphysics of luck, luck and flourishing, luck and moral virtue, luck and moral responsibility, luck and distributive justice, and luck and knowledge? Do some of those

historical influences on contemporary debates rest on mistaken interpretations of the historical figure in question? Does this history contain resources to help us clarify or even solve contemporary problems?

Nafsika Athanassoulis (Ch. 1) begins her discussion by explicating Aristotle's view of lucky events as irregular, incidental, indeterminable, and unstable occurrences with good or bad effects. Subsequently, she explicates Aristotle's view of the good life and the kinds of people who have access to it with respect to that general account of luck and modern categories of resultant, developmental, and constitutive luck.

Sarah Broadie (Ch. 2) explicates Aristotle's subtle and rich view on the relationship between luck and happiness against the backdrop of other ancient views. Aristotle rejects the view that wisdom and moral virtue are sufficient for happiness, and accepts the view that various non-moral external goods are necessary to be happy, which makes happiness subject to luck in certain respects. Broadie discusses Aristotle's position in detail in relation to Solon's dictum: "Do not say 'happy' of the living, but only once the end is reached."

René Brouwer (Ch. 3) considers the role of luck in Stoic thought. In particular, he examines what luck is, how humans can know what luck is, and how humans should behave toward luck from the perspectives of three groups of Stoic philosophers: Early Stoics (Zeno, Chrysippus), Roman Stoics (Panaetius, Posidonius), and Imperial Stoics (Seneca, Epictetus, Marcus Aurelius).

Jeffrey Hause (Ch. 4) canvasses Thomas Aquinas's moral philosophy to determine whether Aquinas allows various kinds of luck to affect praiseworthiness and blameworthiness. Aquinas denies that the results of actions outside of the agent's control can affect her praiseworthiness or blameworthiness. Aquinas's view, however, is more complicated when it comes to circumstantial and constitutive luck; some kinds of each cannot affect a person's praiseworthiness or blameworthiness, but other kinds of each can do so.

Kate Moran (Ch. 5) explicates Immanuel Kant's complex views on luck, happiness, and moral responsibility. Although whether a particular person is happy can be subject to luck, moral virtue tends to bring about happiness over time at least at the level of the moral community. Furthermore, contrary to Kant's anti-luck reputation, his moral philosophy allows for certain kinds of luck in results, circumstance, and character to affect the agent's praiseworthiness and blameworthiness.

Craig Smith (Ch. 6) describes Adam Smith's view on luck and moral sentiments within his wider naturalistic descriptive project of explaining how the moral emotions that we have fit together. A. Smith observes an "irregular" sentiment in our attributions of responsibility: we believe that we merit praise and blame only in virtue of our intentions, and yet our praising and blaming responses are augmented and diminished by external actions and consequences. A. Smith considers where this irregularity comes from, what function it fulfills, and how it is connected to other features of moral experience.

Peirs Turner (Ch. 7) examines whether John Stuart Mill is a luck egalitarian--that is, whether Mill thinks that a just society must eliminate inequalities for which agents are not personally responsible. Turner argues that Mill does not think so. By examining Mill's principles of impartiality, sufficiency, and merit, Turner argues that Mill embraces relational egalitarianism, which is the idea that the just society must eliminate inequalities that undermine human dignity.

Dani Rabinowitz (Ch. 8) offers a narrative about the history of luck in epistemology. He describes the kind of luck identified in Edmund Gettier's counterexamples to the true justified belief account

of knowledge, the way in which Duncan Pritchard sketches a modal account of luck to better understand the relationship between luck and knowledge, and the trend of building in various modal conditions to accounts of knowledge to avoid Gettier counterexamples.

Andrew Latus (Ch. 9) describes the way in which Bernard Williams and Thomas Nagel formulated the problem of moral luck, and how their papers spawned the contemporary moral luck debate. Williams and Nagel agree that our ordinary conception of morality is one that is immune to luck, but also agree that luck can make a moral difference. They, however, draw different conclusions. Williams revises our conception of morality, and Nagel accepts a paradox.

#### Part 2: The Nature of Luck

The philosophical and psychological significance of luck has long been recognized; but only recently has there been focused attention to explore precisely what luck is. At least in the domain of philosophy, most credit Duncan Pritchard's (2005) *Epistemic Luck* as the catalyst for much of the current philosophical reflection on the nature of luck. There is, however, no consensus yet about what luck is; there are several competing accounts of luck in the literature. Here are some of the basic issues:

- 1. Are agents, propositions, events, or states of affairs the fundamental bearers of luck?
- 2. What is luck primarily? Is it mainly an improbable event? Is it chiefly an event over which a person lacks a certain kind of control? Is it principally an event that could easily have failed to occur? Is it predominantly an event that no one intends to occur, or is it the occurrence of an event that we do not understand?
- 3. Does improbability, lack of control, modal fragility, accidentality, or ignorance stand alone as necessary and sufficient for luck? If one of those conditions does stand alone in that way, how do we explain why it is tempting to think about luck in other ways? If it does not stand alone, what are the other necessary conditions?
- 4. Must a lucky event be significant to some person or other? If so, must a lucky event affect her objective or subjective interests? And must she actually ascribe significance to that event? Or might it suffice that she would ascribe significance to it if she had all the relevant information or were rational?
- 5. What is the relationship between luck and related concepts such as accidentality, risk, fortune, chance, and uncertainty? Might focusing on one or another of these related notions help to sort out which account of luck is most plausible?

Duncan Pritchard (Ch. 10) sets out his modal account of luck, according to which an event is lucky if and only if it is modally fragile--that is, the actually occurring event fails to occur in a broad range of nearby possible worlds in which the relevant initial conditions are the same. Contrary to most accounts of luck and an earlier account of his own, he argues that a lucky event need not be significant to a particular agent. He also argues that the modal account provides a better account of luck than its rivals.

Wayne Riggs (Ch. 11) articulates the lack of control account of luck. On Riggs' view, an event is lucky for some person if and only if she does not skillfully and intentionally bring about the event, the event is good or bad in some respect for her, and she does not exploit the uncontrolled event for her own purposes. Subsequently, Riggs considers and responds to the objection that this account implies that too many uncontrolled events are lucky such as the rising of the sun.

Nicholas Rescher (Ch. 12) further explicates his probabilistic account of luck. On his view, an event is lucky for some person if and only if it is improbable and significant for her. According to Rescher, there are various species of luck (finder's, gambler's, guesser's, and dumb luck), and this

chapter makes the species of gambler's luck more precise by examining relationships between improbability and significance.

Rik Peels (Ch. 13) defends a mixed account of luck: a state of affairs is lucky for some person if and only if it is significant for the agent, the agent lacks intentional control over the event, and it could easily have failed to occur. He responds to three objections. First, the account is incomplete, because there is also a non-chancy species of luck. Second, the lack of intentional control condition is not a necessary condition of luck. Third, the modal condition is not a necessary condition of luck.

Nathan Ballantyne and Samuel Kampa (Ch. 14) examine the significance condition of luck by explicating and evaluating four specifications of the platitude that event E is lucky for subject S only if E is significant for S. The differences between these specifications turn on whether the agent must ascribe significance to the event, and whether it is the agent's subjective or objective interests that are impacted by the event. They also critically assess Pritchard's rejection of the platitude.

Fernando Broncano-Berrocal (Ch. 15) argues that luck and risk are parallel in various ways, and that two alleged differences between them are specious. Furthermore, he argues that paying careful attention to the relationship between luck and risk provides a reason to affirm the lack of control account of luck over the modal and probability accounts.

Rachel Mckinnon (Ch. 16) questions the common assumption that epistemic outcomes are either the product of an agent's skill or epistemic luck; instead, it is argued that all epistemic outcomes are a product of *both* skill and luck. On the basis of this lesson, Mckinnon suggests possible revisions to our understanding of the metaphysics of luck.

### Part 3: Moral Luck

The problem of moral luck arises from the intuitive moral principle that we are morally responsible only for what is within our control and the general fact that our character, actions, and consequences are shot through with luck. One way to frame the problem is that after we factor out all the luck from who we are, what we do, and what we bring about, it appears that there is nothing left us to be morally responsible for. An alternative way to frame the problem is that we have conflicting intuitions in concrete cases. Here are some examples: two drunk drivers manage their vehicles in the same way, and one but not the other kills a pedestrian; two trouble-makers would steal a bottle of Coca-Cola if given the opportunity, but only one gets an opportunity and does so. In these cases, the salient difference between the agents is a matter of luck, and so it is intuitive that the agents in each case pair deserve the same degree of blame. Nevertheless, in our everyday responsibility attributions, we also judge that the killer driver deserves more blame than the merely reckless driver, and that the thief deserves more blame than the mere would-be thief. So, our intuitions point us in contradictory directions. Although many in the history of philosophy were sensitive to the role of luck in our moral lives, it was not until the publication of papers by Thomas Nagel (1976; 1979) and Bernard Williams (1976; 1981) that they were sufficiently appreciated in our contemporary setting. Here are some of the relevant issues.

- 1. What account of luck best fits the role of 'luck' in 'moral luck'?
- 2. Is Nagel's basic taxonomy of resultant, circumstantial, constitutive, and causal moral luck exhaustive? Are some of these categories redundant? Should we be considering other forms of moral luck?
- 3. Does moral luck exist? That is, can factors outside of an agent's control affect the praise and blame that she deserves? Or, should all luck be factored out of desert of praise and

- blame? Can we factor out all luck without entirely eliminating moral praiseworthiness and blameworthiness for who we are, what we do, and what we bring about?
- 4. Would discovering the true nature of luck help to make progress in the moral luck debate? Or, should philosophers who are investigating this puzzle continue to use the lack of control conception of luck even if a different account of luck is correct or there is no adequate account of luck?
- 5. What is the relationship between luck and other moral properties such as moral obligation, moral virtue, or human flourishing?
- 6. What is the relationship between luck and free will? Do circumstantial and constitutive luck pose a skeptical threat to our self-conception as morally responsible agents even if free will and moral responsibility are compatible with causal determinism? If our actions are not causally determined, do they occur as a matter of luck? And if such actions do occur as a matter of luck, would their being lucky in this way undermine the 'freedom' in 'libertarian free actions'?

Daniel Statman (Ch. 17) argues that contrary to recent trends in the moral luck literature, ascertaining the true nature of luck will not help us to solve the problem of moral luck. In his view, a more promising route would be to develop a theory of praiseworthiness and blameworthiness that explains why luck can or cannot affect moral responsibility.

Carolina Sartorio (Ch. 18) explicates Nagel's fourfold taxonomy of moral luck. She focuses on neglected forms of each such as resultant luck from omissions, the kind of circumstantial luck we observe in the situationist literature, and casual luck from non-deterministic causation. Subsequently, she considers new sources of moral luck that have to do with causation coming in degrees and with one agent's moral responsibility depending directly on what others do.

Michael Zimmerman (Ch. 19) examines whether luck can affect various moral properties such as moral obligation, leading a good or bad life, having a moral virtue or vice, and being morally responsible. He denies at least two kinds of moral luck. One cannot be morally obligated to do something that lies beyond her partial control, and one cannot be morally responsible for having done or brought about something that was not in her control.

Robert Hartman (Ch. 20) makes a case for accepting moral luck; in terms of the above examples, he argues that the killer driver deserves more blame than the merely reckless driver and that the thief deserves more blame than the mere would-be thief. His argument proceeds from the absurdity of blaming a person on account of what she hasn't actually done, an analogy from less to more contentious kinds of moral luck, and an explanation of the errant intuition that, for example, the reckless drivers are equal blameworthy.

Laura Ekstrom (Ch. 21) considers whether pinning down the nature of luck may help to assess the luck objection to libertarianism. The objection is that the indeterminism involved in an agent's non-deterministically caused action makes whichever action occurs lucky in a way that undermines her freedom and moral responsibility with respect to it. She concludes that not all conditions of luck are fully pertinent to the core issue of freedom and moral responsibility and that objectors should put their luck objection in more appropriate terms.

Mirja Pérez de Calleja (Ch. 22) considers whether there can be luck or chance in a causally deterministic world. Subsequently, she examines two arguments about whether luck poses a skeptical problem for compatibilists--namely, for people who think that an action's being causally determined does not intrinsically rule out being free or morally responsible for that action. She also critically assesses replies to these arguments.

These six essays take up, even if very briefly, the question about what account of luck is relevant to solving the puzzles associated with moral luck and free will. One point of convergence between them is that lack of control is *the* important feature of luck, regardless of whether there are other necessary conditions on luck itself, to think about when engaging these puzzles. This convergence is not too surprising because the standard use of 'luck' in the moral luck literature is the lack of control use of 'luck' (see Hartman 2017, Ch. 2).

### Part 4: Epistemic Luck

It's a commonly accepted platitude that knowledge is incompatible with luck (e.g. lucky guesses generally don't seem to be good candidates for knowledge), but, arguably, not just any kind of luck rules out knowledge. If I just happen to be in the right place at the right time (i.e. as a matter of luck) to learn that I'm going to be given a teaching award--perhaps simply overhearing the news as I walk past the Provost's office--that presumably does not preclude my knowing that I'm going to be given the award. If I was very nearly blinded a moment earlier, that doesn't preclude my having visual knowledge now. So, what sorts of luck are incompatible with knowledge? The kinds of luck found in Gettier and Fake Barn cases are the obvious candidates; however, what distinguishes the luck in those cases from benign species of epistemic luck? Luck also seems to play a key role both in broad, historical skeptical challenges and in new, cutting edge epistemological research into the limits (and projected horizons) of human cognition. Over the past 50 years, a significant portion of the epistemological literature has been driven by luck. Some of the central issues include:

- 1. What account of luck best fits the role of 'luck' in 'epistemic luck'?
- 2. Is Pritchard's taxonomy of doxastic, evidential, content, capacity, veritic, and reflective epistemic luck exhaustive? Are some of these categories redundant? Should we be considering other forms of epistemic luck such as areatic doxastic luck?
- 3. What kinds of epistemic luck preclude knowledge? And is it possible to develop a theory of knowledge that viably avoids such luck? In other words, how might someone develop an adequately "anti-luck" epistemology?
- 4. Or perhaps the common assumption that knowledge is incompatible with luck (at least of a certain sort) is all wrong. Is knowledge really incompatible with luck in the way that so many epistemologists seem to assume?
- 5. The problematic kinds of epistemic luck have typically manifest themselves in particular cases or counter-examples. What is the anatomy of a Gettier counterexample, and why have they proven so incredibly difficult to avoid? And how is the environmental luck at work in the so-called "Fake Barn" style cases different, and what can they tell us about the nature of knowledge?
- 6. How does knowledge's apparent incompatibility with luck connect with much broader skeptical challenges with deep historical roots? And what does this reveal about the fundamental nature of knowledge?
- 7. And what does our understanding of epistemic luck as incompatible with human knowledge reveal about our assumptions regarding cognition and the mind?

Undoubtedly, one of the central driving forces behind the contemporary epistemological literature on epistemic luck has been the Gettier Problem. Ian Church (Ch. 23) offers a diagnosis of the kind of luck at issue in the Gettier Problem, which elucidates why such counterexamples have been so resilient—that is, why the luck at issue in Gettier problems has proven to be so difficult to avoid. Church's grim conclusion is that no reductive analysis of knowledge can viably hope to avoid Gettier counterexamples.

Benjamin Jarvis (Ch. 24) considers the unique challenge posed by "environmental luck," the kind of luck at issue in "Fake Barn" style cases. In his chapter, Jarvis argues that the kinds of questions that many philosophers have focused on when it comes to environmental luck have been the wrong kinds of questions. Instead of asking whether environmental luck precludes knowledge, Jarvis asks whether environmental luck has any epistemic significance.

The problem of epistemic luck has, for many, been a problem of how best to understand and define knowledge so as to preclude the vicious species of luck. Tim Black (Ch. 25) considers some of the seminal "anti-luck" proposals that have been put forward in contemporary epistemology, including sensitivity theories, safety theories, and what he calls "internalistic anti-luck epistemology." Black concludes by considering a more radical "anti-luck" response that draws from the work of Søren Kierkegaard.

Stephen Hetherington (Ch. 26) takes a very different response to the purported problem of epistemic luck. Instead of trying to develop an "anti-luck" epistemology, Hetherington critically examines the guiding platitude in contemporary epistemology that knowledge is incompatible with certain kinds of epistemic luck; Hetherington concludes by suggesting that such a platitude might be fundamentally mistaken and that mere true belief might plausibly count as knowledge.

John Greco (Ch. 27) broadens the scope of the challenge posed by epistemic luck by highlighting the role luck has played in some seminal skeptical challenges in the Western philosophical tradition. Greco argues that such skeptical challenges are often driven by an overly "internalistic" understanding of the challenge posed by epistemic luck. Greco concludes by highlighting ways many contemporary epistemologists have rejected that internalistic understanding, opening up new and exciting ways to respond to longstanding skeptical challenges.

J. Adam Carter (Ch. 28) considers how our assumptions regarding cognition have shaped many of the seminal responses to epistemic luck. Carter argues that many responses to epistemic luck have assumed what he calls "cognitive internalism." He argues that if this assumption is replaced with a more "externalistic" conception of mind, a radically different view of luck and knowledge emerges.

# Part 5: The Psychology and Cognitive Science of Luck

Luck (and our perceptions of luck) can deeply affect our view of ourselves, others, and events. And as Pritchard and Smith (2004) noted, "Most of the work on luck in the recent psychological literature has taken place in terms of what is known as 'attribution research', which is concerned with the way in which people construct causal explanations for why events happened, such as people's actions (e.g., why a person did what they did) or achievements (e.g., why a person succeeded or failed)." And our luck ascriptions are deeply affected by our ability to emotionally regulate, our dominant attachment strategy, our ability to calculate risk, etc. This research into how and why people attribute luck to certain situations can inform or perhaps challenge purely theoretical conceptions of luck. But what is more, the psychological literature is also exploring how people experience and respond to luck; some researchers even explore ways we might help cultivate and promote healthy assessments and responses to lucky (or unlucky) events in life. Key issues to be considered in this section include the following:

- 1. What factors influence when and why we attribute luck to some situations and not others? From a psychological perspective, what tend to be the markers of a lucky event?
- 2. Are people consistent in their luck attributions? If they are inconsistent, what accounts for their variance?
- 3. How does assessment of lucky situations relate to assessment of risk?

- 4. What role do our emotions play when we evaluate and respond to luck and risk? Does better emotional regulation correspond to better luck assessments?
- 5. What factors influence how someone experiences luck? Is there any way to promote healthier responses to good or bad luck?

While we considered some purely theoretical accounts of luck in Part 2 of this Handbook, Steven Hales and Jennifer Johnson (Ch. 29) argue that psychology and philosophy can work together to provide new insights into the nature of luck. In particular, Hales and Johnson argue that the literature on cognitive biases suggest that current theoretical accounts of luck are unable to viably distinguish good luck from bad luck.

Karl H. Teigen (Ch. 30) explores when and why people describe events as lucky (in everyday life and language) from a psychological perspective. According to Teigen's research, people are particularly likely to describe a situation as lucky if it involves risk--particularly in light of what people perceive to be close counterfactual situations. Teigen also explores how people make sense of lucky situations and what people are tempted to attribute to the particular results (e.g. divine action, chance, etc.).

Sabine Roeser (Ch. 31) explores what our emotional response to experiencing luck might tell us about how we evaluate luck. After all, an experience of luck is almost always accompanied by an emotion such as relief at narrowly avoiding an automobile accident or elation at winning the lottery. Roeser argues that these reactions appear to suggest that our assessment of luck is closely intertwined with risk and uncertainty.

The psychological literature seems to show that people routinely overestimate their ability to control random events--particularly when it comes to lotteries, roulette tables, etc. This is called the "illusion of control." Anastasia Ejova (Ch. 32) explores the psychological literature on the illusion of control and considers how such an illusion--especially in light of specific background beliefs--might affect our experience and understanding of luck.

And finally, Matthew Smith and Piers Worth (Ch. 33) look to how seminal ideas from the positive psychology literature might inform the psychological elements of how people conceive of and experience luck. By exploring links in this research between luck, on the one hand, and optimism and gratitude, on the other, Smith and Worth conclude that how we perceive and experience luck may be (at least partially) within our control.

#### Part 6: Future Research

While the academic research on luck has, thus far, centered primarily on questions concerning the nature of luck, moral luck, epistemic luck, and the psychology of luck, the literature continues to grow and develop. New, exciting questions are being considered, and even some old questions are being reconsidered from new or historically underrepresented perspectives. For example, both the nature of luck and luck attributions are deeply relevant to questions in theology and religion more generally. Sometimes luck is seen to be at odds with religious traditions that emphasize the sovereignty and providence of God; however, we might wonder if more careful reflection on the nature of luck reveals genuine conflict there. Additionally, issues concerning moral luck seem deeply connected to how we understand the legal system. The prevalence of epistemic luck might force us to reevaluate the history of science and the nature of scientific discovery. And we might think that variations in how people experience and perceive luck might force us to think carefully about the theoretical import of such experiences and perceptions. Here are some questions to be considered in this section:

- 1. To what extent does scientific progress rely on luck?
- 2. What does experimental philosophy have to teach us about attributions of epistemic luck?
- 3. How might a feminist understanding of moral luck reorient our practices?
- 4. Is there such a thing as legal luck? And what is the relationship between it and moral luck?
- 5. How does luck figure into religion and theology? What is the relationship between salvific luck, on the one hand, and moral and epistemic luck, on the other? Does the contingency of religious belief undermine rational religious belief? Can we understand luck as having a role in what is created, who experiences salvation, and who gets their prayers answered?

J. D. Trout (Ch. 34) argues that contrary to the self-image of some conceptions of contemporary science, scientific progress is often affected by luck. Trout outlines various types of contingency common in scientific success including psychological idiosyncrasies of scientists, environmental features of civilizations, the timing of observing curious phenomena, convergence of political and scientific interests, attention paid to needs generated by cultural contingency, and contingency of our cognitive limitations.

Joe Milburn and Edouard Machery (Ch. 35) consider the relevance of experimental philosophy for anti-luck epistemology in part by surveying recent work. Current experimental philosophy supports the idea that defeasible true justified belief is not knowledge and that Gettier cases teach us something about knowledge, but they argue that more experimental philosophy needs to be done to determine whether there is an anti-luck condition on knowledge and how exactly such a condition should be understood.

Carolyn McLeod and Jody Tomchishen (Ch. 36) examine the complicated position feminists take on the relationship between luck and moral responsibility. There is a dominant trend in feminist philosophy that accepts that certain kinds of luck such as the systematic luck involved in oppression can affect moral responsibility. Nevertheless, other trends highlight limitations on luck affecting moral responsibility and duties.

Ori Herstein (Ch. 37) begins with the standard definition of legal luck as occurring when a person's legal status (rights, obligations, liabilities, or culpability) is affected by factors outside of her control. He explores general reasons to affirm and deny the existence of legal luck based on accepting and rejecting moral luck. He also canvasses particular reasons in favor of accepting legal luck in tort and criminal law, and offers clarifications for the standard definition of legal luck.

Guy Axtell (Ch. 38) surveys recent work on religious luck and explicates categories of religious luck in connection to categories from the moral and epistemic luck literatures. Subsequently, he offers the 'New Problem of Religious Luck' from religious diversity for the claim that it is irrational to believe that one's own religion is uniquely true.

Jordan Wessling (Ch. 39) explores the way in which the doctrines of creation, salvation, and petitionary prayer involve luck. In particular, he considers the indeterminacy of autonomous creation that luckily leads to some possible life forms and not others, whether a person's being a fit candidate for heaven or hell is lucky on various theological views, and whether there is luck involved in whether God answers petitionary prayers.

#### References

Hartman, R.J. (2017) In Defense of Moral Luck: Why Luck Often Affects Praiseworthiness and Blameworthiness, New York: Routledge.

Nagel, T. (1976) "Moral Luck," Proceedings of the Aristotelian Society, Supplementary Volumes 50, 137-151.

Nagel, T. (ed.). (1979) "Moral Luck," in Mortal Questions, Cambridge: Cambridge University Press, pp. 24-38.

Pritchard, D. (2005) Epistemic Luck, Oxford: Oxford University Press.

Pritchard, D., & Smith, M. (2004) "The Psychology and Philosophy of Luck," New Ideas in Psychology 22, 1–28.

Williams, B. (1976) "Moral Luck," Proceedings of the Aristotelian Society, Supplementary Volumes 50, 115-135.

Williams, B. (ed.). (1981) "Moral Luck," in *Moral Luck: Philosophical Papers 1973-1980*, Cambridge: Cambridge University Press, pp. 20-39.