

Building on Nietzsche's Prelude

Reforming Epistemology for the Philosophy of the Future

Musa al-Gharbi

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Dissertation.com
Boca Raton, Florida
USA • 2014

ISBN-10: 1-61233-425-3
ISBN-13: 978-1-61233-425-7

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In the name of God, the Gracious, the Merciful

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Introduction

Which is more basic: rationality or reasons? Regardless of how one tentatively answers that question, both rationality and reasons are typically held to turn on *logic*. Rationality and logic have largely been presumed as virtually synonymous.¹ Whatever else they may be, *reasons* have typically been held as *some logical relation between a situation/action/belief and some state of affairs which motivates or justifies it*. In addition to being descriptive, this definition is also normative: there are good and bad reasons—and this judgment is typically indexed to logical *soundness*.² *De facto*, people *should* act on good reasons.³

This is the traditional view. However, it may be that the role of logic has been overstated, both in relation to rationality and reasons. Accordingly, a number of problems/questions regarding rationality and reasons (and the relation between them) may be ill-formed. If this is the case, new understandings of rationality—its nature and its function—will be required. Any such reformation will have profound implications for the aims and methods of epistemology.

II.

“The mortal sin of the philosophers is not the pursuit of the absolute. Their great offense is that, as soon as they realize they have not found the absolute, they are willing to recognize as absolute one of the products of human activity, such as science, morality, religion, etc. Obviously, the state, just like science, morality and religion has great value—but only so long as it does not pretend to occupy the throne of the absolute. . . . But men do not know how, or rather, do not wish to make this distinction. Idols are to them—why, one does not know—nearer and more comprehensible, than God.”

Lev Shestov
Athens and Jerusalem, Book II, X

Before delving into our investigation-proper, it may be helpful to orient the reader with a few notes on the methods and styles which will inform our inquiry:

Our primary goal is to understand the nature of rationality. Traditional epistemology (as well as ethics and related disciplines) presupposes that justifications are, *mutatis mutandis*, reflective of mental processes; terms like beliefs, desires, intentions, etc. are held to be indicative of actual mental states. We will begin by assessing these axioms in light of contemporary cognitive science. While this literature is consumed by critical debates, there is widespread and growing consensus on a number of points which will be essential to our investigation—and we have other tools at our disposal for sorting through those issues which remain controversial:

The method of Evolutionary Psychology will be a powerful aid for deciding between rival hypotheses and contextualizing these findings. However, a general problem with E. Psychology is that it is highly speculative. For any given phenomenon one wants to explain, there are possibly infinite reasonable stories which could be spun. The traditional method that E. Psychologists deploy in order to narrow the range of plausible accounts is Game Theory. However, for a host of reasons (some of which will be revealed over the course of this investigation), we find that method to be deeply problematic. Without a better way of grounding our narrative, we may end up replacing the fantasy epics of traditional epistemology with the science fiction of E. Psychology & G. Theory.

In order to *actually reduce* the speculative nature of E. Psychology, we will attempt to ground our narrative *in the way events historically unfolded* through the method of Critical Theory.

However, C. Theory is, itself, a complex dialectical methodology which explores the history of events, institutions, and ideas, synthesizing the resources of semiotics, sociology and anthropology.

Given the complexity of our argumentative strategy, we will need greater flexibility than many popular styles of analytic inquiry would permit. Accordingly, we will resort to aphoristic composition—much like the anti-philosophers Nietzsche and Wittgenstein, whose influence here extends well beyond style, also informing our methods and theories on a profound scale.

III.

An important contribution of this work is its exploration of how scientific advances should fundamentally change the way we ask, understand, and answer a number of persistent philosophical questions. Moreover, we demonstrate why philosophers *and* scientists must be more aware of the cultural implications of their work, and the ways in which cultural contexts influence their research. While there are certainly some within the scientific community who are aware of this issue, there is a wide gulf between acknowledging a problem and meaningfully addressing it. This work aspires towards the latter. Within the scientific community there is also a disturbing tendency (especially among the popular scientists who frequent TED talks and write bestselling books) to draw inappropriate conclusions from their research, well beyond the mandate of the evidence, while parading these *ideologies* around in the name of "science."

In defiance of these trends, our philosophical inquiry is grounded by contemporary research and embedded in social contexts. We will refrain from making grandiose claims about such topics as the meaning of life, the existence or nature of the mind, soul, or God;

we will avoid metaphysical conjectures about the ultimate structure of the universe, etc. Given the current limitations of the discipline, most of these are not yet scientific questions—they may never be. Nor are they armchair questions: it is impossible to *reason* one's way to a definitive answer. But neither are they pseudo-questions which should simply be dismissed (as Carnap might suggest). Instead, they are more like James' "live options." Being confronted with these questions, one cannot avoid taking a position on them. The key is to recognize these views as *axioms*, or *articles of faith*—and not to delude oneself and others by selling them as "science" or "empirically demonstrated," or "rationally proven."

So while we will expose many philosophical superstitions here, our work will be importantly different from that of the eliminativists, who are doubly-damned in the view of this author: first, for failing to understand the *cultural significance* of folk conceptions, and second for drawing inappropriate conclusions from insufficient evidence. We will not be arguing that folk psychological terms should be purged from the lexicon; nor will we be arguing that epistemologists' aim to understand how we think, or their method of studying justifications, are worthless. Instead, we will make the more modest claim that the study of justifications *cannot be conflated with* the study of mental processes. Because folk-psychological terms are oriented towards the former, so long as epistemologists focus on them, they will never be studying how people actually think.

Accordingly, epistemologists find themselves in a dilemma. If they wish to continue studying *justifications*, they will need to formulate new aims for their inquiry, reforming their methods in accordance with said aims; epistemology will be a misnomer for this branch of study. On the other hand, if epistemologists believe it is more important to study *how we think*, justifications are going to be pretty much irrelevant.

Instead, epistemologists will need to ground their work in science, and index their research to particular "real world" problems. In all cases, pontificating from the armchair will be woefully insufficient.

¹ Typically, if a belief is illogical, it is held to be irrational as well. The same dynamic holds for behaviors and intentions. As an illustration, the classical conception of rationality could be well-summarized as follows:

*A **reflective** faculty which makes **explicit** and **intentional** use of rules of logic, mathematics, probability calculus, etc. (in tandem with learned knowledge and personal experience) **in order to** solve problems or make determinations.*

² There are many cases in which someone believes the "wrong" thing for the "right" reasons—in these cases, it is often still held that the agent's beliefs were justified despite being false. This is controversial within the literature—but regardless of where people stand on this question, there is little dispute that, *ceteris paribus*, soundness is superior to mere validity with respect to justifications.

Once the determination has been made (as to whether particular reasons are good or bad, however defined), there are typically gradients of *how* good or bad they are. Obviously, these judgments must be relative to some baseline, and it is a matter of dispute as to what that should be. There is a further controversy as to whether reasons are subjective or objective.

³ While it borders on tautology to say that people should act on good reasons, there is significant ambiguity as to how *goodness* should be understood: Morally? Epistemically? Practically? Similarly, what is most important to justify: desires, beliefs, intentions, acts?

Cognitive Dissonance: Reasons v. Mental Processes

"With regard to the superstitions of logicians, I shall never tire of emphasizing a small, terse fact, which is unwillingly recognized by these credulous minds--namely, that a thought comes when 'it' wishes, and not when 'I' wish..."

Friedrich Nietzsche
Beyond Good and Evil: Prelude to a Philosophy of the Future, I.17

I.

How well does the discourse of reasons map onto phenomenology? Not well. Talk of reasons typically concerns reflective, conscious, and/or volitional actions. Moreover, they typically portray reasons as *antecedent* to actions, beliefs, intentions, etc.; reasons are held to *inform* them:¹ we act the way we do, believe the things we do, we hold particular aspirations *for specific reasons*. Or do we?

II.

One of the most powerful indictments of ethical decision-theory is that *it is largely irrelevant which ethical system one ostensibly subscribes to*; in most circumstances, they will all prescribe roughly the same course of action. Regardless as to whether or not one is a Consequentialist, a Deontologist, a Virtue Ethicist, a Particularist, or even an Egoist²— whether one is approaching ethics from a secular or religious viewpoint (virtually *any* religious viewpoint), a materialist or a non-realist perspective, etc.—one is typically not to lie, to steal, to cheat, to murder; one should try to treat people with respect, refrain from harming others, honor one's social commitments, etc.

In virtually any circumstance in which someone would have to make a moral choice, there will be a broad consensus on the "right" course of action— especially for the sorts choices which ordinary people usually face in their daily lives.

For this reason, ethicists have to rely heavily on bizarre, extreme, and improbable cases in order to create any kind of substantive divergence between one ethical view and another.³

And then, when confronted by these differences,⁴ should one ethical system suggest a "counter-intuitive" result, rather than sticking by conclusions of these thought experiments, ethicists will perform all sorts of philosophical gymnastics in order to show that, actually, *there is no divergence after all*: their view is also compatible with our intuitions. That is, after relying on these absurd cases in order to create some kind of substantive difference between one ethical position and another, ethicists spend a good deal of their time trying to erase these very differences and prove, if unintentionally, that it really does not matter if one adopts their own ethical system or another.

For instance, when Kant explains, at length, why we should not lie in the "murderer at the door" scenario,⁵ his successors have composed treatise after treatise attempting to explain why it actually *is* morally permissible to lie in these extraordinary circumstances within the framework of deontological ethics.⁶ Or, when Consequentialism seems to imply that there are no such things as "rights," certainly not inviolable ones⁷—Consequentialist ethicists work out robust series of constraints which, in practice, would prevent counter-intuitive outcomes.⁸ Very rarely are ethicists willing to "bite the bullet" and simply accept that, within the framework of their ideology, one is morally obligated to counter-intuitive actions—

indeed, to actions which may be personally costly,⁹ or may even seem morally repugnant from outside of their theoretical framework.¹⁰

The implication of these compromises, of course, is that ethical theories inform neither our convictions nor our actions. Instead, *non-reflective judgments lie at the core of morality*—an ethical system is only worthy to the extent that it complies therewith; the discipline of ethics, at best, seeks to explain *why* we feel the way we do rather than *what* we should do. That is, in trying to reconcile their ethical systems with our moral instincts, ethicists implicitly surrender the *normative* aspect of their theories, whether they acknowledge it or not.¹¹ But actually, the descriptive aspect of ethical theory proves problematic as well:

In his "Unprincipled Ethics," Gerald Dworkin argues that the overwhelming majority of our actions are non-reflective, and we ascribe reasons to our actions *after* we make decisions—not during or before.¹² Moreover, because we do not have good introspective access to our non-reflective processes,¹³ we tend to confabulate the reasons why we behaved in a given fashion, often in falsifiable ways. On these grounds, he argued that we do not seem to use ethical principles in making moral judgments; the appeal to moral reasoning which people use to *justify* their actions (post-hoc) likely bears little (if any) relation to the mental processes which *actually* motivated the behaviors.

IV.

If moral decision-making is generally non-reflective, what of more *purely* "rational" processes, such as science or mathematics? Actually, we see the same trends. The processes of inspiration and discovery are largely outside of the bounds of consciousness or volition:

we do not "will" ourselves to have breakthroughs. When we set our mind to a given problem, often our major advances occur after we "give up," turn our conscious mind to other tasks, sleep on it, etc. and then we have these moments of "clarity" or "revelation;" we have no control over when (or if) this happens.

It is *after* the "heavy lifting" has been done by our non-reflective processes that we systematize and *rationalize* our discoveries. To what avail? Typically, in order to make them seem more plausible/ appealing *to others*. The reason this work exceeds 70 pages of *arguments* as opposed to 2 pages of *claims* is because its author is not trying to merely convey ideas, but to *persuade* the reader. In anticipation of *skepticism and objections*, we will explore the implications and applications of our theory. These concerns are more *social* than *epistemic*. That is, the purpose rationality plays in science, mathematics, and philosophy may have more to do with *politics* (broadly construed) than the pursuit of "the truth:"

In *The Structure of Scientific Revolutions*, Thomas Kuhn explores the hegemonic nature of "normal science," and the critical role that the *popular adoption or rejection* of paradigms has on the success of subsequent ideas. The work of Foucault has focused intensely on the way norms like "rationality," "sanity," "truth," "reality," "expertise" and "professionalism" are deployed by social elites in order to manipulate the public (often with less than their best interests at heart). Michael Polanyi's *Personal Knowledge* highlights the critical role personal commitment and skill play in scientific advances; Lakoff explores the role of neurology in concept formation *vis a vis* mathematical, scientific and philosophical inquiry.¹⁴ Feyerabend highlights the centrality of the free association of ideas and playful experimentation in his *Against Method*.¹⁵ Taleb underscores how many scientific discoveries were "stumbled upon" rather than actively pursued in his *Black Swan*.¹⁶

With regards to science, it seems as though the role of logic, methods, and rules has been dramatically overstated...or in any case, misunderstood.

Heuristics and non-rational processes play a huge (possibly, the essential) role in mathematics as well. If we actually *did* compute every step of a mathematical problem, it would be a severe constraint on the complexity of problems we could address. However, a good deal of mathematics is essentially *instinctual*. When presented with "4 x 3" we do not *calculate* the product, we *see* the answer is "12." For most of us, it would be as hard to recognize the equation "4 x 3 = __" *without* seeing the solution as it would be to recognize the sequence of letters "a", "n," and "t" without seeing the word "ant." And the higher one goes in mathematics, the more theorems (which are essentially heuristics) one internalizes, and the more practice one does—the more mathematics becomes a non-rational process.¹⁷ That is, the more complex a problem has to be to even *begin* to evoke one's reflective processes in earnest.

V.

In any of these cases (ethics, science, philosophy, mathematics), when asked to *justify* a given conclusion, one would offer something akin to an argument or proof. While these *seem to be* reports on how we came to our conclusion, it could be that these *explicit* justifications are the product of social norms bearing little relation to our actual mental processes. Are there reasons to suspect such a dissonance? In fact, there are plenty. Although we do not have introspective access to our non-reflective mental processes,¹⁸ there is abundant evidence suggesting they diverge far from conventions of rationality:¹⁹

Empirical Evidence Suggesting that "Reason" may be a Cultural Convention rather than a Fact of Human Nature

In Western cultures, logic and rationality enjoy such a close relationship that they are considered to be virtually synonymous. There are historical reasons for this, which involve the West's idealization of ancient Greece and their supposed dedication to *logos*.²⁰ While "Reason" came to be held up as universal, as the *essence* of humanity even, there is plenty of empirical evidence suggesting that "Reason" is little more than a set of cultural norms reflective of Western European values and history—particularly of the 17th and 18th centuries *Anno Domini*.²¹

This is not to say that other cultures are *irrational*; instead, that justifications take radically different forms in other cultures and in other times²²—and these differences may shed light on what rationality *is*.²³ For instance, the rule which is said to be the locus around which logic revolves is the Principle of Non-Contradiction: one cannot sensibly assert (P & -P)... or can they?

The classical notion of Wisdom in Semitic (and Asian) cultures turned on the juxtaposition and/or reconciliation of apparently contradictory claims.²⁴ Not only were true contradictions expected and tolerated, they were embraced: the highest truths were held to lie somewhere between irreconcilable points.²⁵ As the possibilities open to God (or to the Universe) were not held to be subordinate to those of human comprehension, experience, expression, or even imagination—through meditating on paradoxes, one could transcend (false) limitations and experience [Truth] directly, if fleetingly.

Of course, with these radically different notions serving as the foundation of logic, dramatically different systems of rationality would emerge in these respective cultures²⁶

(exacerbated by the fact that these societies used different *families* of languages, relative to Western societies).²⁷ Accordingly, while Western standards and conventions of justification may say a good deal about *our* history, culture, and languages, they may not say much *essentially* about human nature, or human cognition. Moreover, while *rationality* plays a critical role in virtually all societies, its typical (ethnocentric) conception seems grossly misleading and totally inadequate.²⁸

Akrasia

Akrasia is an unresolved (and at times, irresolvable) tension between the conclusions of our reflective and non-reflective processes; or, between the mandates of rationality and what one *actually* believes, desires, intends, etc. Awareness that one is in an *akratic* state does little to resolve it. Even being sincerely and fully convinced of one's normative obligation to abandon or commit to a given belief, desire, intention, etc., one may simply be unwilling or unable to do so.²⁹ Of course, if there was a clean correspondence between rationality and human cognition, *akrasia* should not even be possible, certainly not ubiquitous.³⁰ But it is both.

The Difficulty of Mathematics & Formal Logic for Most of Humanity

If cognition was *essentially* logical, mathematics and formal logic should come naturally to virtually everyone; we should all be more or less adept, with a bit of training. Instead, the virtual opposite is true: the overwhelming majority of most populations struggle to think in accordance with formal logic. For many, these tasks border on incomprehensible, even with dedicated study—and the more abstract these tasks are, the more difficult they become.³¹

Certainly, mathematics and formal logic represent ways in which people *can* think, albeit under the right circumstances,³² but this mode of cognition is certainly not the default.³³ In fact, it tends to be very taxing: even under ideal conditions, we can only think in this manner for relatively short spans of time before our performance begins to steeply decline (even for experts—although, as previously explored, they do not have to *think* about as much of the content, having internalized it). If human cognition is indeed *essentially* logical, these phenomena seem inexplicable; after all, mathematics and proofs are logic in its simplest and purest form: this mode of thinking should be *easier* than others if our cognition were *essentially* logical.

Chronic "Errors" (Biases & Heuristics)

Regardless as to whether one accepts the dual-process account of cognition or one of its rival theories, the heuristics and biases research (closely associated with Kahneman & Tversky) suggests rather powerfully that the overwhelming majority of human decision-making occurs through a set of non-reflective processes responsive to various cues and information formats.³⁴ These so-called "heuristics" are fast, frugal, and often quite accurate; in fact, we often override the conclusions of these processes to our detriment.³⁵

However, reliance on heuristics also entails a number of biases, and relative to various schemes of rationality, they lead us "astray" in systematic ways. Moreover, these processes resist education: non-naïve subjects fare little better than laypeople when faced with the sorts of problems which evoke the systematic errors. And worse still, group deliberation often exacerbates, rather than moderates, these biases.³⁶

The situation is not totally hopeless, however. One promising solution appears to be niche construction: designing our environments in such a way as to play to our cognitive strengths and compensate for our limits and weaknesses.³⁷ Gigerenzer has demonstrated that a number of these biases and errors can be *partially* resolved through changing the way that problems and data are framed. Finally, we have developed a number of tools and technologies which can dramatically extend human cognition and memory in various ways.³⁸ Notice, however, that all of these fixes are *external* to the agent, who remains as "irrational" as ever. And as we will see later, this may not be a bad thing.

Intuitions are Motivated by Irrelevant Consideration; they are also Unstable & Inconsistent

If our underlying mental processes were logical, we should expect our intuitive judgments to be consistent (among various types of people, or within a subgroup) and stable (over time and across relevantly similar problems and circumstances): they should follow rather directly from the salient features of a situation, and should not be influenced by "logically irrelevant" factors. However, virtually no part of this description seems to match the way our intuitive judgments actually work.³⁹ Yet, despite the volatility of our intuitions, if asked to *justify* any particular judgment, we typically provide an explanation which conforms to the standards of rationality.

Not only does this volatility and inconsistency suggest a discord between our tidy standards of rationality and the way our cognition actually works, it also undermines the utility of intuitions as support for *theories* (as analytic philosophers are wont to do), given that theories must be consistent, general, logical, etc.

Dumbfounding & Confabulation

Often, there does not seem to be an answer as to why we took particular actions or hold particular desires, preferences, etc.: why did one grab the blue shirt instead of the green shirt this morning? Why did one choose this particular route over another? Why does one find certain things beautiful, pleasurable, etc. and not others (or find one item superior to another)? Conversely, why does one find some things disgusting? When asked to justify these *basic* mental states, one often finds oneself dumbfounded;⁴⁰ no *logical* reason is even theoretically plausible. But if logic is foundational to our cognition, *no* judgments or actions should be unreasonable (i.e. inaccessible to reason)—certainly not the bulk of them.

While we necessarily have introspective access to our conscious (i.e. linguistically framed) thoughts *as they are occurring*, these represent an extremely small share of our total mental processes (broadly construed to include beliefs, intentions, feelings, desires, preferences, theories, etc. insofar as these concepts correspond to actual mental states). Accordingly, our actions (informed by these mental processes) are largely non-conscious as well.⁴¹ Even for those (relatively few) actions resultant from conscious deliberation, our intentional commitments are often vague, broad and general; the specific methods deployed to execute these mandates are almost entirely reflexive rather than reflective; they are invented *intuitively/ instinctually, ad hoc*, in response to the unique, innumerable, and largely ineffable contours of particular situations, drawing on information and skills which are largely tacit. Accordingly, insofar as our actions are *rationalized*, these rationalizations usually occur *post hoc*;⁴² essentially, we have to *guess* why we acted in a particular fashion.

These guesses are typically influenced by subsequent developments or what would be convenient for us to propose in the present—and they are often falsifiable, even when subjects are trying to tell the truth.⁴³

This confabulation occurs not only with regards to our actions,⁴⁴ but also our beliefs and memories.⁴⁵ We have a difficult time accurately tracing back the origins of particular pieces of information; we often misidentify the sources of our beliefs. And however accurate they may or may not initially be, our memories change over time in light of other accounts of a given event, subsequent knowledge and experience, our evolving self-image, etc.⁴⁶—even to the point of producing sincere, vivid, nuanced, but ultimately false, recollections: misinformation can cause us to distort memories, other memories (often traumatic) can be suppressed or altogether fabricated.⁴⁷

These phenomena should be unexpected: if our mental processes mapped onto rationality, and especially if rationality were essentially logical, then our beliefs, memories, actions, etc. should be resultant from clean causal chains. At the very least, if we could not "backtrack" these chains for some reason, we should *be aware* of our ignorance: we should not unwittingly confabulate. But in fact, it turns out that conscious thought plays a far less significant role in our cognition (and accordingly, in determining our actions) than people have traditionally believed;⁴⁸ as we shall see, it could be that the dominant discourse is profoundly mistaken about the *role* of mankind's phenomenological capacities, and also their *nature* (insofar as they are perceived as "logical").

VI.

"I know what I want, wish, believe, feel,...' (and so on through all the psychological verbs) is either philosophers' nonsense, or, at any rate, *not* a judgment *a priori*."

Ludwig Wittgenstein
Philosophical Investigations, Philosophy of Psychology—A Fragment, 309

Epistemologists typically hold that there is a tight connection between mental processes, explicit justifications, and logical rules. Individually, and especially collectively, the previously-explored phenomena undermine these associations.⁴⁹ There are dogmas implicit in each of these supposed relations:

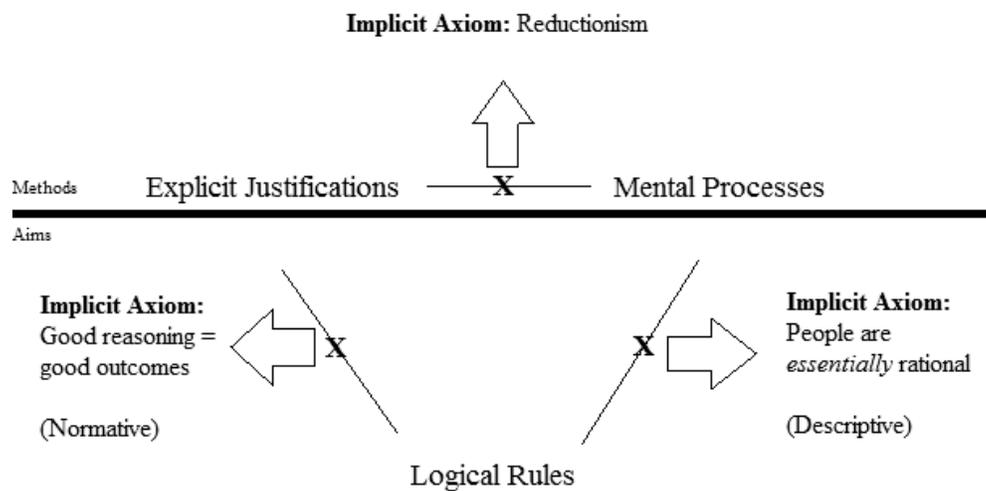


Figure 1: Epistemology's Implicit Axioms

For instance, underlying the supposed connection between our explicit justifications and our mental processes is the dogma of reductionism—i.e. the belief that language cleanly corresponds to objective phenomena “in the world.”

Behind the presumed connection between mental processes and logical rules is the dearly-held view that human beings are essentially rational; this association motivates the descriptive aspect of epistemology. Finally, implicit in the connection between our explicit justification and logical rules is the supposition that good reasoning leads to good outcomes in the world: we should bring our beliefs, desires, intentions, and actions into compliance with logic because it will work out better for us if we do. This view motivates the normative aspects of epistemology.

Over the course of this investigation we will demonstrate all of these axioms to be false. In doing so, we will call into question the entire discipline of epistemology: its methods and aims (both normative and descriptive).

VII.

If mental processes are not "rational," how can we make sense of them? Moreover, what does rationality come to *mean* if it does not refer to mental processes? Answering the latter question will occupy the bulk of the forthcoming discussion, so let us offer some cursory remarks on the former before moving on:

While our mental processes may not be cleanly reducible to logical rules, they are not random either. The supposed (mutually-exhaustive) opposition of *logos* to *chaos* has its origins in Manichaeism; it is a thoroughly religious conception falsified by the natural world (wherein order and regularities arise organically over the course of myriad interactions): it is a false dichotomy. There have been some works which aspire to advance positive theories without this bias (demonstrating how cognition can be non-logical but also non-random),⁵⁰

however, as this work intends to explore *conscious* (i.e. rational) processes, we will have little to say on the matter here—in any case, it is not an "armchair" question. However, our investigation of the latter question may have implications for the former, which can be explored more rigorously in the empirical sciences.

¹ In epistemological circles, beliefs and desires are typically held as things which people have a good deal of control over. Often, the conclusion of epistemological case studies is that the agent in question should change his beliefs, abandon his desire, or withhold judgment altogether—as an understatement, these are much easier said than done.

An epistemology which is not grounded by the ways people actually form beliefs and make judgments, one which does not account for the constraints on human cognition—such a project seems rather worthless, at best.

² The divide between the Egoists/ Immoralists and more "conventional" moral philosophy is one of the few authentic fault-lines in the discipline of ethics; but even *they* often succumb to the desire to compromise—reconciling their positions with traditional morality for the sake of increasing appeal. As an example, see Lester Hunt's "Flourishing Egoism."

³ The sheer outlandishness of many proposed counterfactual scenarios renders these examples nearly useless for practical morality. Because the situations in question are so extraordinary, it can be difficult to see how to relate the outcomes of these hypotheticals to one's everyday life.

They cannot even teach us *how we should go about making ethical decisions*, as the deliberative process is so radically removed from our own: these examples typically present their reader with a precise number of clear options, small in number (typically, 2) with unambiguous outcomes which are *known* (not merely anticipated) in advance of the decision in question, removed from all social context, and wherein the reader is given virtually infinite amounts of time to consider the case in question, which remains static as he considers it. No part of this description would apply to "real-life" ethical quandaries.

⁴ Most apparent differences between the mandates of ethical systems are not, in the final analysis, the result of different *values* but of how *shared* values should be prioritized or fulfilled; Rachels, "The Challenge of Cultural Relativism."

⁵ Kant, "On a Supposed Right to Lie from Altruistic Motives."

⁶ e.g. Herman, "A Mismatch of Methods"

⁷ For instance, Jeremy Bentham famously and repeatedly referred to the idea of natural rights as "nonsense upon stilts."

⁸ e.g. Shaw, "The Consequentialist Perspective"

⁹ Cohen, *If You're an Egalitarian, How Come You're So Rich?*

¹⁰ Even when ethicists are willing to *conceptually* accept counter-intuitive conclusions and extraordinary ethical demands— in practice, they do not *act* on them. That is, despite some persistent differences in *theory*, there would be very little variation in ethical *practices* between professed adherents to various ethical systems within a given context.

Consider the case of Peter Singer: in his "Famine, Affluence and Poverty," he holds that the citizens of "developed nations" are all obligated to dramatically lower their own standards of living and redistribute *all* excess wealth to the "third world" in order to ensure that no one lives in absolute squalor (while others live in decadence). He holds that this is a personal obligation, which bears on the *individual*—regardless of whether or not the government is willing to fulfill this obligation (although the individuals should *also* democratically pressure their representatives to comply). He argues that people should live in humble dwellings, hold few possessions— purchasing anything they can second-hand. He condemns, at length, the idea that people should place more value on their own family, friends, and countrymen than on strangers across the world.

And yet, Peter Singer enjoys a much higher standard of living than the average *American*, let alone the average citizen of the world. He maintains an upscale residence in Manhattan; he travels in luxury cars; he arrives for speaking arrangements in tailored suits of the modern fashion; he regularly eats at fancy restaurants and enjoys cozy vacations— in short, he is far from living to the point of "marginal utility" (despite the 10- 20% of his substantial income he donates to charity); and his family is similarly provided for. When confronted by this apparent hypocrisy, he simply acknowledges that he is "no saint," as though this self-mortification resolves the tension of his *continued* preaching of our need to live at the level of "marginal utility" paired with his *continuing* to ignore this mandate himself. We are not discussing the occasional hypocritical act resultant from some fleeting weakness of will, but of an intentionally and consistently hypocritical *lifestyle* (see, "Questions for Peter Singer").

However, probably the single most amusing example of this hypocrisy is that of Paul Johnson. In his *Intellectuals*, he details at length the ways in which various members of the intelligentsia consistently and dramatically violate the precepts of their own philosophies. After a series of detailed case studies, he suggests that we should *not* value ideas more than the character of their propagators (how you live says a lot about what you *really* think. If there is a consistent disparity between one's words and actions, we should question their reliability).

Despite the book's heavy focus on the way these other intellectuals mistreated their families, neglected or betrayed their commitments, etc. it was later found out that Johnson had been carrying on an extra-marital affair *for over a decade* (see, "The Rise and Fall of Paul 'Spanker' Johnson").

In order to avoid the charge of *ad hominem*, consider the following: ethicists dedicate their lives to these theories— they are, unquestionably, the most passionate advocates of their respective ethical systems. And if, despite their passion, their knowledge, and their relatively easy lives—if *they* cannot manage to live in a manner roughly commensurate with the ideals they are promoting, it seems unreasonable to expect (and indeed, *demand*) that others live them better. In some cases, it seems outright immoral: for instance, when intellectuals call upon their countrymen to fight and die in the service of some ideological system while they retreat into the safety of their ivory towers to cheer them on.

And yet, it is very rare than an *ethicist* is in the newspaper for making bold and heroic decisions in pursuit of their ideals, for rolling up their sleeves and trying to make a direct and positive difference on the "frontlines" of horrific situations, for making extraordinary sacrifices, etc. The men of action who *do* perform these feats of valor rarely explain their choices in terms of complex ethical systems or principles— they typically respond that they were just "doing what had to be done."

And so, out of fear, moral laziness, self-interest, etc. the few remaining differences in ethical theories ultimately get buried, in practice. As a result, the discipline of ethics seems more like a cynical ploy for the intelligentsia to manipulate the public than a set of genuine convictions acted out in one's life.

¹¹ In the first place, the reason ethicists must rely on these extreme cases is that, in practice, we have no need to appeal to any ethical theory to make our decisions. Within a given context, we simply *know* what is right—and we do it, fail to do "the right thing," or we actively choose to do something we know to be "wrong." Regardless of which path we choose, we typically know where our actions stand morally. That is, extreme cases are necessary *insofar as the discipline of ethics is theoretical* because they introduce ambiguity into morality, contrary to our typical experience.

¹² To supplement Dworkin's claims: in his "Moral Heuristics & Moral Framing," Sunstein explores research suggesting that we make our moral decisions in much the same way as most of our other decisions—by heuristics, keyed to particular cues and data formats. Lakoff explores similar themes in his *Don't Think of an Elephant!* In "An Unprincipled Morality," Dancy argues that there is no way to tell what is "right" outside of the contours of particular situations: abstract, hypothetical, and counterfactual scenarios have little applicability for the "real world." Similarly, ethical principles have little-to-no use practically or even normatively. And it isn't a big deal; ethics, he argues, can get along just fine without them. People do not really rely on them in making decisions—and it is hard to see why they should. Principles and reasons are primarily used for *justification*.

¹³ We do not even have good introspective access to our desires. We are pretty bad at determining what will make us happy, how happy it will make us, and for how long. Similarly, with unhappiness.

Gilbert & Wilson, "Miswanting: Some Problems in the Forecasting of Future Affective States."

¹⁴ Gallese & Lakoff, "The Brain's Concept: The Role of the Sensory-Motor System in Conceptual Knowledge;" Lakoff & Nunez, *Where Mathematics Comes From: How the Embodied Mind Brings Mathematics into Being*.

An important subtext of their work is that we can never know if the apparent order in the universe is a feature of some "objective reality," or merely a result of our cognitive- perceptual hardware and software.

¹⁵ The way the discipline of science proceeds seems to mirror the way our thought processes work: dramatic breakthroughs followed by periods of rationalization (Kuhn, *The Structure of Scientific Revolutions*).

Profoundly, while scientific processes seem to mirror phenomenological ones, it may be that the phenomenological processes themselves *mirror biological evolution*: in *The Plausibility of Life*, Kirschner & Gerhart demonstrate that evolutionary change seems to proceed through sudden and dramatic biological changes (albeit, with conserved core processes), followed by periods of "deep conservation."

In his *The Black Swan*, Nassim Nicholas Taleb argues that virtually all significant and enduring changes—be they personal, social, technological, or biological—are the result of (often cataclysmic and always highly improbable) "black swan" events. Because these events are, in a profound sense, unreasonable (within the framework of a given culture/moment), they are not amenable to being predicted, manufactured, or controlled. These revolutions are often followed by conservative processes which stabilize and hegemonize particular changes.

Rationalization should be understood in this fashion, insofar as it is *logical*. Consider: logic is always and only *truth preserving*, never *truth creating*; the best it can do is render as explicit connections between premises which were formerly implicit. Logic is an inherently *conservative* process.

¹⁶ Taleb goes on to argue that there is a wide gulf between theory and practice, invention and implementation, discovery and application.

For each of these couplets, there are typically different sorts of people who do the latter as compared to the former. The transition from the first phase to the second is non-linear, and the specific ways that the novelty in question is implemented, applied, or put into practice is typically far-removed from the vision of its progenitor. Of the two, the latter is much more difficult and less glamorous—but much, much more important. In fact, the former phase is useless in the absence of the latter.

Moreover, even the people in the former phase tend not to be scientists, academics, or even professionals in the fields they inadvertently revolutionize. And their discoveries, again, are often more the result of serendipity, or else "tinkering" rather than reflecting from the armchair.

¹⁷ With regards to mathematics, it is more challenging to "show one's work" than to derive the correct answer. The "heavy lifting" is not the calculations, but the justification.

¹⁸ It may seem as though we are begging the question here, as the existence of an unconscious mind (*mutatis mutandis*, compatible with a dual-process view of cognition) is controversial—as is, indeed, the existence of a *mind*, at all (according to eliminativists).

While these debates are interesting and important, they have little bearing on the matter at hand. For our purposes, it will be sufficient to show that, *whatever else one wants to say about human cognitive processes*, they do not seem to correspond to *logical* rules, nor to our explicit justifications. Positive claims about cognition beyond this would be empirical matters which demand more evidence than can be offered from the armchair—in fact, a conclusive answer demands more evidence than *science* has at its disposal, to date.

¹⁹ Regarding our reflective processes: our *conscious* thinking is rational—this should not be surprising, as such thinking is framed in *social languages*.

While there is much that is objectionable in Grice's theories on linguistics, he seems correct in asserting that languages such as English, Arabic, Japanese, etc. are necessarily social; people use these languages with *communicative intent*. Even in the case that we are thinking *to* ourselves, we use the language *as though* we are talking to others. In fact, often we *do* talk to ourselves (audibly). To frame our thoughts in these languages is to *rationalize* them. Conscious thinking is the translation of our mental symbols into communicative symbols (that is, a translation of our language of thought into "social" languages).