The Science, Politics, and Ontology of Life-Philosophy

Edited by Scott M. Campbell and Paul W. Bruno

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The Science, Politics, and Ontology of Life-Philosophy

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Contents

| Not | tes on Contributors | vii |
|---|--|------|
| Acknowledgments | | xii |
| Edi | tors' Introduction Scott M. Campbell and Paul W. Bruno | xiii |
| | | |
| Part I Life-Contexts in Dilthey, Nietzsche, and Bergson | | 1 |
| 1 | Dilthey as a Philosopher of Life Rudolf A. Makkreel | 3 |
| 2 | Biological and Historical Life: Heidegger between Levinas | |
| | and Dilthey Eric S. Nelson | 15 |
| 3 | Your Money or Your Life: Using Nietzsche's Critique of Mechanism | |
| | and Platonism to Defend the Biosphere Ronnie Hawkins | 31 |
| 4 | The Comprehensive Meaning of Life in Bergson Florence Caeymaex | 47 |
| D | | |
| Par | t II Converging Technologies | 65 |
| 5 | Information, Self-Reference, and the Magical Realism of "Life" | |
| | H. Peter Steeves | 67 |
| 6 | The Artificialization of Life: Designing Self-Organization | |
| | Jean-Pierre Dupuy | 79 |
| 7 | eLife: From Biology to Technology and Back Again Jos de Mul | 93 |
| 8 | Philosophy of Life in the Age of Information: Seinsgeschichte | |
| | and the Task of "an Ontology of Ourselves" Charles Bonner | 109 |
| Dar | t III Life, Power, Politics | 121 |
| 1 ai | the life, rower, ronnes | 121 |
| 9 | "Without Inside or Outside": Nietzsche, Pluralism, and the | |
| | Problem of the Unity of Human Experience Michael J. O'Neill | 123 |
| 10 | Anachronism and Powerlessness: An Essay on Postmodernism | |
| | Leonard Lawlor | 141 |
| 11 | Taking Hold of Life: Liberal Eugenics, Autonomy, and Biopower | |
| | Serena Parekh | 157 |

| Par | t IV Philosophies of Life | 169 |
|-------|--|-----|
| 12 | The Care of the Self and The Gift of Death: Foucault and | |
| | Derrida on Learning How to Live Edward F. McGushin | 171 |
| 13 | The Tragic Sense of Life in Heidegger's Readings of Antigone | |
| | Scott M. Campbell | 185 |
| 14 | Living the Pyrrhonian Way Stephen R. L. Clark | 197 |
| 15 | Intuition as the Business of Philosophy: Wittgenstein and | |
| | Philosophy's Turn to Life Neil Turnbull | 211 |
| 16 | On Life and Desire: Kant, Lewontin, and Girard Paul W. Bruno | 223 |
| 17 | The Wisdom of Emotions Jason J. Howard | 237 |
| 18 | History in the Service of Life: Nietzsche's Genealogy | |
| | Allison M. Merrick | 249 |
| Index | | 261 |

vi

Notes on Contributors

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Neil Turnbull is Principal Lecturer in Philosophy at Nottingham Trent University. He is the author of numerous articles and book chapters, as well as *Politics, Psyche and Soma* (Humanities Press, 2013, forthcoming) and *Modernity and the Worlds of Science* (Eerdmans 2013, forthcoming). He is also currently the editor of the journal *Radical Orthodoxy: Theology, Philosophy, Politics.*

Acknowledgments

The remote origins of this book of essays can surely be traced back to the editors' friendship that began years ago as graduate students in the Philosophy Department at Boston College. In conversations that have ranged from the philosophical to the personal, it is fair to say that we share the conviction that philosophy can tell us something about how to live. To be sure, neither of us believes that philosophy provides ready-made answers, a rulebook for life, so to speak. Indeed, finding out what philosophy "says" about life is the task itself. The desire to pursue a collection of philosophical essays about life reflects, at least in part, conversations that each of us has had with our students, colleagues, friends, family, mentors, and with each other for many years. In particular, the editors would like to recognize Marianne Campbell, Ann Lightcap Bruno, Oscar Bruno, Ada Bruno, William Richardson SJ, P. Christopher Smith, Jacques Taminiaux, Joseph Flanagan SJ, Fred Lawrence, Richard Kearney, Richard Cobb-Stevens, James Bernauer SJ, Gary Gurtler SJ, John Edelman, Patricia Bowen-Moore, Heidi Northwood, Deb Dooley, Sara Varhus, Mark McCloud, and Joseph D'Andrea. We also would like to acknowledge the contributors to this volume. The experience of reading and editing these essays has been an education in itself. It was a pleasure to work with them on this project, and we are grateful to all of our contributors for sharing their insights and making us think differently about life. We also had the pleasure of working with an outstanding team of publishers at Bloomsbury Academic. In particular, we are very grateful to Rachel Eisenhauer, Assistant Editor for Philosophy and Religious Studies, as well as Colleen Coalter and James Tupper. At Newgen Imaging Systems, we would like to express our sincere thanks to Srikanth Srinivasan for excellent copy-editing work. Lastly, we would like to thank the Philosophy Departments at Boston College, Nazareth College, and Framingham State University. Generous support from The Center for Excellence in Learning, Teaching, Scholarship, and Service (CELTSS) at Framingham State University as well as a Summer Grant from Nazareth College helped to make this book possible.

Editors' Introduction

The "biosphere," "the right to life," "life-support," "neurobiology," "biotechnology," "genetic engineering," "DNA," "life coach," "life, liberty and the pursuit of happiness," "the good life." These words and other phrases are blithely spoken and understood in popular discourse, but what *life* means—understood contextually, historically, intentionally, unintentionally, implicitly—is rarely addressed in any substantive way.

In the most fundamental way, the question of life is at the root of the scientific, the political, and the ontological. Scientific developments have had an extraordinary impact on the ways we human beings intervene on natural biological processes. In the political realm questions of life underlie moral and legal questions about how we live in a social and political community. Indeed, questions of life get to the root of *what is* biologically, anthropologically, and ontologically.

The purview of the modern natural sciences has set the conditions for the kinds of questions asked, and consequently, the kinds of answers offered in response to questions about life. But as scientific disciplines develop, splinter, and specialize, we can easily forget to consider the consequences of unforeseen developments. Indeed, the technological threat—and how many ever consider technological "progress" a threat—may well be the result of technology's increasing power, a power that runs the risk of slipping out of our control. Instead of technology being a tool of human control and mastery, the time has come for us to take seriously the possibility that technology bears the potential to overwhelm us. If we recognize the etymological roots of the Greek *techne* as the creation of some product after a rational (*logos*) plan, we must also recognize now that the "rational plan" calls for, in some instances, technology's "autonomy," "self-organization," and "nonlinear organization." As such, the question, "What is?" enters the picture on the doorstep of life (*bios*).

"So, what is the meaning of life?" Philosophers frequently hear this question, sometimes asked aggressively and defiantly. The question is vast and not given to pithy answers. There is a tradition of life-philosophy, which extends back to the work of Wilhelm Dilthey, Henri Bergson, and Friedrich Nietzsche, to which we can turn to start answering this question, and that is the goal of this volume of essays, to retrieve and then extend the work of these life-philosophers in order to ask about the meaning of life. Immediately, though, we find that when we try to answer this question, "What is the meaning of life?" we place it in the context of our individual lives. This single question breaks apart into a constellation of questions and problems we face as individual people trying to live meaningful lives.

We restricted the scope of this book to three themes: science, politics, and ontology. Scientific and technological advances have brought about significant changes in our daily lives, but there is a need to think more deeply about how these advances are changing our understanding of life itself, at both a biological level and, more particularly, at a human level. Every political ideology presupposes certain ideas about human life, and they harbor ideas and strategies about how to manage and structure people's lives. Understanding the idea of human life contained within political ideologies and challenging those very assumptions can significantly enhance our approach to politics as well as our understanding of the changes to our lives that politics can bring about. It is perhaps something of a surprise to see ontology connected to the idea of life. In philosophy since Plato, ontology has meant metaphysics, whose sense of eternity stands in contrast to the moving flow of life. As we show in this book, however, the study of life is the study of who we are and of what makes all life to be what it is. Essays in this volume develop philosophies of life, thus addressing the subtle and nuanced relations among life, ontology, and metaphysics.

Of course, there are many books on the market these days that purport to tell us something about the meaning of life. Too often, though, those texts view life in terms of self-help or motivation and not as genuine philosophy. In them, philosophical thinking is construed as being aimed at self-improvement, and thus perhaps as a branch of psychology. But the tradition of life-philosophy addresses fundamental problems about the meaning of life, and it does so in a way that is academically rigorous and intellectually stimulating. Indeed, the topic of life can have more than just academic appeal without becoming a mode of self-help. Scholars can appreciate this book, but it is also accessible to a general audience. These essays are academic, but highly readable, and someone with no formal training in philosophy can benefit from them.

Our goal here is not only to retrieve the tradition of life-philosophy (as we see, for example, in Dilthey, Bergson, and Nietzsche), but also to show how innovative and original interpretations of philosophers from the ancient to the contemporary reveal new ways of thinking about life. Although every essay is written by a philosopher, there is, nonetheless, an interdisciplinary quality to the volume. While focusing on the broad themes of science, politics, and ontology, it includes essays with topics as diverse as biology, technology, ancient philosophy, phenomenology, post-structuralism, deconstruction, history, liberalism, the environment, emotions, Greek tragedy, and the philosophy of history. In spite of this wide array of topics and themes, there is a single, unifying focus to the book, and that is the concept of life, at least insofar as life can be contained by a concept. Each essay takes up the concept or, perhaps, the notion of life from a different perspective and from within the context of a different thinker or variety of thinkers.

For many reasons, we believe that the topic of this volume is both timely and important. It reaffirms the importance of life to the activity of philosophy. Somewhere along the way, philosophy largely abandoned *Lebensphilosophie* in favor of logical analysis. We want this book to help restore to life its fundamental place within philosophical discussion and practice. Second, this volume is historically oriented. It retrieves that tradition and then goes further, to open up new areas of inquiry, some of which are inspired by the traditional life-philosophers and some of which stand in opposition to their work. Third, this volume addresses serious practical and theoretical problems. From the dangers of new technologies to significant confusions about eugenics, biology, democratic liberalism, human emotions, and history, this volume confronts problems that pertain to life and attempts to address those problems in thoughtful, meaningful, philosophical ways.

This volume divides into four sections: I: "Life-Contexts in Dilthey, Nietzsche, and Bergson." II: "Converging Technologies." III: "Life, Power, Politics." IV: "Philosophies of Life."

The first section, "Life-Contexts in Dilthey, Nietzsche, and Bergson" directly addresses the work of the classical life-philosophers. It serves as an introduction to these thinkers and to the tradition of life-philosophy, but this section does more than simply introduce a topic. These essays show how philosophers attempt to grasp the historical sense of life over and against a scientific or mechanistic one.

The first essay, by **Rudolf A. Makkreel**, is entitled "Dilthey as a Philosopher of Life." For Wilhelm Dilthey life itself serves as the overarching context for all of our experiences. Life is, as Makkreel writes, an "overall context that frames not only all natural inquiry but all human spiritual strivings and historical concerns." This context of life is what is given to us immediately. We cannot go behind or beyond it. Makkreel shows how Dilthey develops a "critique," in the Kantian sense, of historical reason that might ground the human sciences as Kant had grounded the natural sciences, to show the extent to which human consciousness can be traced back to its roots in the historical development of human beings. This "historical embeddedness of life" can also be used to explain how ethical concerns are rooted in the life-context of human drives and impulses. In Makkreel's essay, we see just how much life itself provides the primary context for human concerns and serves as a frame, a primary nexus of reference, for all of our historical, cultural, and spiritual experiences.

Eric S. Nelson takes up the themes of life and nature from a phenomenological perspective in his essay, "Biological and Historical Life: Heidegger between Levinas and Dilthey." He looks at Heidegger's hermeneutics of factical life as well as Levinas's turn toward transcendence in order to evaluate the relationship between Husserl's transcendental philosophy and naturalism. Nelson shows how Levinas discerns in Heideggerian ontology a kind of naturalism that is "inherently inadequate to the ethical, since it excuses violence." In the early Heidegger, however, which is informed by Dilthey's hermeneutical and historically oriented life-philosophy, we find a "life beyond naturalism." This is a dimension of Heidegger's work that, according to Nelson, Levinas seems to miss. In a wide-ranging analysis, Nelson looks at language, hermeneutics, and the body to show how the meaningful, linguistic, and historical contexts of human experience are operative in Heidegger's understanding of life.

Ronnie Hawkins invokes the work of Nietzsche and Schopenhauer in her essay, "Your Money or Your Life: Using Nietzsche's Critique of Mechanism and Platonism to Defend the Biosphere," as a counterpoint to the way in which mechanistic thinking is threatening the environment, or biosphere, the term she uses and which captures the realm of life within which all things exist. Mechanistic thinking makes living things quantifiable and calculable and, thus, subject to economic forces. Hawkins traces Nietzsche's notion of the will to power back to Schopenhauer's idea of the will to live in order to resuscitate a conceptual framework that might challenge the mechanistic paradigm that is dominating our understanding of life and is subjecting it to manipulation and quantification. Both the mechanistic paradigm and, she says, the Platonic paradigm, are deadening life and rendering it inert. Life is becoming lifeless. Nietzsche's "monster of energy," the will to power that recurs eternally in the realm of life, can show us just how much things are centers of force with a will of their own. Then we may, in the spirit of Nietzsche's Übermensch, reject the monetary advantages that come from quantifying life. In doing so, we may save the biosphere and our own lives.

The final essay in this section on the classical life-philosophers is by **Florence Caeymaex**. Her essay, "The Comprehensive Meaning of Life in Bergson," presents the essential features of Bergson's philosophy of life through a close reading of certain key sections of *Creative Evolution*, emphasizing the central idea of duration and the image of the vital impetus. Bergson's metaphysical understanding of life, based on intuition, offers a new way of thinking about knowledge. Caeymaex relates Bergson's ideas about life to both his metaphysics and his epistemology in a wide-ranging discussion that includes explorations of time, aging, the living body, memory, and the evolution of the eye. She shows how intuition, duration, and the image of the vital impetus help us to conceive of an intelligence that can think about the vitality of living beings, and vice versa. She writes, "If the notion of duration is the crossroads of all the problems taken up in Bergson's metaphysics, it is, nevertheless, starting from our experience of living beings that we are able to grasp its scope and meaning."

The second section of this volume is entitled "Converging Technologies," a reference to the convergence, and thus integration, of nanotechnology, biotechnology, information technology and cognitive science (NBIC). Some of the essays in this section address NBIC directly. Overall, though, these essays reflect our changing ideas about human life in light of technological advances and scientific discoveries. H. Peter Steeves, in his essay "Information, Self-Reference, and the Magical Realism of 'Life," takes a personal, lyrical, and scientific approach to our understanding of life. With inspiration from the fiction of García Márquez, Steeves thinks about life in a way that does not reject science but is not determined by science either. "Life, in the end," he writes, "must be understood in a new way that structures the scientific search itself-perhaps as more of a verb than a noun, always as something that involves a community of things all at once, forever dependent on context and what life accomplishes by being life." He examines various scientific definitions of life and traces the notion of life's self-referentiality through a panoply of thinkers, including Descartes, Husserl, Derrida, Gödel, and Bohr, and then he follows the idea of individuality into the liberalism of Western thought and the problems faced by information theory. He concludes by saying that all information lacks meaning when it is not informed and contextualized by life itself. Information is not the same as meaning, and the individuality of modern liberalism lacks context. We see, yet again, how life, even when it is interpreted scientifically, is informed by communal and relational contexts, which account for its meaning.

Hannah Arendt recognized the fundamental paradox of our time: as human powers increase through technological progress, we are less and less equipped to control the consequences of our technological progress. **Jean-Pierre Dupuy's** essay on "The Artificialization of Life: Designing Self-Organization" takes up the ethical problems of converging technologies (NBIC). As a consequence of our technological ability to set off *complex natural* phenomena, we confront a new kind of uncertainty, and practically speaking, we must develop new concepts of prudence that are capable of confronting this novel situation. Dupuy shares Hans Jonas's credo that there is no ethics without metaphysics, and his essay focuses on the metaphysics of acting into nature in an attempt to escape from the ethical aporia left in the wake of NBIC.

The next essay, "eLife: From Biology to Technology and Back Again" by Jos de Mul, extends the theme of converging technologies by analyzing the synthesis of biology and computer science as well as the multitude of subdisciplines, such as biomics, computational biology, and synthetic biology, to which this synthesis has given rise. In his essay, de Mul surveys the broad landscape of what he calls informationistic biotechnologies. Using a host of examples, de Mul analyzes the technological, corporate, and political factors at stake in the development of these technologies. He shows that in the shift from gray to green technologies, that is, in the shift from industrial technologies to informationalistic biotechnologies, there is incredible promise. These new technologies could radically transform food production, for example, while offering the hope of prosperity to impoverished rural areas. But these new technologies harbor considerable risks, and the inherent uncertainties of biological processes make them difficult if not impossible to control. Informationistic biotechnologies are changing how we think about life. We are now trying to control and manipulate life to serve human needs, and de Mul shows both the hope and the danger involved in doing so.

The final essay in this section, "Philosophy of Life in the Age of Information: *Seinsgeschichte* and the Task of 'an Ontology of Ourselves'" by **Charles Bonner**, is an exercise in *posing* the question of life given our historical moment. A specific understanding of life that corresponds to the methods and presuppositions of the life sciences has emerged over the course of the past five or six decades. Given that the dominant form of rationality is "scientific," *posing* the question itself requires, according to Bonner, an investigation into "the ontological ground on which we stand, the tacit understanding of being, the prevailing self-understanding of human being as such, the ontological status attributed to nature, to works of art, and to God or the gods." The task of reviving a philosophy of life demands an "ontological deconstruction" akin to the one Heidegger lays out in the Introduction to *Being and Time*, and Bonner initiates such a deconstruction

of our Information Age by tracing the scientific transformation that has taken place over the last half-century, and moreover, by showing the ontological status of life vis-à-vis those transformations.

The third section of this volume, "Life, Power, Politics," looks at the different modes of political life. In "Without Inside or Outside': Nietzsche, Pluralism, and the Problem of the Unity of Human Experience," Michael J. O'Neill looks at the connections between politics and culture to see what kinds of political forms, according to Nietzsche, might produce a serious and noble life. Not everyone interprets Nietzsche as a political thinker. In drawing out the relationships between politics and culture, O'Neill shows how liberal democracy leads to indifference about values. Pluralism accommodates a variety of views and values, none of which may take priority. When we interpret Nietzsche as a political thinker, however, we see how he advocates on behalf of a political culture that makes it possible for values to be lived and not simply discussed. As O'Neill writes, "To the extent that a political regime produces an authentic culture it is worthwhile, or worth living under." O'Neill shows the sense of unity in Nietzsche, unity both in the culture as a whole and in the life of an individual person. For Nietzsche, the agon is not simply a variety of competing interests (pluralism) but an arena within which certain values are deemed worth fighting for. For an individual person, an authentic existence is one in which one's personal beliefs can be harmonized with their public life. One who wants to defend the virtues of liberal democracy will have to address the trenchant criticisms made by Nietzsche of the kind of life that modern liberal democracies produce.

The next essay, "Anachronism and Powerlessness: An Essay on Postmodernism" by **Leonard Lawlor**, uses the work of Lyotard to develop a way of thinking about a "nontotalitarian" social-political bond. We live in a time that is dominated by global capitalism, and as Lawlor explains, this "domination of global capitalism over every other genre of thinking and being, for Lyotard, amounts to a kind of totalitarianism." At the beginning of the essay, Lawlor makes a phenomenological analysis of the self that shows how one finds within oneself a multiplicity of voices, a "we" that is nonetheless a heterogeneous entity and thus, strictly speaking, not a "we" at all. Is it possible to think of the self, this "we," in a way that is nontotalitarian, noncapitalistic, and noneconomic? Lawlor retrieves the notion of time in phenomenology and Bergson, and he outlines Lyotard's interpretations of the totalitarian tendencies of primitive and modern narratives, in order to develop the idea of a social bond made up of people who are unified around the idea of powerlessness and who refrain from doing violence to particularities and singularities, taking time "to listen better, to hear the multi-vocality of all living things."

In the final essay of this section, "Taking Hold of Life: Liberal Eugenics, Autonomy, and Biopower," **Serena Parekh** evaluates the ethical implications of "liberal eugenics" through the lens of Michel Foucault's conception of biopolitics. Liberal eugenics is the biotechnical concern with human enhancement, from hormone therapies to genetic manipulation. Rather than try to resolve or answer the ethical questions that abound with these genetic therapies, Parekh takes a look at how the debate about these technologies has been framed. Because liberal eugenics does not involve state coercion and does not infringe on autonomy, it is often regarded as unobjectionable within a liberal state. However, such a conclusion misses the biopolitical dimension of autonomy. Using the notion disciplinary techniques developed in Foucault, Parekh investigates dimensions of autonomy not typically addressed.

The fourth and final section of this volume is entitled "Philosophies of Life." It features a variety of essays on what one might call the ontology of life, investigations of who we are as living human beings and of what life itself is. In "The Care of the Self and The Gift of Death: Foucault and Derrida on Learning How to Live," Edward F. McGushin takes up the question posed by Jan Patočka about whether or not the care of the soul or self can speak to us today. Patočka and Foucault show how modern forms of power and technology subject human beings to various mechanisms that constitute us as individuals. McGushin uses the work of Foucault and Derrida, who were both interested in this question, to develop ways of thinking about the care of the self that resist these modern forms of power. He writes that "[t]he care of the self—that life in which the self is freed, strengthened, given life—is ultimately a responsibility that comes as a gift from an other who cannot be known." Looking closely at Socratic political discourse, Christianity, pastoral power, and responsibility, McGushin concludes that "the notions of gift, self as gift, relationship as gift and *aporia*, might be able to serve as elements of a new care of the self."

In "The Tragic Sense of Life in Heidegger's Readings of *Antigone*," **Scott M. Campbell** looks at the work of another contemporary philosopher. Martin Heidegger offers two readings of *Antigone*, the second of which explicitly counters the commonly accepted view that the play is fundamentally about an opposition between religion and the state. For Heidegger, the play is actually a poem about the relation between the human being and Being itself. He closely analyzes the Greek text and discerns there a series of conflicts and oppositions, all of which are connected to Sophocles' claim, in the first choral ode, that the human being is the strangest (*deinotaton*) of all creatures. These readings, taken together, open up a way of thinking about the meaning of tragedy in human life. This essay takes up both of Heidegger's readings in order to address that broader concern. For people who do not find themselves in the same situation that Antigone finds herself in, this play, nonetheless, resonates with them. The key to that resonance is Antigone's sacrifice. She sees in her life an overpowering dilemma, which she cannot avoid. While others, such as her sister, Ismene, find that they do not have to act, Antigone does have to act, and so she takes that dilemma upon herself. Her decision to act reveals her profound humanity, it reveals who she *is*, but in doing so it also reveals the tragic sense of human life. Human life for Heidegger involves a fundamental conflict, of both belonging and not belonging, of being both homely and unhomely, between beings and Being. Antigone assumes responsibility for her humanity, but she becomes tragic in doing so.

In his essay on "Living the Pyrrhonian Way," Stephen R. L. Clark offers a defense of Pyrrhonian skepticism as a way of life. Similar to the Buddhists, Clark argues, the Pyrrhonian Skeptics developed strategies for releasing oneself from attachments that can actually provide healthy modes of human interaction. Systematically, he responds to the charges of dogmatism that have been levied against Pyrrhonian skepticism, and he addresses possible objections to his position. Making a sharp distinction between disbelief and not believing, Clark shows how the Pyrrhonian skeptic can cultivate a way of life that, in following impulse and custom without being convinced that what they are doing is right or true, can achieve equanimity. They seem passive, but they are not necessarily passive, and because they are not committed to any particular ways of believing, they are not afraid of counterarguments. For the same reason, they cannot be taken in by sophistry or pernicious political rhetoric. Even on an ethical level, the Pyrrhonian skeptics are not immune from moral outrage because their natural instincts would reject that which is repugnant. Pyrrhonia skepticism is a way of life that rejects the dominance of reason in favor of natural instinct and impulse. "Their policy," Clark writes "was simply to be guided by nature, feeling, custom, and the rules of such crafts as they practiced, without supposing even that this was 'right' or 'good' or 'epistemologically sounder'. . . Theirs was a strategy, not a doctrine." Like professors, they would question, inquire, analyze, and suggest opposing ideas without insisting that their ideas are right or correct. This way of life is not just philosophically defensible, it is eminently philosophical.

In his essay, "Intuition as the Business of Philosophy: Wittgenstein and Philosophy's Turn to Life," **Neil Turnbull** argues that the philosophical "problematic of meaning" is, in Wittgenstein's philosophy, preliminary to a philosophical investigation of more fundamental and historically significant ethico-religious questions about the relationship between "living a life" and "the philosophical problem of the world." Drawing on the work of both the early and the later Wittgenstein and with special reference to Wittgenstein's notoriously problematic term of art "forms of life," Turnbull suggests that Wittgenstein should be conceived as a philosopher who was profoundly concerned with that most fundamental of all modern philosophical questions: "the relationship between intellectual and ethical life." Wittgenstein sought to retain "a connection between philosophy and a particular kind of practical wisdom." He concludes that Wittgenstein must be viewed as a thinker who develops a new practice of philosophy that is founded upon a radical acceptance of "life itself."

Paul W. Bruno's "On Life and Desire: Kant, Lewontin, and Girard" takes its leave from Kant's assertion that life and desire are inextricably linked. Kant, not surprisingly, conceives of life and desire in terms of "faculties," but this approach limits the way we can think of both. The evolutionary biologist Richard Lewontin's reflection on the relationship among gene, organism, and environment impels us to consider life as a threefold relationship, a "triple helix." This idea is the pathway to Rene Girard's triangular or mimetic desire. Thus, Bruno's essay is a kind of circle leading back to Kant's provocative link between life and desire.

"The Wisdom of Emotions," by Jason J. Howard, argues that emotion is essential to our understanding of life. Work on emotion across the fields of psychology, biology, and philosophy has come a long way in recent decades in painting a very different picture of emotion than the one with which most of us are familiar. Rather than seeing emotion as disruptive and chaotic, the echo of blind libidinal urges of our animal past, a spirit of consensus has emerged that sees emotion as integrative, stabilizing, developmentally indispensible, and necessary for a healthy human existence. Taking into account a variety of work on emotion by thinkers like Jean-Paul Sartre, Hans Jonas, Martha Nussbaum, and Robert Solomon, Howard provides a cumulative case for the view that emotions are best seen as types of judgments, which means that emotions provide much more insight into life than traditionally supposed. Armed with this insight he inquires into the kind of wisdom disclosed by our emotions and concludes by arguing that our emotions should be seen as the most visceral expression of our own philosophy of life. In the final essay in this volume, "History in the Service of Life: Nietzsche's *Genealogy*," **Allison M. Merrick** explores one of the central exegetical issues in Nietzsche's work: How are we to understand Nietzsche's assertion that history must be in the service of life? Merrick's essay establishes an inimical account of historiography—history in the service of the ascetic ideal—as practiced by Rée and Renan, then proposes the therapeutic potential of the practice of history that is in the service of life, as evidenced most strikingly in Nietzsche's *On the Genealogy of Morality*.

There are a number of threads running through all of the essays in this volume. It is fair to say that each of the essays, in its own way, recognizes an oversight, lacuna, or limitation in the way we conceive of life. Our conceptions may be expressed in words—written or spoken—or expressed in actions, but they remain inadequate to the task. As word or deed, the ease with which we overlook the rich and manifold meanings of life may itself say something about life and the way we human beings live it.

Many of these essays show how Cartesian ideas such as *res cogito*, *res extensa*, the metaphor of the machine, and the goal of mastery and possession of nature, are manifest both implicitly and explicitly in our understanding of life. For the most part, these essays view the human being not as a subject or *cogito* but rather as a historical being informed by a variety of meaningful contexts.

Several essays recognize that the technical, scientific worldview has become the dominant way of apprehending the world. But the modern technical, scientific mode of inquiry is by definition limited. We might say, for example, that our scientific understanding can provide the knowledge for the technical capability to engineer an atomic bomb, but it cannot tell us whether or not we should drop the bomb. The ethical question is beyond the scientific. These essays address that limitation not by appeal to standard ethical theories like virtue ethics, Kantian deontology, or utilitarianism, but rather by calling our attention to the threats to life that scientific advances are making and, even more importantly, the way that these technologies have transformed and continue to transform our ideas about the meaning of life.

Furthermore, and this may be implicit throughout the volume, there appears to be an attempt to rethink our idea of philosophy. Almost since its inception, the life of the philosopher has been conceived of as a contemplative or meditative life. Where attempts are made to describe the active life (what Hannah Arendt famously calls the *vita activa*) of the philosopher, it is thought that philosophers must disengage from their contemplation in order to participate in the give and take of everyday, even political, life. The essays in this volume contribute to the growing body of literature that views philosophy as a way of life, one that synthesizes contemplative, critical reasoning with an active, engaged life concerned with addressing contemporary social and political problems. Of course, the threads identified here are not exhaustive. Readers will surely make connections and find patterns of their own while exploring these essays.

—Scott M. Campbell and Paul W. Bruno, Editors

Part I

Life-Contexts in Dilthey, Nietzsche, and Bergson

Dilthey as a Philosopher of Life

Rudolf A. Makkreel

Dilthey saw his project as a philosophy of life, but not in any reductive biological sense. Life is conceived as the overall context that frames not only all natural inquiry, but also all human spiritual strivings and historical concerns. This means that life is appealed to not as the antithesis of reason, but as a force that encompasses reason. Thus he devotes himself to the idea of a "critique" of historical reason as a broadening of the Kantian critical project. The goal is to ground the human sciences as Kant had grounded the natural sciences. Care must be taken, however, to not simply pattern these newly developing sciences on the law-based model of the natural sciences. The human sciences need to be understood in relation to the practices that gradually gave rise to them. Their conceptual framework must be organized in accordance with "the reason of things that was active in their history" (Dilthey 1989, 178). Consequently, they should not be *constructed* in the manner of Comte and Mill, but critically delimited according to their *formation*. Intellectual *Konstruktion* must be replaced with historical *Aufbau*.

"The first condition for the formation (*Aufbau*) of the historical world," according to Dilthey, "is the purification of the confused and corrupted recollections of the human race about itself through a critique that is correlated with interpretation" (Dilthey 2002, 280). The critique of historical reason must be hermeneutical by acknowledging that "the nexus of history is that of life itself insofar as life produces connectedness under the conditions of its natural environment" (Dilthey 2002, 280). To the extent that this connectedness is rational it inheres in life and cannot be derived from any independent ground. Life is the ultimate context of an interpretive critique. It encompasses vital processes and forces, but it also frames the mechanical causality of classical physics. Life cannot be defined by contrast to anything, for it constitutes the

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overall givenness of things. This contextual approach to life allows Dilthey to consider both the biological conditions of human life as well as the reflective transcendental conditions for understanding its significance.

What Dilthey means by the given is not the sense-content of the positivists, but life as the unfathomable source and context of all experience. As he writes in his 1892 essay "Life and Cognition": "no matter how hard I struggle to obtain the pure experience of the given, there is no such thing. The given lies beyond my direct experience... Everything, absolutely everything that falls within my consciousness contains the given as ordered or distinguished or combined or related, that is, as interpreted in intellectual processes" (Dilthey 2010, 60). The given is not an immediate present available to observation, but a mediated presence that needs to be interpreted in relation to life. We can reformulate this hermeneutically and say that life is what is always there as *contextually given*. Life is the ultimate context that we cannot transcend or go behind. Every given of experience is already part of some larger whole.

Modern epistemology has ignored this contextual aspect of experience. It has tended to start with fixed elementary constituents such as impressions and sensations. Even Kant, who stressed the spontaneous aspects of the cognitive process, assumed that "the matter of what we cognize is . . . an incoherent manifold," which needs to be synthesized by the formal operations of the transcendental ego (Dilthey 2010, 66). Dilthey argues that lived experience (Erlebnis) teaches us otherwise. What is given in lived experience already has an intrinsic connectedness and constitutes a continuum. To be sure, this connectedness is indeterminate and needs to be specified. The initial task here is to analyze and articulate the continuum or nexus of consciousness rather than synthesize discrete sensuous elements by means of some intellectual act. To derive the unity of objects of consciousness from the apperceptive activity of self-consciousness as Kant did is to invert the true course of things. There is already a reflexively given unity in what is perceived. Apperceptive activity is needed merely to reflectively specify that unity. Apperception is not an original or elementary function of consciousness, but acquired over time for scientific purposes.

Another epistemological prejudice that has to be overcome is that consciousness is inherently phenomenal, representational, and set apart from the world. Even when consciousness is directed at so-called phenomenal objects, it possesses its own reality and is present to itself as a "reflexive awareness (*Innewerden*)" (Dilthey 1989, 6, 26, and 202). This translation is intended to underscore that the older translation of *Innewerden* as "inner experience" is too narrow. What I mean

by reflexive awareness is the self-givenness or the being-with-itself (Innesein) of consciousness. Whereas consciousness is characterized by an aboutness that can be directed at what is within or without, reflexive awareness is the being-with-itself of consciousness. This is how reflexive awareness is described by Dilthey himself: "it is a consciousness that does not place a content over against the subject of consciousness (it does not re-present it); rather, a content is present in it without differentiation. That which constitutes its content is in no way distinguished from the act in which it occurs" (Dilthey 1989, 253-4). Reflexive awareness is originally a pre-representational consciousness, but it can also access states of representational consciousness. Just as for Kant "the I-think must be able to accompany all my representations," reflexive awareness can potentially accompany any worldly content of consciousness, whether representational or not (Kant 1998, B131). It involves an implicit self-givenness that precedes an explicit or reflective sense of self. The felt self-givenness or with-itselfness of reflexive awareness comes before any introspective observation available to a self that is for-itself. Thus Dilthey writes that

if we call "observation" the directing of attention to something-placed-before-me ... then there can be no observation of reflexive awareness (*Innewerden*) or its content. Attentiveness directed at reflexive awareness produces merely an intensification in the degree of consciousness connected with the exertion of effort. This intensification in the field of reflexive awareness ... is the most simple form in which psychic life can appear. (Dilthey 1989, 254)

Reflexive awareness as the being-with-itself of consciousness constitutes its real connectedness. This connectedness can be articulated into cognitive, affective, and volitional structures, each of which provides its distinctive nexus to things. But Dilthey warns that however much we may want to focus on one of these structures, we should never lose sight of the overall life of the mind. Thus the cognitive nexus should not be fully isolated from the affective and the volitional. Cognition is not possible without some inquisitive interest, which is a function of feeling; nor can it produce determinative results without attention, which is a function of willing.

The reflexive awareness that informs the connectedness of the processes of consciousness includes worldly content, but the latter is not explicitly recognized as belonging to an external world until an adequate sense of self is developed. Gradually, what is given as interconnected in consciousness undergoes differentiation. Dilthey illustrates this by the following experience of musical appreciation: "In the nexus of psychic life, hearing and taking delight in the tone

... become constituents of the self that perceives and experiences, while the tone becomes a constituent part of the external world which confronts the listening subject as something distinct" (Dilthey 1989, 255). The reflexive taking delight in a sequence of tones can serve as an initial reference point for the perceptual taking of them as sounds stemming from a piano and the more reflective take on them as a phrase from a sonata composed by Beethoven.

Traditional epistemologists had attempted to account for our sense of the distinctness of objects and other subjects in representational terms. But what is represented in consciousness can never reach beyond itself except in hypothetical, inferential terms. What Dilthey is looking for is a non-inferential access to the world, and he finds this access in the volitional nexus rather than the cognitive nexus. In "The Origin of Our Belief in the Reality of the External World and Its Justification," he writes that "the consciousness of a volitional impulse and of an intention on the one hand and that of the intention being restrained on the other, that is, *two volitional states*, constitute the core of the experience of resistance and thereby of the reality of objects" (Dilthey 2010, 21). We have here the reflexive awareness of the will that it has met resistance within itself.

When resistance to our striving is felt reflexively, the will senses a diminution. But not until this immediate feeling of resistance (*Widerstand*) is acknowledged reflectively as a restriction (*Hemmung*) on the will does a consciousness of the world as distinct from the self arise. On the basis of the recognition of a restraining limit a distinction can be made in consciousness between an inner experience of the self and the outer experience of the natural world.

The standard contrast between inner and outer experience has an initial plausibility, but it is not easily defined or maintained. The awareness of my state of mind and my feelings are obvious examples of inner experience. Perceived objects like the rocks and trees on my path tend to count as *outer experience*. But the perception of some external object like a tree in my garden can also become an *inner experience* for me if I remember planting it and think of how much pleasant shade it has provided me. Then I see it as a valued object that belongs to my life-history. A statue in a church is another example of a perceptual object that can be more than an outer experience. But in this case, it provides the basis for what Dilthey called a "transcendental experience" in his "Contributions to the Study of Individuality" (Dilthey 2010, 217). This third kind of experience could be said to *apperceive* a *perceived* outer object as possessing a value or meaning not derived from my own life, but from a pre-given life-context with which I identify. I recognize that the statue is of a revered figure from the past who embodies virtues that endow human life with dignity. This third kind of

experience involves an understanding that locates an "inner sense" in something outer. I find a shared meaning in this statue from my cultural heritage.

The fact that Dilthey spoke of this cultural experience in the context of a discussion of transcendental reflection allows us to also think of it as a reflective experience. It appeals to transcendental conditions, not as Kant did to gain access to the natural world of outer experience, but to reflect on our place in the spiritual-cultural world. This is not a world that stands apart from us or even in opposition to our will, but a social world that is co-constituted by us. In doing so, we apperceive certain objects as more than external givens, but as objectifications of human activity. What outer experience perceives as a natural object can, under certain conditions, be apperceived by reflective experience as expressing something about human life. Reflective experience is "transcendental" in giving our life-context a spiritual significance.¹

This reflective experience finds its pre-reflective basis in what Dilthey calls the inherited common context for all elementary understanding. What is "inner" here is not primarily mental or psychological or introspective. I quote from Dilthey's "The Understanding of Other Persons and Their Life-Manifestations" of 1910:

Before the child learns to speak, it is already wholly immersed in the medium of commonalities (*Gemeinsamkeiten*). The child only learns to understand the gestures and facial expressions, movements and exclamations, words and sentences, because it constantly encounters them as the same and in the same relation to what they mean and express. Thus the individual becomes oriented in the world of objective spirit (*Welt des objektiven Geistes*). (Dilthey 2002, 229–30)

The inner nature of value and meaning resides in contextual immersion before it can be located in introspective insight. Elementary understanding is oriented by the normative authority of a local commonality, which encompasses what is taken for granted on the basis of custom, social convention, even prejudice. What Dilthey has done here is to take Hegel's metaphysical concept of objective spirit and give it a basis in common life. But in order to grasp its full spiritual significance he appeals to something akin to transcendental reflection in Kant.

Our historical embeddedness in life is also confirmed by Dilthey's reflections on ethics. In 1890 he offered a lecture course at the University of Berlin (now the Humboldt University) entitled "Ethics: Its Principles and Its Particular Manifestations." In these lectures, which were posthumously published with the title *System of Ethics*,² Dilthey sets himself the task of developing a "psycho-ethical" approach that is rooted in "anthropological-historical analysis" (Dilthey 1965, 79). Whereas traditional psychology has analyzed feelings mainly as responses to sense impressions that come from without, a psycho-ethical understanding of the feelings that can motivate us to act must be rooted in an anthropological analysis of our drives, instincts, and desires. Instead of focusing on the intellectual processes whereby human beings adapt to their surroundings, Dilthey argues that most of our responses are basically instinctive. The feelings that measure the effect the world has on us are not just the subjective aspect of our representations of the world. They are really rooted in our drives and inseparable from them.

Traditional psychology tends to construct epistemically geared levels of mental life where sense-impressions constitute the basic level, and these are then assessed by feelings so that finally the will can decide how to act in the world. But this intellectual reconstruction of psychic life merely skims the surface of our lived experience and ignores the real ways in which our sensations, drives, feelings, and desires are interwoven and merge all levels. The anthropological considerations that Dilthey is willing to include in ethical self-reflection go all the way back to our biological makeup. Thus he states that "instinct and feeling cannot be separated from each other within the concrete biological sciences" (Dilthey 1965, 51). What we decide to do cannot be separated from the most basic reflex-mechanisms of our body such as maintaining life by circulating blood. Even the reflex-mechanism involved in breathing does not require any input from the will; nor does the defensive movement that reacts to being attacked. Examples like this and Dilthey's claim that "the schema of a living being consists of reacting to impressions so as to re-establish equilibrium" have led Peter Krausser to define Dilthey's anthropology as a cybernetic system (Dilthey 1965, 48). Although Dilthey does not yet possess the terminology of twentieth-century cybernetics to fill out his stimulus-response schema with concepts such as "self-regulation" and "feedback," Krausser finds the basic features of self-maintaining functional systems in these lectures on ethics. While there are aspects of this kind of perspective in Dilthey's biological descriptions, it does not do justice to his conception of human life to define it cybernetically as a system of circular causality that reacts to stimuli from its milieu to learn to survive by a process of adaptation.

Throughout his writing Dilthey makes it very clear that his life-philosophy is not to be reduced to a biological theory of organic self-preservation or even self-propagation. The natural system of philosophy that developed in conjunction with the rise of the natural sciences is responsible for this reproductive caricature of the productivity of life. But for Dilthey life is in essence spontaneous and expansive. It encompasses both natural forces and spiritual powers. Applying this to ethics, Dilthey claims that the "psychological core of the original content of virtue" lies in "the joyful consciousness of power and the intensification of the feeling of life that is connected with it. We find its counterpoint in the joy of observing others exert power" (Dilthey 1965, 60). We instinctively identify with the exertion of power by others as long as it is not directed against us to diminish ours. Dilthey states that "just as we see animals in herds, we humans are instinctively governed by a drive for sociability" (Dilthey 1965, 101). On this basis he argues that the psychological feeling of sympathy to which the British appeal in order to account for human sociability is a mere surface manifestation of an anthropological sense of solidarity (*Solidarität*) that is rooted in our life impulses (*Triebe*). This is how Dilthey puts it himself:

Every feeling for others can only originate by means of an imaginative re-creation of what occurs in the other person (theory of the understanding). This re-creation is not an intellectual process, but rather is achieved by means of a movement of the same feelings, motivating impulses and incentives that take place in the other person. Thus, it always rests on a commonality, a solidarity of human nature. (Dilthey 1965, 68)

This human solidarity involves being moved by and moving with others (*Mitbewegung*) (Dilthey 1965, 75). All psychological forms of sympathy (*Mitgefühl*), whether it be compassion (*Mitleid*), shared joy (*Mitfreude*), or empathy (*Mitempfindung*) are derivable from the more basic *movement-with* that characterizes anthropological solidarity.³ This movement-with has a biological/ physiological component that Dilthey calls a being-stirred (*Miterzittern*), but it would be a mistake to reduce anthropological solidarity to that. As the above quote indicates, solidarity has to be understood at the level of motivating impulses and incentives, and this requires us to reconceive movement-with as engagement-with.

Solidarity is not just a natural instinct—it has to be understood more actively as an engagement with others. The extent to which we are motivated by a sense of solidarity is also a function of the sphere of commonality of objective spirit that surrounds us. And morally it is our task to cultivate this as a virtue. If we tried to account for ethical behavior merely by solidarity as movement-with, ethics would remain at the same naturalistic level at which Hume's *Mitgefühl* and Schopenhauer's *Mitleid* left it (Dilthey 1965, 102). Therefore, Dilthey aligns the incentive of solidarity with that of benevolence. Human beings must actively *will* the welfare of others to be ethical. Sympathy and compassion cannot be ethical incentives by themselves, but only in conjunction with the benevolence that was linked with solidarity.

As he develops his anthropologically based approach, Dilthey speaks of three main ethical incentives. One of them is the benevolence (Wohlwollen) that he aligned with a sense of solidarity. The other two incentives are to do what is right (Rechtschaffenheit) and to perfect or complete oneself in a socially legitimate manner (Vollkommenheit). These three ethical incentives were predelineated as moral principles in an early essay that Dilthey published in 1864 entitled "An Attempt to Analyze Moral Consciousness" ("Versuch einer Analyse des moralischen Bewußtseins") (Dilthey 1958, 26–7). In fact, the concluding section 12 of the System of Ethics is taken almost exclusively from this earlier essay, where the incentives are formulated as three moral oughts. This raises the question how it is possible to move from anthropologically conceived ethical incentives that are a posteriori to ultimately arrive at moral oughts that are a priori. There is, I think, a crucial subsection 9.3 that prepares us for this transition. It is entitled "The Consciousness of Commitment (Bindung) in Duty and Right." Here Dilthey is quite explicit that the commitment to do what is right demands a consciousness that must go beyond any aspects of solidarity that could be regarded as a reflex response to external pressure, whether physiological or spiritual. The commitment to do what is right must come from within on the basis of respect for others as ends in themselves (Dilthey 1965, 102). This could be said to involve the same kind of transcendental reflection that we spoke of earlier and that transforms something external into something that has inner value without it being reducible to my own inner experience. The mere life-value of solidarity is elevated to the spiritual value of respect for others. Having first deepened Hume's approach to arrive at benevolence, Dilthey now engages the Kantian approach as part of his moral self-reflections. But instead of appealing to respect for the law to justify doing what is right, Dilthey derives it from a commitment that is based on both a "fidelity to oneself and respect for the self-worth of other persons" (Dilthey 1965, 102). The sense of obligation (Verbindlichkeit) that comes with this commitment (Bindung) involves a recognition of a reciprocal human connectedness (Verbundensein) rather than a one-sided dependence on a higher law (Dilthey 1965, 71, 109).

Formally, Dilthey moves even closer to Kant at the end of the lectures by acknowledging that ultimately we must make "moral judgments" that are "unconditional" and "synthetic a priori" (Dilthey 1965, 108). Although Dilthey had rejected the possibility of synthetic a priori *theoretical* judgments for outer

experience, he is now willing to speak of synthetic a priori practical judgments for inner experience. Had Dilthey published his 1890 lectures himself he would no doubt have tempered the language that was imported from his early essay. But he clearly still thinks that morality requires judgmental assent to oughts that are unconditionally binding. Already in 1864 he differed from Kant in insisting that there is no unifying principle that allows us to derive these oughts from on high. An ethics grounded in anthropology needs three distinct syntheses to rise to the level of moral reflection. The first synthesis defines the strictly binding commitment to do what is right that we analyzed earlier and comes with a sense of duty. Dilthey finds it manifested most prominently in the male world of political life (Dilthey 1965, 103). The second synthesis links us to others through benevolence, which he seems to regard as a more feminine incentive. Whereas the duty involved in the virtue of uprightness can be tinged with a rigid and negative feeling of indebtedness, benevolence is more positive in grounding self-limitation on a more flexible and free sentiment of human reciprocity (Dilthey 1965, 109). The third synthesis involves the formative ideal of human perfection. It embodies the universal validity that Dilthey considers the metaphysical correlate of anthropological solidarity (Dilthey 1965, 69). The first two syntheses acknowledge the sexual differences of human beings, gearing one to public associations and the other to more local allegiances like family and friends. The final synthesis recognizes the creative and historical character of humanity and is projected in artistic and cultural terms.

We can summarize by saying that the first moral synthesis aims to unify humanity, the second harmonizes it and the third projects an articulated cultural whole. Speaking of these three synthetic oughts as forms that intersect, Dilthey declares: "they support each other in life but combat each other in moral theory" (Dilthey 1965, 110). In the final two paragraphs of the lectures we are brought back to the harshness of historical life when Dilthey comments that: "The violation of duty excludes us from human associations; the violation of benevolence excludes us from the sphere of mutual devotion. The violation of an ideal excludes us from the intelligible world, from the spiritual world of idealistic existence" (Dilthey 1965, 112).

It is important to realize that the formative kind of ethics that Dilthey strives to cultivate aims at a kind of perfection that can only be attained in the moral life made possible by culture. Indeed, the final switch from ethical considerations to moral oughts in the *System of Ethics* can be correlated with a transition from anthropological-historical analysis to modern cultural history. Section 11 on the epochs of moral culture provides that needed transition to section 12 on moral synthetic a priori judgments. A moral culture emerges "when the natural force of life in a national ethos is diminished" allowing other natural aspirations to be emancipated and produce "antagonistic principles that claim to guide life" (Dilthey 1965, 105). Dilthey gives an individuating characterization of modern culture when he assigns it "the same inner coherence, the same concrete unity that is found in the person . . . The distinctive feature of culture is to possess the vibrant unity of the person. The culture of a period can be regarded as the way that this structural system gives itself organs of enjoyment, productivity and creativity" (Dilthey 1965, 105). Then Dilthey differentiates three generations of moral culture, starting with Eastern nations and then moving to Greco-Roman culture, which gradually declined because of disparities in ownership, religious skepticism, and hedonism. Finally, he turns to the rise of modern cities and nation-states and criticizes the natural system of morality, justice, and religion of the seventeenth and eighteenth centuries.

We have seen Dilthey start with a psycho-ethical approach rooted in anthropological-historical analysis and end by correlating moral self-reflection with cultural critique. The anthropological import of Dilthey's System of Ethics is to provide an understanding of what holds human beings together even as modernity discloses a process of cultural differentiation and individuation. This leads us to recognize that life provides us with social drives that point to the possibility of various forms of human solidarity. But instead of using these insights to agree with Hegelians that Sittlichkeit should replace Moralität, he aims to give new life to morality by ridding it of abstract systems based on purely rational principles. Dilthey declared in his Baseler Antrittsvorlesung of 1867 that philosophy should reach back to Kant while also taking into account the contributions of Hegel among others. We already saw how Dilthey enriches the Hegelian idea of objective spirit by grounding it in common life and then applies an analogue of Kantian transcendental reflection to account for the way we grasp its historical import. In his 1890 lectures on ethics, Dilthey acknowledges the rational power of Hegel's social ethics, but places it in a broader framework established by anthropological reflection on life and then moves it forward toward the ideals of moral culture.

Dilthey's philosophy of life takes irrational forces into account, but it is not a form of irrationalism. His critique of historical reason is a critique in the Kantian sense of establishing the limits of pure reason. But instead of defining these limits primarily through reference to the intellectual faculty of *Verstand* (cognitive understanding), Dilthey develops a more encompassing notion of *Verstehen* (reflective understanding) that can grasp the reason of things in life itself. This led him to replace the epistemology (*Erkenntnistheorie*) that grounds the cognition of the natural sciences with a more integral theory of knowing (*Theorie des Wissens*) that can also do justice to the aims of the human sciences. Such a theory of knowing is based on self-reflection (*Selbstbesinnung*) which takes into account both theoretical and practical issues. As Dilthey wrote: "Self-reflection turns to the nexus of the facts of consciousness to find the foundation for action as well as for thought" (Dilthey 1989, 268). Dilthey agrees with the idealists that consciousness places conditions on what can be known, but they are not just formal conditions of thought. They should also reflect the results of the linguistic development of the human race. These conditions must be apprehended in their full scope and "are to be found in willing and feeling as well as in thinking..." (Dilthey 1982, 45).

To the extent that we seek to probe the life content of these conditions of consciousness we cannot ignore the history of human development. The only time Dilthey explicitly ascribes a transcendental function to consciousness is when it interprets an external given of life as having a spiritual significance that is binding for us. When something outer is recognized as having an inner meaning for us, then it becomes possible to attribute to it an "immanent purposiveness" with which we can identify. The idea of immanent purposiveness stems from the *Critique of Judgment* and is probably the most important idea that Dilthey appropriated from Kant. It is the inspiration for his efforts to expand on Kant's reflective conception of purposiveness and extend it from the reciprocal functions of specific organic systems to the social and cultural systems that serve to focus our productivity in human history. Dilthey's broad contextual approach to life has the unusual virtue of allowing for both biological agency and transcendental spontaneity. What he refers to as transcendental reflection can be applied to the articulation of historical systems in order to transform mere felt life into the intelligible meaning of the life of human spirit.

Notes

- 1 For a more extended analysis of reflective experience see (Makkreel 1992, 218–25).
- 2 This text is now only available in Dilthey 1965. However, it is being translated for volume 6 of Dilthey's *Selected Works*.
- 3 See (Dilthey 1965, 65–78) for the way Dilthey uses these cognate terms without, however, explicitly defining their relation.

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Biological and Historical Life: Heidegger between Levinas and Dilthey

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Introduction

Due in part to the radical antinaturalistic legacies of Edmund Husserl and neo-Kantianism, subsequent phenomenology often remains uneasy with nature, life, and biology—categories suspected of being reductionist—even as it proposes to articulate them anew in contrast with their standard natural scientific conception. In Heidegger and Levinas, nature is a problematic category referring to a chaotic and contingent yet instrumentalized realm of alienated brutality that endangers uncoercive dwelling and ethical transcendence. Heidegger's philosophical trajectory is partially exemplified by multiple attempts to rethink "life"—in his early project of a hermeneutics or self-articulation of factical life—and "nature"—as a more originary $\varphi \upsilon \sigma \varsigma$ (*physis*) in light of poetic dwelling in his later thought (Heidegger 1983, 11 and 1978, 237–99).

In Levinas's critique of Western ontology, such life and nature continue to be overly anonymous and impersonal, tied to the self-assertion of the will and to a pagan participation and absorption in the mysterious powers of being that lets them be rather than calling for interpersonal justice. The ontology of nature and being is not to be rethought through primordial sources, such as returning to the radical upsurge and sway of archaic Greek *physis*, as its power is only interrupted by a transcendence that is irreducible to nature—whether it is causal, constructed-sedimented, or more originary.

The derivative character of nature, as a construction and projection of spirit or as a separate phenomenal sphere left to scientific inquiry, is a primary thesis of transcendental philosophy, which—as customarily portrayed—delineates the scope and limits of legitimate cognitive knowledge based on consciousness and the model of—a primary achievement—modern scientific-mathematical inquiry. By 1910–11, Husserl described the late modern cultural situation as one of crisis—indicated by naturalism and historicism—and the potential resolution of this crisis in renewing philosophy as a rigorously scientific and transcendental enterprise (Husserl 1911, 289–341). While neo-Kantian philosophy bisected nature and spirit, factuality and value, Husserl revived and radicalized transcendental philosophy with an experientially richer and logically more sophisticated form associated with the phenomenological method.

The question remains to what extent Heidegger and Levinas transcended or only modified the transcendental paradigm of Husserl and their neo-Kantian teachers. In both cases, interpreters and critics dispute whether their thought signifies a radical departure or a more subtle reorientation. Despite their criticisms of Husserl's ostensibly overly theoretical and intellectualistic conception of phenomenology, as well as its subject-oriented tendencies, basic concepts and strategies such as the phenomenological reduction, passive synthesis, temporality and intentionality, categorial intuition and formal indication continue to inform and echo in their own discourses.

More intriguingly, given their respective questioning of the priority of consciousness and the transcendental subject through worldly "being-there" (*Dasein*) and the transcendence of the self through the other, their departures from Husserl do not lead either thinker back to naturalistic or efficient causal explanations of experience and the world. This is noteworthy given: (1) Heidegger's use of a different language of the immanence of self-interpreting life and of nature and naturalness—from the violence of the upsurge and holding sway of *physis* to the apparent nostalgic sentimentality for fields, groves, and rivers—and (2) Levinas's persistent identification and critique of this idium of life and nature as the crucial element of Heidegger's thinking and its failures.

Despite their transformations of phenomenology, Heidegger and Levinas remain beholden to its commitment to a realm that is independent of the contingent causal nexus of the natural world and ontic empirical inquiry. The inheritance of transcendental philosophy—and its contestation of what Husserl called the "naturalistic worldview"—joins them, even as the question of nature whether there is a disclosive encounter with an "other nature" or an ethical revelation of an "other of nature" beyond calculation and instrumentalization sets their thought into opposition. I will consider in this discussion to what extent Heidegger's early project of a hermeneutics of factical life and Levinas's reorientation of phenomenology toward transcendence, excess, and escape suggest divergent yet intersecting responses to the potential, risks, and problems of transcendental philosophy in light of the phenomenological critique of the "nature" of naturalism that orients and troubles their philosophical strategies.

The question of nature

Husserl's polemic against scientific naturalism coincided with his deep concern with the epistemological basis of and modes of inquiry in the natural sciences. While present in their earliest writings, Heidegger and Levinas leave such concerns aside in intensifying Husserl's polemic. Heidegger rejected epistemology as distorted philosophy, which concerns the question of being prior to that of knowing, and Levinas's radical critique of ontology in the name of ethics cannot restore philosophy's epistemological dimension. Likewise, even if Levinas distrusts Heidegger's suspicion of technology, science, and modernity in general, as his postwar comments in essays such as "Heidegger, Gagarin and Us" make clear, Levinas maintains the phenomenological critique of scientific and poetic naturalisms in a desire for "a land foreign to every nature" (Levinas 1969, 34). Levinas already advocated this critique in the 1930s; not to pursue a more fundamental encounter with being but for the individual human person irreducible to natural or material factuality.

Whereas by the mid-1930s issues of nature, life, and biology are entwined with Heidegger and National Socialism, Levinas earlier—in the first chapter of *The Theory of Intuition in Husserl's Phenomenology*—focused on the reductive character of scientific naturalism (Levinas 1995). Levinas commented in 1931 that the "world overflows nature," that is, the lived world exceeds and is irreducible to scientifically known nature, and "the phenomenological method wants to destroy the world falsified and impoverished by the naturalistic tendencies of our times . . ." (2004, 62).

Heidegger and Levinas do not seriously question Husserl's arguments that self and world cannot be adequately understood naturalistically or materialistically as a nexus of efficient causes. It is an important issue whether this unavoidably presupposes a transcendental constitutive subjectivity, even as it appears to be deferred through the there or a transcendence that exceeds constitution, intentionality, and the self, and leads to aporia.

It is significant that Levinas (1) notices in *On Escape* in 1935—unlike Husserl and Heidegger—the ethical social moment in materialism and articulates the importance of pleasure and sensuous bodily existence and (2) simultaneously rejects any reification or fetishism of the body and biological or natural existence

however these are expressed. Even as Levinas mentions Hitler, and Nietzsche, he employs vocabulary from Heidegger that indicates that he associates all three figures with a second variety of naturalism (Levinas 2004, 21). This is not the naturalism of the modern scientific worldview, which all the classical phenomenologists—and Heidegger most of all—criticize, but of a romantically celebrated, heroically embraced, or tragically accepted nature. Levinas diagnoses such ideologically configured nature as consisting of being, fatalism before nature, and barbarism: "Every civilization that accepts being—with the tragic despair it contains and the crimes it justifies—merits the name 'barbarian'" (Levinas 2003, 73 and 2004, 18). Heidegger's proper name is unmentioned yet "ontologism" is (Levinas 2003, 71).

Levinas's underlying critique of Heidegger from the 1930s to the 1990s is of its naturalism in this second sense; being as nature—not as science or metaphysical essence but rather—in the sense of accepting and advocating the brutality of the factuality, the self-sufficiency, and thereness of being and accordingly legitimating injustice and violence (2003, 51–4 and 2004, 134). For Levinas, like Adorno, no poeticizing about the gift and generosity of being, the awe of natural phenomena, or the nostalgic simplicity of rural life can be excused. The gift and generosity of being offers no adequate basis for distinguishing the murderer who enjoys life and the murdered who is denied life.

As Kierkegaard asked whether the indifference of the external world, in which it shines or rains on the just and the unjust alike, is equally the rule of the spiritual world, Levinas posed in 1935 the question of the indifference and neutrality of being for the individual person. Given what is to come, irrespective of his depiction of Heidegger's thought, the legitimacy of this question stands. Whereas Adorno critiqued Heidegger for privileging the human over nature, Levinas objected in the postwar period to Heidegger's privileging of anonymous, indifferent, and neutral being in nature and encompassing landscapes (Adorno 2001, 13; Levinas 1998, 116–17 and 1981, 182). There are no persons in such environments; "In the *Feldwege*, there is a tree; you don't find humans there" (Levinas 1998, 116).

Levinas stresses in "Heidegger, Gagarin and Us" the monotheistic and modern technological destruction of pagan groves, sacred sites, and mystery-laden landscapes. Levinas praises this destruction because it undermines the distinction between native and stranger—and accordingly between nature and artifice—and the violence that this distinction repeatedly justifies. Nature is conceived here as antihuman and mythical violence; love of locality, place, and native landscapes is seen as dividing humans into native and foreign. Despite Levinas's earlier interpretation of phenomenology as "de-reifying the human being" and humanizing things, responsiveness to things is identified with cruelty to one's fellow humans (Levinas 1990, 231–2). Nature and mystery cannot make humanity human; it is rather by serving one's fellow humans by cultivating and reshaping the land in order to feed them (Levinas 1990, 233). It is, Levinas contends, distance from nature that allows humans to engage in their earthly task of not approaching "the widow, the orphan, the stranger and the beggar" with "empty hands" (1990, 26).

The Holy Land is neither wilderness nor forest paths; hunger is holier than being. The tamarisk planted by Abraham is a Hebrew acronym for "food, drink and shelter, three things necessary to man which man offers to man. The earth is for that" (Levinas 1990, 233). Though Levinas advocates the separation of human freedom in relation to nature, a distinct response to nature remains as Levinas insists that "man inhabits the earth more radically than the plant." Levinas distinguishes this radical earthly inhabiting from Heidegger's worldly care and dwelling by its being devoted to welcoming and serving the other rather than itself.

Levinas associates Heidegger's ontology with a kind of naturalism. Not that of scientific causal explanation but being as an apparently natural and ethically unquestionable holding-sway to be heroically embraced or tolerated in resignation. Such naturalism is inherently inadequate to the ethical, since it excuses violence. Levinas identifies such dynamic self-unfolding power as central to Western ontology through a line connecting the self-preservation and striving of the *conatus*, the struggle for and self-assertion of existence, the will to power, and Dasein's primary concern for itself in its individuation or its ownness and mineness (Bernasconi 2005, 171–6; Nelson 2009, 189–204).

Heidegger rejected "biologism" in the first sense of naturalism discussed above—that is, as a reduction of human existence to its biological elements and rejected the notion of a biological or Darwinistic struggle for existence. Heidegger criticized the notion of a "struggle for existence" (*Kampf ums Dasein*), between objectively existing beings (1994, 134 and 1989, 482). This is an essential moment of Heidegger's thought and of ontology in general for Levinas, who describes being *as* war and ontology *as* violence in the preface to *Totality and Infinity* (1969, 21–30).

Insofar as Heidegger opposes these concepts, Levinas's critique appears to miss its target. However, the biological and the natural are not solely natural scientific categories applying to objective entities and their relations. Levinas does not consider Heidegger to be an acute naturalist or scientist, and he is less concerned with biology as a natural scientific discipline or Darwinism as a biological theory. His primary concern is with social and ontological Darwinism and their ideological constructions of nature. By emphasizing self-interest as well as absorption and participation in collective organisms—and such egoism and collectivism are complementary in totalitarianism—being and nature become excuses for and justifications of the violence and injustice of humans against humans.

Notably, while Levinas addressed the question of whether being and the fatalism that rivets the person to it can be escaped, Heidegger was speaking that same year in his lecture-course *Introduction to Metaphysics* of the violent upsurge and holding sway of *physis*, of the ontological and not merely ontic conflict of *polemos* and *Auseinandersetzung*, and the violent event of founding and creating accomplished by great statesmen, artists, and thinkers (Levinas 2003, 53).¹ In other examples, Heidegger speaks of fields, forests, and rivers and the peasants who appreciate them in less violent yet nostalgic and sentimental ways. As Adorno argued, Heidegger employed the language of nineteenth-century romantic naturalism with its categories of the sublime and the sentimental or pastoral idyllic; even if he rejected the Latin "*natura*" for the more originary *physis*.

The two senses of naturalism—the efficient causal and the poetic—discussed so far do not exhaust questions of nature, life, and biology in Heidegger and Levinas. Levinas detects vitalist elements in Heidegger, but he noted in 1935 that the discourse of creative life-forces is tied to the self-assertion of life and thus to being such that escaping or getting out of being cannot be renovation, creation, or return (Levinas 2003, 54). Intuitionist life-philosophy was critiqued by the early Heidegger, as it forgets that perception and experience only speak through language and interpretation.

Heidegger and the hermeneutics of historical life

What indicates the possibility of "life beyond naturalism" is the hermeneutical "life-philosophy" (*Lebensphilosophie*) associated by the early Heidegger with Dilthey and contrasted with Bergson's intuitionism. In an early lecture-course on intuition (*Anschauung*) and expression (*Ausdruck*), Heidegger distinguished Dilthey's historically oriented and interpretive life-philosophy from the biologically oriented and intuitionist life-philosophy of Bergson and James and opts for the former (1993b, 15).

The transition from intuition to the interpretation of expression is part of the young Heidegger's turn from pure phenomenology as a rigorous science toward an impure hermeneutics of factical life wherein "life" (*Leben*) is encountered and interpreted in its enactment and occurrence within its situation and its contextual immanence. Such a hermeneutics of factical life suggests the possibility of a life encountering and articulating itself. Hermeneutics signifies more than the art of reading texts. It is the self-explication of immanent life—irreducible to a biological factuality or vitality —but in its historical, linguistic, and relational-interpretive nexus (*Zusammenhang*) as facticity and possibility. While Heidegger's appropriation of Dilthey's strategies is gradually displaced through the 1920s, much of it remains in the background of *Being and Time*. This hermeneutical dimension is underappreciated in Levinas's interpretation.

In interrogating the encompassing and entrapping character of immanence, particularly its codification as ontology, Levinas interprets Heidegger as its primary perilous culmination. Yet by engaging the relations of language, life, and interpretation in the early Heidegger, this assessment calls for further contextualization—in the sense of situating rather than reducing to a set of determinate conditions. Heidegger's early project of a hermeneutics of factical life complicates Levinas's questioning of nature, life, and existence in Heidegger.

What makes of facticity a question—and thus an opening—isits ground lessness. As the early Heidegger clarifies, turning to facticity is a promise and a threat: the promise that the real (or material or empirical) would be disclosed in a way left undetermined by the doctrines of realism (or materialism or empiricism). The threat thus revealed would not be an immediate ground of experience providing the foundation for knowledge but rather the ground lessness that must be disturbing to thought. The promise propels us toward the factical; whereas the threat means that we only ever find ourselves on the verge of grasping it. The factical (approached in *Being and Time* as thrownness and birth) *as* enigmatic, *as* inappropriable and *as* abyssal generates the call that makes us responsible. As Heidegger writes in a note added to *Being and Time*, our responsibility is to the very finitude that leaves us without a given ground and incapable of self-grounding.

Approaching the factical puts us in a position of relating to what is other, contingent, and plural such that it is always indirect and deferred further along the hermeneutic arc. The specific structure of this relating is, in these early texts, the structure of formal indication so that this hermeneutic circle comes to include a moment of rigorous formalization of intentionality that transcends it (i.e. a turn towards the "how" of Dasein's being-in-the-world) *and* a radical

deformalization (i.e. an interpretive turn toward individual and concrete ways of understanding).

According to Heidegger in 1919, philosophy has been overly abstract, conceptual, and theoretical and needs to attend to our concrete factical existence without reifying it or being transfixed by and absorbed in it. Contrary to the prevalent life- and worldview philosophies that rejected reflection as the conceptual reification and self-alienation of life, and which had long departed from Dilthey or Bergson's insights, Heidegger argued that the immediate concreteness of life addresses those caught up in it as a fundamentally philosophical issue concerning their own existence. Insofar as the immediacy of experience and perception is already mediated by language and historicity, this existence is interpretive prior to explicit conscious reflection. Yet life is still, via the reflexive categories that inform ordinary practices and everyday ways of speaking, as much reflective and conceptual as it is intuited and lived.

"Life" is not a physical or biological factuality or a transparently given immediacy for intuition. It is structured and mediated by categories (the categorial) that are shifting and only accessible through their enactment and practice. Heidegger's strategy proceeds through the lived and interpretive "categories of life"—Dilthey's conception that challenges the static ahistorical categories of consciousness and the reductive interpretation of reason offered by transcendental philosophy, and a precursor to the "existentials" or existential categories of *Being and Time*—and as *logos*, the communicative event and enactment of one's own existence through language.

Factical life inexorably entails more than the pure immanence of life or the blind fatality of "brute facts" for the young Heidegger. The self-explication of life requires recognizing the ruination and dispersion of factical life, as Dasein— according to Heidegger later in the decade—only comes to itself through its very interruption (*Bruch*) and brokenness (*Gebrochenheit*) (2004, 252). Adorno argues that Heidegger is captured in the contradiction of Dasein being simultaneously broken and whole (2003, 117). This paradox is comprehensible through the formal indication of factical—that is, in each case historical and temporal—life.

Dasein is dispersed and outside of its element, such that intuitive immersion in and irrationalist celebration of the supposed immediacy and vitality of life is deeply problematized. As exposed, dispersed, standing outside of itself, ruinated and fallen, factical life does not simply "heighten" and "intensify" its monadic life, ego, or will in overcoming resistance and alterity. Entangled amidst things with others in the between of the world, factical existence elicits its own self-articulation through communication by enacting the hermeneutical "categories of life" as singularly in each case its own to be. Such processes of self-interpretation and self-reflection, and the possibility of an individuation more encompassing than the instantiation of a conceptual category or general type, are part of the very facticity of human existence.

Alienation is not alien to human life if in the uncertainty, uncanniness, and risk of understanding and interpretation, human existence is opened to itself in being an issue for itself, as the freedom of an undecided possibility, and as responsibility for how it relates and does not relate to things, others, and itself. Human life is thus "lived" (*er-lebt*), and disturbingly de-lived (*ent-lebt*). The living of it involves the finitude and questionability of existing—in its relational context (*Zusammenhang*) and dis-relational breakdowns—and the care and effort of understanding and interpretation in communication with others, the world, and oneself.

The strategy of formally indicating factical life, for which the categories of formal and transcendental logic are insufficiently formal and universal, discloses the "self" as worldly and constantly referred and dependent (*angewiesen*) beyond itself; not as neutral and indifferent but as care (*Sorge*); as "each time" (*je*) singular (*einzelnes*) and its own (*eigenes*) rather than as common and universal. Care is for the early Heidegger inherently communicative. It is not the will or *conatus* of modern philosophy but the middle voice, "*vox media*," originating in the address of factical life, and factical life speaks the language of the world even when it speaks solely to itself (Heidegger 2005, 357). As such, the self becomes itself in relation to what it is not; it is individuated in relation to alterity.

Even as facticity is described as the primordial happening ("*es ereignet sich*") and upsurge of a pre-intentional and pre-theoretical "it" (*es*) or "there" (*da*), which is irreducible to consciousness, intentionality, and the subject, the categorial formalization involved in formal indication ruptures absorption in the immediacy and immanence of life to be receptive and faithful to it. Heidegger's early project transformed phenomenology by calling attention to its historical, linguistic, and interpretive character. Further, it indicates a different understanding of language and interpretation as worlding and happening—as event (*Ereignis*), a term Heidegger already uses verbally and hence temporally in the "es eriegnet" of 1919—and performative enactment (*Vollzug*) (1987, 73–5).

Phenomenology is more than the description of the a priori essences and transcendental conditions of life, subjectivity, and consciousness—nor is it independent of the empirical-ontic, the finite, and the factical. Intentionality, subjectivity, and the transcendental indicate questions rather than answers for Heidegger. Heidegger remarked in the *Basic Problems of Phenomenology* that one

only gains life by giving oneself over to it (*Hingabe*), and—rather than producing, positing, constructing, or constituting its object—the philosophical stance is an "*eros*" letting itself go (*sich-los-lassen*) in life (Heidegger 1993a, 263).

Expression and its interpretation might appear phenomenologically secondary to intuition and perception, and the seeming transparency of conscious life to itself; yet experience is already structured in the facticity and possibilities of worldly and communicative relations such that its complexity is inaccessible to direct intuition. Encountering and confronting phenomena occur through signification, disruption, and the categorial-hermeneutical work of interpretation embedded in everyday practices.

Despite Heidegger's switch from the mathematical to the historical in 1915, he could still claim that logic interested him the most. His engagement with themes and issues from *Existenz* and *Lebensphilosophie* does not signify an abandonment of earlier concerns with logic, particularly the problem of how a thisness (*haeccitas*) is graspable through the categorical, as their historical reinterpretation and hermeneutical transformation.

Hermeneutics, the art of interpretation, likewise involves the double task of the grammatical interpretation of language and the "technical" or "indirect" psychological interpretation of individuality. As the latter inevitably proceeds through language, especially in being concerned with new and different ways of speaking, questions of concept-formation and logic are inexorable in the practice of hermeneutics. Departing from his work in Scholastic and modern logic, Heidegger increasingly approached these questions through Greek and early Christian interpretations of *logos*.

The hermeneutical turn in Heidegger's early thought, along with a more rigorous understanding of hermeneutics that avoids reducing it to the either/ or of transcendental rationalism or existential irrationalism, suggests that his early thought transcends "transcendental philosophy" qua Husserl and neo-Kantianism, even if it preserves transcendental moments in reinterpreting them as hermeneutical and historical. Nor does it, as his critics contend, embrace the irrationalism of the pure nonconceptual and nonlinguistic intuitive immediacy of concrete existence.

Heidegger challenges the intellectualistic apriorism of transcendental philosophy through his early project of a "hermeneutics of factical life" while distancing himself from and warning of being entombed in mere living or intuitive and irrational celebrations of life. Since factical life addresses and claims humans as a philosophical issue concerning their own existence and how it is to be lived, immanent existence is questionable and interpretive rather than self-certain and intuited. As communicative, mediated, and indirectly interpretive of itself, such life is inevitably reflective and conceptual as well as intuited and lived.

In the early Heidegger, life is not interpreted as an atomistic and unshared living as the struggle and self-assertion of a *conatus*, will, or ego. Life is primarily lived in the medium and between as *logos*, which signifies the communicative event, enactment, and interpretation of one's own existence in a hermeneutical situation or relational context of others, things, pragmatic affairs, and meanings. This lived-nexus (*Lebenszusammenhang*) is too complexly mediated to be self-transparent to introspection, intuition, and perception, as Heidegger makes clear in his response to thinkers as diverse as Husserl and Bergson. The life-nexus, as Dilthey previously established, is structured prior to self-consciousness and self-description by the media of history, language, and interpretation. In engaging and articulating its hermeneutical situation in a particular language, place, and time, interpretation and reflection cannot evade the historical, communicative, and pragmatic conditions of its life.

Interpretation involves the reliance on and possibilities of destructuring (*Destruktion*) traditions, habits, and customs as the reified and unreflective sedimentations of historical life that inform and deform lived experience. Entangled in the world, factical existence categorially enacts, articulates, and individuates its life as its own. Interpretation and reflection, as practices of "appropriation" in the sense of translation, destructuring, and individuation, belong to the very facticity of human existence. They are not foreign to it, as in the anti-intellectualism and intuitionism of popularized *Lebens*- and *Existenzphilosophie*. Such issues are relevant to Levinas's judgment of Heidegger as an irrational life-philosopher, affirming the virility of the *conatus* and the violence of its struggle for existence, and as retaining an overly intellectualist and cognitivist understanding of understanding (*Verstehen*) that reduces ethics to truth.²

Biological nature and interpretive life

Regarding Heidegger's pre-originary logicism, logic as the communicative event of the word, Heidegger asserted that the problematic of logic had barely begun to be fundamentally addressed in Western philosophy since Aristotle (1994, 21). Heidegger criticized logic as a one-sided extreme and a "violation of the living spirit" (Heidegger/Rickert 2001, 58). He did not reject the role of thought, reflection, and concepts in order to intuitively return to "life as such." Life can only be grasped immanently or responsively from out of itself in its categorial, historical-hermeneutical, and ontological-existential character.

Heidegger concurred with Husserl and Rickert's critique of life-philosophy insofar as it is oblivious to the categorial and conceptually informed character of human life and culture, implying that the question of the entity at issue can be ontically answered through depictions of human nature based on the human sciences. In contrast to the ontic and anti-conceptual tendencies of life-philosophy, the question of *Dasein* is one of the categorial (existential) qualities of its existence and consequently a preeminently philosophical question (Heidegger 1995a, 216). Heidegger recognized philosophical significance in life-philosophy although it failed to think the issue of life radically enough. The task of a hermeneutics of factical life is to articulate life more primordially than life-philosophy did (1995b, 50). Heidegger remarks that Dilthey's thinking of life is more originary yet like all life-philosophy ultimately recognized life's disquiet only to quiet and sublimate it (1995b, 38–50).

Heidegger's use of "life" (*Leben*) resists its biologistic interpretation in life-philosophy, vitalism, and social Darwinism, since these avoid the facticity and fundamental disquiet (*Unruhe*)—a precursor to the constitutive uncannniness (*Unheimlichkeit*)—of history and life (1995b, 30–54). That is, its immanent ruination and questionability (1994, 2). Life is not only given as stability, security, and certainty but exposed as dispersal, distance, and ruination (1994, 103). Rather than being a continuum of vital energy or evolutionary progress, disquiet and uneasiness characterize life and indicate its fundamental motility (1994, 93). "Life-philosophy" is too absorbed in life to clarify it. It is a tautology, like the "botany of plants" as Heidegger repeats in *Being and Time*, saying nothing about the categorial character of the life that it seeks to articulate or its ontological status (1977, 46 and 1995a).

"Life" (*Leben*) as "living-experience" (*Erlebnis*), "expression" (*Ausdruck*), and "interpretive understanding" (*verstehen*) is not simply intuited. It is not merely concrete, immediate, or self-transparent to itself. Life is instead a hermeneutical process as it is constituted by multiple tendencies toward *Entleben*—of dispersion, rupture and the interruption of ruination (*Ruinanz*). Life itself is already its own self-differentiation and deferment (1987, 84–5 and 1993a, 232).

The distance and non-transparency of life to itself has three dimensions. (1) The self-understanding of life cannot avoid the question of death and the possibility of its own impossibility. It occurs in relation to its own potential absence. (2) The understanding of life inevitably involves the universalization of the singular that Husserl called categorical intuition and which Heidegger reinterprets as formal

indication and hermeneutical anticipation. (3) It is constitutively "always already" and pre-theoretically interpretative such that life embraces more than biological facts as life is mediated by the facticity and possibilities of history, language, and tradition. Criticisms of "life-philosophy" misconstrue Dilthey's project. Dilthey never proposed a self-intuition of life. He called for reflection (*Besinnung*) and recognition of the categorial character of life through the "categories of life."

Despite Heidegger's reemployment of transcendental language in his engagement with Kant in the 1920s, he modified Husserlian and neo-Kantian transcendentalism by rejecting its reliance on an inadequate mathematical-scientific model of theory. He criticized the transcendental ego as an inadequate basis for knowledge. The "I think" is inadequate if not referred to the question of the *being* of the "I am," the "I am" that Heidegger called an originary facticity (1977, 46). Instead of being the founding moment for knowledge, the cognitive attitude of the transcendental subject was founded in relation to a primordial level of attunement with the world (in mood, disposition) and in intrinsically communicative understanding.

Knowing presupposes the "pre-understanding" of the knower in attunement and understanding. Occurring in attunement and movedness, pre-understanding is not a preestablished and monadic prejudice prior to and isolated from communication. This "pre-understanding" of things, the world, and being is their intersection, their event and encounter. It is this communicative crossing prior to reflection and choice but not to worldly relations that orients all understanding, including intellectual inquiry.

Motility does not refer to the intuited givenness of an isolatable bodily organism but the affectivity of a historical being situated within an "effective" or "formative" nexus (Heidegger 1994, 161). Heidegger mentions the effective contextual nexus (*Wirkungszusammenhang*) and generation, which are contexts and nexuses of individual life for Dilthey, to which the individual passively and actively belongs (1993b, 157). The phenomena are never immediately given and received; they are disclosed in myriad ways requiring communication and interpretation. There is no disregarding the facticity of the world, the body, and materiality; Dilthey and Heidegger articulate their inherently interpretive formation.³

The human body is not given and perceived independently of a hermeneutical situation of interpretation, insofar as it exceeds a brute factuality of intuition and a facticity that is understood and interpreted in one way or another. Heidegger's suspicion of the direct intuition or biological explanation of the body, developed from his early critique of popular "life-philosophy" to his later criticisms of

biological and racial interpretations of Nietzsche, situates his reserve with the body, especially a body without a nexus and world of significations. This is insufficient insofar as his critique of discourses of the body emerged from considerations of the way in which Dasein is in its world, how it is as a linguistic and social-historical being. Dasein is a bodily being and, in his early thought, articulated through the categories of life. Following this argument, "the body" is insufficient for interpreting this very bodily being in the world or worldly embodiment.

Conclusion

Levinas criticized Heidegger for starting his analysis too late with pragmatic relations with things, as perception and nourishment are "prior to" such relationships. Still, perception and nourishment cannot be thought of as an attribute of Dasein's being in the sense of a past prior to history and language. They involve a care for self and other, a concern with things and behavior that is aimed at use, and are inherently interpretive via the practical interests of an individual human life (Dilthey) or Dasein (Heidegger) and according to the structures of meaningfulness and their disruption. Heidegger's conversion of intentionality from a guiding principle of a perceiving subject to an orienting comportment of a worldly finite being shows how the "subject" is embodied in a world that is not only physical and material but meaningful, linguistic, and historical. This brings his thought into proximity to the historical-hermeneutical understanding of "life" in Schleiermacher and Dilthey, who recognized that interpreting phenomena immanently from out of themselves requires indirect interpretation and communication in the context of historical life and direct perceptual intuition based in the species' biological life.

Notes

- 1 Compare to (Heidegger 1983, 47).
- 2 Compare to (Chanter, 2001, 81–2).
- 3 Contrast with (Chanter 2001, 12).

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Your Money or Your Life: Using Nietzsche's Critique of Mechanism and Platonism to Defend the Biosphere

Ronnie Hawkins

For a brief while, I "saw" it. That is, I beheld something awesome in the original sense of that word, something that was in constant motion, writhing, coiling and uncoiling, continually transforming in its whirling, kicking, tumbling dance, yet holding steady before me, gently mocking my stupefaction. What I experienced was something in between visual and conceptual, a little like one of the Hindu deities with many waving arms, yet at the same time not quite human, or maybe human and so much more, all of existence vibrating in a ceaseless, throbbing pulse. It was certainly a candidate for terming:

a monster of energy, without beginning, without end . . . a play of forces and waves of forces, at the same time one and many, increasing here and at the same time decreasing there; a sea of forces flowing and rushing together; eternally changing, eternally flooding back, with tremendous years of recurrence, with an ebb and a flood of its forms . . . without goal, unless the joy of the circle is itself a goal. . . . (Nietzsche 1967c, 550)

—in other words, Nietzsche's will to power, the totality of all that is, of which life, as he noted, is a special case, but the one that happens to concern us most primally here on this Earth.

The occasion of the above experience was a gathering of indigenous people, academics, students, and interested others in the Peruvian Amazon several years ago, a ceremony presided over by a Shipibo-Konibo master shaman who had introduced us all to the entheogenic brew *ayahuasca* an hour or so previously.¹ What I "saw," however, differed primarily in vividness from a vision that has long been haunting my mind's eye, a world picture that we of life-blind

industrial culture are only just starting to imagine, arising out of the braille of scientific publications and the imagery of our sophisticated technologies. The "plexus of causes" in which all of us life-forms are entangled is being revealed, and yet—as the ever-optimistic Zarathustra kept discovering, to his recurring disappointment—the great masses of humanity, along with most of our serious thinkers, still grasp it not.

With regard to healing, the shaman taught us this: a healer does not heal the sick by applying a "cause" to produce an "effect." Working with plants, the healer's orientation is one of humility; he or she does not bestow a "cure" upon a passive supplicant. Rather, our guide informed us, the healer is an intermediary, connecting the ill person with the spirit of the plant, an active being in its own right. Some indigenous thinkers scoff at the frenzy of modern, industrialized biomedicine to analyze, patent, and commodify the "active ingredients" of their herbal allies; you can grind up their bodies, turn them into white powders or pressed pills to be exchanged for money, and these may well have "effects" on living bodies, but this process is of a different order than what goes on in a healing ceremony. It seems industrial medicine no longer revolves around respect for beings or the *intent to heal*; in its place, we mostly find an intent to make money.

In the larger picture, the indigenous peoples of the Amazon are engrossed in a desperate effort to save their lands and cultures from destruction by an invading force penetrating ever deeper into their lives. It is part of a global transformation that is rapidly impoverishing our biosphere, a cataclysm now counted as Earth's sixth great spasm of extinction, more rapid and potentially more devastating than the demise of the dinosaurs. So much the worse for our prospects of learning to heal with "the spirits of the plants." Tropical forests, with plenty of moisture and temperatures keeping molecules in rapid motion, are the greatest planetary generators of species diversity and also among the most imperiled; about 70 percent of the world's plant species seem to be falling to the bulldozer blade and the biocide.² This is because of a worldview that sees them as nothing but repositories of "resources" for making "product," an entity so homogenized, so meaningless in itself as anything other than a means to the end of "making money," that we can even dispense with the definite article.

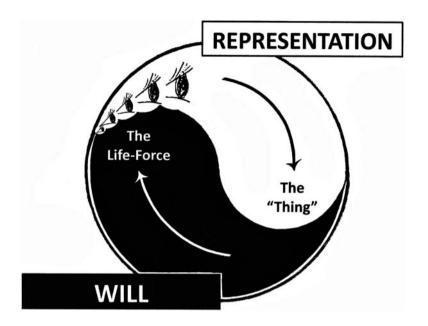
That said, I think the question we have to ask ourselves is "Why?" Why, at a time when we are just beginning to get a glimpse of its magnificent complexity, are so many of us acting to cut the threads binding together the very fabric of life on Earth? Browsing through some of Nietzsche's lesser-known writings, I happened on an aphorism that, as I interpret it, seems both to provide a

rather elegant answer to this question and to suggest how we might move on. Here it is:

The two most extreme modes of thought—the mechanistic and the Platonic are reconciled in the *eternal recurrence*: both as ideals. (Nietzsche 1967c, 546)

Cracking this nut will require some background on Nietzsche, and Schopenhauer before him, as important life-philosophers, since together they lay out an alternative metaphysical/ontological picture that stands in stark contrast to the traditional bulwarks constructed and endlessly reinforced by most of their philosophical predecessors and peers. Despite the tirades against "metaphysics" scattered here and there in his writings—tirades that I generally take to be directed toward the rigid, deadening metaphysics of his day—Nietzsche does, as all of us necessarily do, work within a framework for understanding how things hang together, if only to make sense of the world we live in. His alternative vision was one of turbulence, peopled by myriad living forms, transient and yet eternally recurring, disparate yet somehow united in joyful oneness. I do not claim to be a Nietzsche scholar, but I will take seriously Zarathustra's injunction to "lose me and find yourselves" in trying to work out a better answer to the question "What is there?" than the conceptual boxes that currently constrain our thought.

Though Nietzsche rejected many aspects of Schopenhauer's philosophy, in particular his "pessimism," saying "no" to life because of its turmoil and suffering-Nietzsche turned that judgment on its head with his "holy Yes!"-I see his equation of "the world viewed from the inside" as "will to power' and nothing else" (Nietzsche 1966, 48) as largely reflective of Schopenhauer's metaphysical scheme in The World as Will and Representation. Schopenhauer describes the will as "the innermost essence, the kernel of every particular thing and also of the whole" (Schopenhauer 1969a, 110); representation, in contrast, is the "perception of the perceiver" (Schopenhauer 1969a, 3), the world apprehended by the subject "from without," in the form of "images and names" (Schopenhauer 1969a, 99). Representation is a "surface" our senses and our human reason together paint over the unitary will; we perceive/conceive what we encounter as disjunctive and fragmentary, subject to plurality, causality, and the other Kantian categories of thought. What lurks under that surface, however, is not Kant's "thing-in-itself," but rather the will, something that—far from being unknowable—we happen to have intimate, if nonconceptual, knowledge of, insofar as our will and our body are "one." Schopenhauer thus speaks of two "sides" to the world, an inner and an outer, the latter of which-along with time, interestingly enough-began "only with the opening of the first eye" (Schopenhauer 1969a, 31), an event that occurred long ago in the evolution of life, long before the human being appeared on the scene.



Manifestations of *will* ourselves, we humans actively create a world that seems to consist of a multitude of stable, separate, and even logically orderable "things"—an illusion that Nietzsche spent much of his life trying to dispel—but we are not the only beings to create a representational world. Like Nietzsche, Schopenhauer rejected anthropocentric dualism, recognizing instead a graded continuity in the "degree of objectification"—the degree of complexity of bodily form—by which the embodied *will* of other beings stands revealed to us, as well as in the way intelligence in other beings represents their world to them.³

Schopenhauer's writings are rich with vivid depictions of living organisms as manifestations of will. As apprehended by us, the parts of each one's body are "the visible expression of" the demands and desires of its particular will:

Teeth, gullet, and intestinal canal are objectified hunger; the genitals are objectified sexual impulse; grasping hands and nimble feet correspond to the more indirect strivings of the will which they represent. (Schopenhauer 1969a, 108)

In each living organism, the will is present "complete and entire," as fully in an insect as in a human being, and grades of intelligence exist only to serve the will:

Just as a species of animals appears equipped with hoofs, claws, hands, wings, horns, or teeth according to the aims of its will, so it is furnished with a more

or less well-developed brain, whose function is the intelligence requisite for its continued existence. (Schopenhauer 1969b, 205)

Plants as well as animals are moved by the "blindly urging force" of will (Schopenhauer 1969a, 117), and Schopenhauer supposed them to experience "an obscure self-enjoyment" (Schopenhauer 1992, 82). Since the will within us is said to be identical with that in all other living things, we can know what other beings will, "namely, existence, well-being, life, and propagation" (Schopenhauer 1969b, 204), because we experience a drive toward these ourselves. In nature, however, all the individual wills come into conflict with one another, engaging in ongoing strife, contest, and struggle as "the will-to-live generally feasts on itself, and is in its different forms its own nourishment" (Schopenhauer 1969a,147), producing a horrifying spectacle from which Schopenhauer chose to withdraw.

Something very like Schopenhauer's two "sides" or opposing aspects of reality show up in Nietzsche's first book, The Birth of Tragedy, as the Apollonian and the Dionysian. For the ancient Greeks, the god Apollo represented light and visual form, sculpture, the shifting appearances of dreams, and ultimately human individuation itself, while Dionysus, the god of intoxication, led with rhythmic drumbeats to an experience of "mysterious primordial unity," leaving "the veil of maya"—the illusion of separateness—"fluttering in tatters" (Nietzsche 1967a, 37). In later works, Nietzsche transforms Schopenhauer's modest "will to live"—"For what is not cannot will; but that which is in existence—how could it still strive for existence!" (Nietzsche 2005, 101)—into the will to power, the constant push of everything living not merely to maintain but always to increase and extend and overcome itself. Zarathustra's celebration of the body with its "great reason," to which conceptual thinking is subordinated (Nietzsche 2005, 32), is well known, as are his many naturalistic metaphors, his love for his animals, the eagle and the serpent, and his injunction to "stay true to the Earth" (Nietzsche 2005, 67). In his notes, collected into The Will to Power, Nietzsche is clear that the human will to power exists in continuity with that of all other beings:

In order to understand what "life" is, what kind of striving and tension life is, the formula must apply as well as to trees and plants as animals.... For what do the trees in a jungle fight each other? For "happiness"?—For *power*! (Nietzsche 1967c, 374–75)

Life is struggle, life is suffering, life even "sacrifices itself—for power!" (Nietzsche 2005, 101)—but where Schopenhauer turned away, Nietzsche threw his arms out wide to embrace nature, red in tooth and claw.

Nietzsche's answer, then, to the question "What is there?" seems to be similar to Schopenhauer's, a lively world of beings propelled from the inside, constantly engaged in interactions of domination and submission, each expressing the will to power in its own way. On the basis of this pushing-and-pulling, ebbing-and-flowing metaphysics, he rejects what he calls "the mechanistic interpretation of the world," because it attempts to impose a static lid on the ceaselessly self-transforming "monster of energy." Nietzsche observes that we humans create "things" by freezing the endless flux, stopping the flow by projecting our own longed-for stability of self outward onto what is encountered in the world, dividing it into discrete, uniform, unchanging bits in correspondence with the particulate structure of our language, with its nouns that make everything seem solid and static (Nietzsche 1968b, 38). While a belief in "things" is in fact false, he claims, since all is really in constant motion and nothing is permanent or "the same," those who divided up the world in this erroneous way had a survival advantage over those who were more precise; when it came to recognizing food and dangerous predators, the lumpers among our ancestors were better off than the splitters (Nietzsche 1974, 169-73). But to view living organisms themselves as nothing but reactive machines, merely "adapting" to external conditions-an idea that, he notes, had become fashionable in the life sciences of his day—was to rob life "of a fundamental concept, that of *activity*": "thus the essence of life, its will to power, is ignored" (Nietzsche 1967b, 78-9). Darwinism's assumed passivity of organisms in the face of natural selection thus came under fire: "One should not mistake Malthus for nature," and "Darwin forgot the mind" (Nietzsche 1968b, 75-6).

Nietzsche's critique of *mechanism* is most detailed in *The Will to Power*, a compilation of his notes from the years 1883 to 1888 put together by his sister Elizabeth, at the end of which the famous "monster of energy" quote appears. Walter Kaufmann, editor of the English edition, notes that the section headed "The Will to Power in Nature" has "no close parallels" in Nietzsche's published books. It begins with a criticism of "the Mechanistic Interpretation of the World":

Of all the interpretations of the world attempted hitherto, the mechanistic one seems today to stand victorious in the foreground . . . no science believes it can achieve progress and success except with the aid of mechanistic procedures. Everyone knows these procedures: one leaves "reason" and "purpose" out of account as far as possible . . . in short, one pays heartfelt homage to the principle of the greatest possible stupidity. (Nietzsche 1967c, 332)

Nietzsche maintains that what scientists try to hide under such terms as "pressure" and "stress" requires the recognition of "an inner will," the will to power, analogous to what we experience ourselves:

[O]ne is obliged to understand all motion, all "appearances," all "laws," only as symptoms of an inner event and to employ man as an analogy to this end. In the case of an animal, it is possible to trace all its drives to the will to power; likewise all the functions of organic life to this one source. (Nietzsche 1967c, 333)

One of the aspects of mechanism Nietzsche seems to find particularly offensive is that it is geared toward quantification at the expense of obliterating the qualitative. In order to arrive at a certain quantity of identical units, each "thing" that is counted must be like every other "thing": "The mechanistic world is imagined . . . so as to be calculable-thus causal entities are invented, 'things,' (atoms) whose effect remains constant" (Nietzsche 1967c, 339). The force of the will to power lies in its quality, he maintains, while "in a purely quantitative world everything would be dead, stiff, motionless" (Nietzsche 1967c, 304). Without the "thing," moreover, there is no causality. "Two successive states, the one 'cause,' the other 'effect': this is false"; rather, "it is a question of a struggle between two elements of unequal power: a new arrangement of forces is achieved according to the measure of power of each of them" (Nietzsche 1967c, 337). He thereby dismisses "the two popular concepts 'necessity' and 'law': the former introduces a false constraint into the world, the latter a false freedom.... There is no obedience here: for that something is as it is, as strong or as weak, is not the consequence of an obedience or a rule or a compulsion" (Nietzsche 1967c, 337).

Nietzsche's perspectivism comes into play in his criticism of the physicists' billiard-ball notion of "the atom," and not only because the scientists are projecting their own "perspective" outward but seemingly also because even the atom might be said to have a "perspective" of its own:

Physicists believe in a "true world" in their own fashion: a firm systemization of atoms in necessary motion. . . . But they are in error. The atom they posit is inferred according to the logic of the perspectivism of consciousness—and is therefore itself a subjective fiction . . . —And in any case they left something out of the constellation without knowing it: precisely this necessary perspectivism by virtue of which every center of force—and not only man—construes all the rest of the world from its own viewpoint, i.e., measures, feels, forms, according to its own force. . . . Even in the domain of the inorganic an atom of force is concerned only with its neighborhood: distant forces balance one another.

Here is the kernel of the perspective view and why a living creature is "egoistic" through and through. (Nietzsche 1967c, 339)

All beings, it seems, including what we designate as "the atom," can be construed as "centers of force," each with its own perspective and will to power. In an even more straightforward rejection of traditional ideas about "cause and effect," he asserts, "[t]here is absolutely no other kind of causality than that of will upon will. Not explained mechanistically" (Nietzsche 1967c, 347).

The possibility that Nietzsche's alternative metaphysical framework, which he sometimes refers to, *contra* mechanism, as "the dynamic interpretation of the world," might allow for "other ways of knowing" than those so familiar to us in the Western world is, I believe, well captured in this passage:

"Thingness" was first created by us. The question is whether there could not be many other ways of creating such an apparent world . . . whether that which "posits things" is not the sole reality . . . whether the "effect of the external world upon us" is not also only the result of such active subjects—The other "entities" act upon us; our adapted apparent world is an adaptation and overpowering of their actions; a kind of defensive measure. The subject alone is demonstrable; hypothesis that only subjects exist—that "object" is only a kind of effect produced by a subject upon a subject. (Nietzsche 1967c, 307)

Nietzsche may seem to contradict himself by elsewhere railing against the very notion of a "subject," but I take this in the same vein as his ranting against traditional metaphysics, targeting the notion of "the subject" separated from its actions, the "lightning" existing separately from its "flash." In a world conceived of as "will to power—and nothing besides!" the subject *is* what it *does*, neither "compelled" nor "obeying." And it is upon Nietzsche's "hypothesis" that "only subjects exist" that we might begin to understand the words of the shaman, that it is the spirits of the plants that do the healing.

Nietzsche understood the will to power to extend into the inorganic world, with life being "a special case," but "the form of being most familiar to us" (Nietzsche 1967c, 368). From his published works, this passage stands out:

The question is . . . whether we really recognize the will as *efficient*, whether we believe in causality of the will: if we do . . . then we have to make the experiment of positing the causality of the will hypothetically as the only one. "Will," of course, can affect only "will"—and not "matter" (not "nerves," for example). In short, one has to risk the hypothesis whether will does not affect will wherever "effects" are recognized—and whether all mechanical occurrences are not, insofar as a force is active in them, will force, effects of will. (Nietzsche 1966, 48)

If Nietzsche's metaphysics resembles Schopenhauer's, this tack is not surprising. Schopenhauer says much the same thing: "Hitherto, the concept of will has been subsumed under the concept of force; I, on the other hand, do exactly the reverse, and intend every force in nature to be conceived as will" (Schopenhauer 1969a, 111). "The most universal forces of nature," such as gravity, electricity, magnetism, and chemical properties, "exhibit themselves as the lowest grade of the will's objectification" (Schopenhauer 1969a, 130). The "vital force" of the living "avails itself of and uses the forces of inorganic nature. Yet these forces in no way constitute the vital force, any more than a hammer and an anvil constitute a blacksmith" (Schopenhauer 1969a, 142). Rather, the "higher Idea"—a higher level of organization in the form of a living organism—subdues the lower grades of objectification, taking "possession" of the matter but allowing the inorganic forces "to continue in a subordinate manner.... Thus, for example, we see in the solidifying of bones an unmistakable analogy of crystallization, which originally controlled the lime, although ossification is never to be reduced to crystallization" (Schopenhauer 1969a, 144-5). However, Schopenhauer recognizes "the boundary between the organic and the inorganic" as "the most sharply drawn in the whole of nature," pointing out this "fundamental and essential difference":

In the *inorganic* body the essential and permanent element . . . is *matter*; the inessential and changeable, on the other hand, is the *form*. With the *organic* body the case is the very opposite; for its life, in other words its existence as something organic, consists simply in the constant change of the *material* with persistence of the form. (Schopenhauer 1969b, 296)

What should command our attention, given both Nietzsche's and Schopenhauer's rejection of "the mechanistic interpretation of the world," is that a growing number of scientists as well as philosophers are coming to the same conclusion: *mechanism* does not do justice to *life*. Living organisms display *autopoietic organization*, actively maintaining themselves, and, like the lightning and its flash, "the being and doing of an autopoietic unity are inseparable" (Maturana and Varela 1987, 47–9). Fritjof Capra, echoing Schopenhauer above, notes that "the central characteristic of an autopoietic system is that it undergoes continual structural changes while preserving its weblike pattern of organization" (Capra 1996, 218). Like Nietzsche, Stuart Kauffman criticizes the neo-Darwinian insistence on natural selection's elimination of the "unfit" as the only active process in evolution, instead emphasizing "systems which have their own spontaneously ordered properties" (Kauffman 1993, xv). Kenneth Goodpaster defines *being alive* as a matter of showing "self-sustaining organization and integration in the face of pressures toward high entropy," and he has identified

the appropriate "core of moral concern" as being respect for all and only entities manifesting this condition (Goodpaster 1978, 323). Alexis Pietak has taken on the "three isms"—reductionism, mechanism, and materialism—that have straight-jacketed biological science for many decades, daring to imagine how shifting to a more holistic style of thinking, recognizing the emergent properties of complex systems, and seeing "*Life as energy*" might dramatically change how we understand the world in which we live.⁴

The unity-in-multiplicity aspect of life on Earth was first recognized in Darwin's theory of common descent; its radiation from a common ancestor of three and a half billion years ago is now visible in a striking circular mapping of evolutionary relatedness.⁵ With recent advances in ultramicrography we can now peer deeply into Nietzsche's "Heraclitean flux," watching on our laptops the "stepping" of motor protein dynein⁶ as it walks along microtubules inside living cells.⁷ Even the double helix has to run in place to remain "stable": "What many people don't realize is how dynamic the structure of DNA is," Dr. Jacqueline Barton observed in an interview for the *New York Times*; "The base pairs are always moving and vibrating, electrons are migrating, holes are opening up and closing through the center of the DNA. . . . Nothing stays still for more than a femtosecond here or a millisecond there" (Angier 2004). A group of cell biologists has taken to calling their research into the active, self-organizing processes of living systems "molecular 'vitalism," to emphasize how unlike the mechanistic workings of actual machines these processes are.⁸

With respect to whole organisms, a host of "cognitive ethologists" and others have been making great strides in awakening us to the subjecthood of nonhuman animals. More recently, plants are being revealed as sensing and acting beings with their own forms of intelligence. Darwin observed that the sensitive root tip, "having the power of directing the movements of the adjoining parts, acts like the brain of one of the lower animals"9; contemporary work in "plant neurobiology" is investigating the possibility that meristematic tissue in thousands of root and shoot tips, interconnected by chemical and electrical signaling, may result in "the emergence of intelligent behavior" in a plant (Hall 2011, 147). "Importantly," Matthew Hall concludes, "whatever the current scientific debates, the intellectual basis for treatments of plant life as inert, vacant, raw materials is demonstrably false" (Hall 2011, 156). Recalling Nietzsche's image of a "center of force," environmental philosopher Paul Taylor recognizes all living things as "teleological centers of life," each pursuing "its own good in its own way"-expressing its individual will to power!-and he construes each living center an entity to be respected ethically.¹⁰ The dependence

of our ethics upon our metaphysical/ontological picture of the world should be obvious. As pointed out by Carolyn Merchant, industrial culture's embracing of the mechanistic paradigm—viewing nature as "a system of dead, inert particles moved by external, rather than inherent forces," an event she calls "the death of nature," legitimated the unrestricted manipulation of nature for human ends (Merchant 1980, 193), which in turn has plunged us into the extinction spasm we are undergoing today.

People in the animal rights movement already know the world is full of nonhuman subjects that interact with us, and their ethics is informed by their ontology. So do many hands-on gardeners, who propagate plants and help them thrive, but also take responsibility for weeding when the will to power becomes a little too exuberant for the garden as a whole. Did what I "saw" in Peru have any basis in reality, "outside" of my own perception/conception/visualization? I don't know; there are those who have interpreted similar experiences with an affirmative answer. My intent in participating included learning to enhance my ability to visualize imaginatively, so I'm happy to settle for it as a powerful metaphor. But I do know that the plants and animals I deal with on a daily basis are real, entities in their own right independently of me, because they "push back"—their will to power brushes right up against my own.

If the above has served to explicate Nietzsche's notion (and vindicate his rejection) of "the mechanistic," what can we say about "the Platonic"? My reading is that he objected not only to Christianity but also to the hegemony of abstract reason in Western thought as being antinature, antilife. In Nietzsche's time, Christian theology provided the "afterworldly" meta-narrative that distracted us from the here and now on this Earth. Celebrating our temporal, bodily existence, Nietzsche's message for the nineteenth century was "God is dead!"-an injunction to get our heads out of the clouds and learn to smell the roses. Before the Christian heaven became ensconced in the sky, however, Plato sang the praises of a world of perfection that lay somewhere beyond, abstracted from our imperfect and temporary lives. Nietzsche notes that he "recognized Socrates and Plato as symptoms of decay" (Nietzsche 1968b, 29). Socrates tried to "make a tyrant of reason," ushering in "a new kind of agon," of which he was "the first fencing-master," a dialectician who "devitalizes his opponent's intellect" (Nietzsche 1968b, 32).¹¹ In attempting to do away with the body, with the senses and the "apparent" world they reveal, philosophers trade in "conceptual mummies; nothing actual has escaped from their hands alive" (Nietzsche 1968b, 35); in the "sign-systems" of logic and mathematics, "reality does not appear at all, not even as a problem" (Nietzsche 1968b, 36).

As "Platonism for the masses" (Nietzsche 1966, 2), Nietzsche rails against Christianity's abstract realm where there are "nothing but imaginary causes ('God,' 'soul,' . . .), . . . imaginary effects ('sin,' 'redemption,' . . .)," and so on, an "entire fictional world [having] its roots in hatred of the natural (-actuality!-)" (Nietzsche 1968a, 125). Today, however, our Platonic mode of thought has become the theology of economics. Nietzsche saw the beginning of the progression that led to our present predicament: "what one formerly did 'for the sake of God' one now does for the sake of money" (Nietzsche 1982, 123). Our current meta-narrative, unlike the stories of the Bible, is almost wholly abstracted from the human scene, obsessed with quantification, and increasingly divorced even from logical intelligibility, yet its commandments are obeyed with far less resistance. As John Searle so deftly pointed out, "money" itself is a social construction, a symbol that "exists" only because we all agree to believe it does, an "ontologically subjective" entity.¹² Unlike "the atom," there is not even an independently existing "center of force" for our representation to wrap itself around—a "federal reserve note" is nothing but symbols, all the way down. Today, Nietzsche's rant about the "imaginary causes" and "imaginary effects" of the "purely fictitious world" that "falsifies, disvalues and denies actuality" should be directed not toward "God," "souls," and the forgiveness of "sins," but rather toward "compound interest," "derivatives," and "credit scores." That we would willingly chop down the Tree of Life to make chits for a great Monopoly game in the sky should be enough to make anyone nauseated.

We can now start closing in on an understanding of Nietzsche's provocative pronouncement:

The two most extreme modes of thought—the mechanistic and the Platonic—are reconciled in the *eternal recurrence*: both as ideals. (Nietzsche 1967c, 546)

The *mechanistic* and the *Platonic* are "extremes"; mirror-image twins, they are both human constructions, ways of representing the world spun out by our faculty of language, one a false uniformity and deadness imposed on living nature, the other a realm of pure abstraction with no corresponding actuality at all. In between these two extremes lies the will to power, the turbulent "monster of energy" that feeds on itself, the living reality of embodiment. At best, the two extremes are conceptual bookends, tools we can apply when the occasion warrants, but never to be mistaken for the real thing we would apply them to. These two extremes, being cut from the same cloth, do not require reconciliation with each other so much as they require reconciliation with the world of life, which is the actual world in which we humans are immersed.

It remains only to make sense of this reconciliation "in the eternal recurrence," the interpretation of which is a demanding task for all Nietzsche scholars. Schutte understands it as one of several metaphors for overcoming the dualisms that riddle our culture, healing our alienation from the cyclic patterns and continuity of life, overcoming our resentment against the past (Schutte 1984, 58-68). Williams sees it as "an ideal that enables you to see yourself," reflecting values as a mirror reflects a body (Williams 2001, 115); Zarathustra is struck down, she claims, upon encountering the sudden vision, not only of the small man recurring endlessly, but of himself as well, his own small place within the welter of humanity (Williams 2001, 117-18). Heidegger makes much of "the Moment," the gateway between eternities stretching into the past and the future. The eternal recurrence says "something essential: That which is to come is precisely a matter for decision, since the ring is not closed in some remote infinity but possesses its unbroken closure in the Moment, as the center of the striving"-the Moment "determines how everything recurs" (Heidegger 1984, 57).

Seeing ourselves?—well, perhaps we *would* be struck dumb before our collective image in a mirror. "My God! We're primates who have overpopulated and are now fouling our nest, hypnotized by our own symbols!" The thought should strike everyone ill to the core. The disgust Nietzsche felt toward the small man, the last man, was provoked by humanity's poverty of will, the insipid refusal to engage in any striving toward self-transformation—but in his day the consequences of a mindless stampede to convert the living world into stuff and money had not yet come to light. Today we see them everywhere.

But if Zarathustra is the teacher of the eternal recurrence, he is also the teacher of the *Übermensch*—what the human could become upon crossing the "rope over the abyss." If everything recurs, then the *Übermensch*, as well as the small man, has emerged before and will do so once again. What might this creature will? A knuckling under to an inexorable degradation of life, excused under the guise of "*amor fati*"? Or might the *Übermensch*, in the Moment that determines what will be, decide that we will reverse our ecocidal trajectory?—and in the making of *that* decision, utter the words, "As such do I will it!"

Not everyone will succeed in making that crossing, I fear, but, should we begin now, some part of our species just might reach the other side. In place of

"God is dead," therefore, I suggest a new wake-up call: "Money is nothing!" For indeed, money is not a "thing" at all, while for us, life is everything.

Notes

- 1 For a beautifully illustrated account of some of the visions attained in this shamanistic tradition, see Luna and Amaringo (1991). It should be noted that participation in such a ceremony is not illegal in Peru; however, the issue of whether such interactions with plants should be considered illegal anywhere is one academics should examine. For some pertinent views, see (Nutt 2009) and (Tupper 2008).
- 2 Along with a fifth of all mammals and about a third of all reptile, fish, amphibian, and invertebrate species that are threatened with or imminently facing extinction (Young 2010, 35).
- 3 N. Katherine Hayles presents a somewhat similar "metaphysical" scheme, recognizing the active construction of a "world" by humans and other forms of life via a set of processes she calls "the cusp," through their interaction with what is "out there," which she calls "the unmediated flux" (Hayles 1995, 49–50).
- 4 See Pietak's Life as Energy: Opening the Mind to a New Science of Life.
- 5 See the University of Texas's genetic tree, www.zo.utexas.edu/faculty/antisense/ downloadfilestol.html (accessed August 2012).
- 6 www.youtube.com/watch?v=z2yFlNn2dZc (accessed August 2012).
- 7 Ironically, it is taking some of our most advanced technology—the mechanistic at its best—to reveal how little life resembles something mechanical.
- 8 See (Kirschner et al. 2000).
- 9 As quoted in (Hall 2011, 139).
- 10 See Taylor's Respect for Nature.
- 11 Many of today's analytic philosophers seem to be proud heirs to this tradition.
- 12 See (Searle 1995).

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The Comprehensive Meaning of Life in Bergson

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Translated from the French by Edward F. McGushin¹

There is good reason to consider Henri Bergson, alongside Nietzsche, Dilthey, and Simmel, as one of the major figures in the field of "philosophy of life." Bergson often evoked his very early interest in theories of evolution.² As early as 1896, *Matter and Memory*—his book on the relation between the body and the soul—put in play the central role of the brain as the organ of "attention to life" in the activity of the mind, sketching a conception of the living body (*corps vivant*), i.e. of the body as a "center of action." But it is with the appearance of *Creative Evolution*—the work which established the national and international fame of Bergson from 1907 on (Azouvi 2007, 131)—that Bergsonism is definitively tied to the notion, or more exactly the *image*, of the "vital impetus" (*l'élan vital*). In both the mental and physical sense, it is the thematic of life that asserts itself as essential for all of Bergson's reflections. And it is to the evolution of life that this philosophy returns in 1932 in order to think through the problem of distinctively human sociability, that is to say, moral and religious phenomena.

In many respects, Bergson's philosophy is an attempt to renew metaphysics starting from biological science, which took off in the 19th century, and to found, on new bases, the alliance between science and philosophy that Descartes realized with mathematics. Just as Descartes had taken "mathematics as model and support," Bergson became a student of the life sciences, broadly understood (biological, psychological, sociological). He was not just looking for a model—that of an empirical and experimental knowledge (*connaissance*)—but he also had the aim of elaborating a properly metaphysical signification of the notion of life, born of a philosophical *intuition* conceived as a direct vision of the real.

And yet, despite the link that deeply unites philosophical intuition and life, Bergson's theory of life is not vitalism, as it is sometimes thought to be. And this for two reasons: on the one hand, because life is not the sole problem dealt with in Bergson's philosophy, and on the other hand, because this philosophy never postulates a "vital principle" at the core of reality. First of all, we will recall that, in effect, Bergson presented each of his great books as an "entirely new effort" to treat a new problem (Bergson 2009b, 97).⁴ Hence, the "true nature of life" is neither given nor presupposed in Matter and Memory, and Creative Evolution does not hold all of the keys to the moral problem treated in The Two Sources of Morality and Religion. Moreover, while Bergson really did seek to isolate the metaphysical sense of life, starting from the sciences of life (physical, organic, social), and while he developed this meaning across his different works, he never advanced "life" or "vitalism" as the ultimate, unique, or all-encompassing explanatory principle. The continuity of Bergson's œuvre is foreign to any systematizing spirit, to any will "to take hold of the whole of knowledge virtually in a single principle" (Bergson 2009b, 27).

Therefore, we need to understand that while a philosophy of life really is elaborated in Bergson's works, life is neither a "principle," nor the one and only site of philosophical intuition. The attempt to integrate the sciences of life with metaphysics leads not only to the elaboration of a theory of life, but to the complete revision of metaphysics, that is to say, to a profound transformation of philosophical thought or intelligibility itself. The primary notion, the one that fully expresses this transformation, is not that of "life," but rather that of "duration" (*la durée*).

"Duration" has a double sense for Bergson: an ontological sense—it refers to the intuition that the essence of reality is becoming—which is inseparable from a gnoseological or theoretical sense—referring back to the idea that an absolute knowledge or knowledge of the absolute is a "thinking in duration." This notion constitutes neither the center nor the principle, but rather the obligatory point of passage for all the problems treated by Bergson. For this reason, we should say that it is possible to seize "the true nature of life" starting from duration, but life is not "le tout" of duration. But as we will see, the intuition of duration is born from a certain experience of life and it gives back to "life" the comprehensive meaning that Bergson attributes to it.

Creative Evolution is situated at the heart of this complex problematic. In effect, one finds in this book the elaboration of a theory of life, which, by following the trail of facts isolated by scientific knowledge, arrives at the necessity of a new genre of knowledge. It is also the realization of the limits of our ordinary

intellectual categories, which are incapable of grasping the essence, or more exactly, the whole, of life. This is the reason why the theory of life is inseparable from a critique and theory of knowledge, through which Bergson will be led to specify how science and metaphysics are different and yet complementary, thus demonstrating the respective roles of intelligence and intuition. By remaining at the level of life itself we will be able to explain why our intelligence, which always remains a vital function, naturally tends to misapprehend life and incites, because of this very fact, an intuition which will surpass it.

The aim of this book is to grasp what Bergson calls "the true nature" of life, or more exactly, "the profound meaning of the evolutionary process" (Bergson 2007b, vi). Bergson situates his reflection in relation to the sciences, which take living beings as their object; to the extent that the idea of evolution has become their common presupposition, it is, for him, the obligatory point of departure for any theory about the essence of life. The way one conceptualizes the nature of life—and hence its relations with brute, inorganic matter—is strictly dependent upon the way one conceptualizes the evolutionary process.

On the basis of the first and second chapters of *Creative Evolution*, this essay attempts to outline the essence of Bergson's theory of life in relation to his theory of knowledge and his metaphysics. My intention here is not to provide a summary of all the implications of this theory of life,⁵ but rather to offer, departing from this determinate thematic, some of the keys to his work as a whole.

Living body and duration

In the first chapter of the book, Bergson shows that evolutionary theories generally content themselves with applying traditional notions of finality or mechanism, and this, despite the empirical indications provided by the sciences themselves. Having indicated the inadequacy of traditional notions for comprehending the simple existence of the organized or living body, Bergson goes on to show why they are *a fortiori* worthless for understanding the evolution of life. This is how he is led to propose the image of the vital impulse for thinking evolution, which, on the one hand, breaks with the mechanistic perspective, and on the other, profoundly transforms the teleological perspective.

The line of questioning that opens the chapter actually bears on the modes of existence of entities, and Bergson begins by recalling the results of his previous works. For him it is established that our existence, as we perceive it from the inside or psychologically, is—to speak in absolute terms—uninterrupted

qualitative change, a reality with the defining characteristic of enduring (durer), of persisting through change, of bringing about an irreversible transformation. It is equally established that the material objects of our external perception exhibit the "inverse character" (Bergson 2007b, 7). Our perception fragments material reality into discontinuous parts and attributes change to a modification of the order and quantity of the parts. Science takes up the stance of perception: the succession that it observes, the causality that it postulates (and that it translates into the language of mathematics), reduced to a quantitative change, assumes the character of a reversible time, similar to that of a videotape that one could play backwards in order to return to the first image or to the initial conditions. The mechanical causality of physics is not an absolute negation of time, but rather rests on a concept of time arrived at by abstraction from the real duration. The reversible time of physics is, for Bergson, an artifice designed to conceptualize the set of changes possible in a system. In this perspective, time is not active; it does nothing: "the present contains nothing more than the past, and whatever one finds in the effect was already there in the cause" (Bergson 2007b, 14).

Between the psychological and the material, where should one situate the living body? If it is incontestably a portion of material extension, subject to physical and chemical laws, then it is more than a simple assemblage of parts or points of matter. One cannot adequately describe it by means of categories applicable to the raw material objects that sense-perception and the physical sciences target. Organic unity, on the one hand, tends toward a "certain systematization of parts"⁶ (Bergson 2007b, 14); on the other hand, this unity is primarily the continuity of a "thing which endures (*dure*)," a being whose past "persists in its entirety in its present, remaining actual and active" (Bergson 2007b, 15). The most evident manifestation of this duration, of this persistence through change in the living being, "the register in which time inscribes itself" (Bergson 2007b, 16), is the irreversible process of aging. For Bergson, there is no fundamental difference between embryonic development and aging: it is a matter of one single continuous process, which is the "perpetual change of form" (Bergson 2007b, 18).⁷ Therefore, in a certain sense, there is, in aging itself, the production of novelty, what Bergson names "creation." One should understand by this not a process of fabrication, the production of an object, but rather a transformation, the becoming-other of the organism. In this becoming, the present state encompasses and includes the whole set of past states-one could speak of an organic memory-but without having been given, that is to say, without having been contained in the preceding states as a possibility⁸: it is more than and other than simply the series of preceding states added together; it is the set of these past states *modified*. Bergson had already encountered this concrete duration in his preceding works: in *Time and Free Will* and then in *Matter and Memory* duration defined the essence of psychic and psychological phenomena. It appeared in those works as the essential difference between the living and the dead, the organic and the inorganic. The fundamental characteristic of the organized body is becoming or history: a continuity where the past acts as a memory coalescing with the present (Bergson 2007b, 22) *and* the creation of something novel and previously unforeseeable.

Embryology, histology, theories of heredity—so many domains of knowledge in which becoming plays an essential role. For Bergson, the direction taken by the biological sciences of his time, by making duration appear as a reality, put the received conceptual frameworks of the material sciences to the test—conceptual frameworks which substitute abstract time for concrete duration. It calls for another model of intelligibility, if not in the biological sciences themselves, then at least at the level of a theory of life.

In my view, it is not a matter of disqualifying the physico-chemical approach to organic phenomena, but of showing that in order to elaborate a theory of life one must depart from the (legitimate) path of physico-chemistry. In sum, to think organization is to break with Cartesian mechanism. But it is also to break with the teleology that has typically been seen as the alternative to mechanism. This is what orients Bergson's opposition to vitalism, which, against mechanistic reductionism, attempts to explain the organization of living beings as a function of a "vital principle." These theories, which one finds among certain well-known biologists of the time,⁹ hold that the development of organisms obeys an internal principle, independent of physico-chemical causality, acting within each individual as a final cause and making it take such and such a form of organization.¹⁰ When all is said and done, if the mechanistic view sees the whole course of development already determined by the initial conditions, a teleological view inscribes it in the future; in either hypothesis, duration or real evolution counts for nothing because one presupposes that "all is given" (Bergson 2007b, 39).

Evolution and vital impetus

If mechanism and teleology are incapable of accounting for the evolutionary process characteristic of living beings and organized bodies, what will happen when one applies them to evolution at the level of life as a whole? Beginning with Lamarck, the idea slowly took hold that the relationships and differences established by the classifications of natural history had to be thought according to a temporal order or chronological succession, leading to what Bergson calls "transformism" (Bergson 2007b, 23-4). This lets us see, at the level of the totality of living beings, a series of continuous transformations that, branching off along different paths, give birth to new species, and also to new individuals that in themselves represent an original variation of the species. On a grand scale, it is a process of creating unforeseeable forms. Bergson admits that transformism, or the theory of evolution, remains a hypothesis that cannot be demonstrated. But this is not a fatal objection because it underscores that, on the one hand, the rich development of the life-sciences confers on this hypothesis an "indefinitely increasing probability" (Bergson 2007b, 24) and, on the other hand, that evolutionism has already acquired the status of what we would today call a "paradigm" for the biological sciences.¹¹ Under these conditions, how could a mechanistic conception-the logic of which is essentially predictive and thus focused on the repetition of the same-presume to hold the key to a philosophy or theory of life? Similarly, under these conditions, how could a radical teleology-which conceives of creation as production according to a goal, plan, or model-continue to have meaning?

In rejecting mechanism and radical teleology Bergson is taking a philosophical position, but that position is not the result of mere reflecting on principles. His challenge to them comes about through a kind of crucial experience, over the course of which a series of concurrent scientific hypotheses will reveal the limits of mechanistic reasoning¹² as well as the need for a different understanding of teleology.

This crucial experience involves the question of how the eye develops over the course of evolution. How must one comprehend the process that led to the existence of such a marvelously complex structure?¹³ And especially, how can we account for the fact that one finds *analogous* structures along different evolutionary lines (e.g. the human eye and the eye of certain mollusks), *as if nature had opted for certain determinate organic structures, rather than for chaos*? Bergson's argument shows that, when faced with these questions, all of the mechanistic theories of evolution are invalidated: either they give up the attempt to explain the directions of evolution—and, therefore, of organization itself—or they surreptitiously reintroduce a final cause which explains the directions taken by evolution.¹⁴ This is the kernel of truth contained in the scientific hypotheses: it does not seem possible to rely on a certain teleology to understand evolution, and yet a theory of life must be able to affirm at the same time both that evolution is an unpredictable, "continual creation of forms" (Bergson 2007b, 87) and that it is not, for all that, completely arbitrary.

Each of the scientific hypotheses gives only a partial view of evolution (Bergson 2007b, 85). It is up to philosophy to disengage, at the intersection of the "trail of facts" traced by the sciences, the ideas that they suggest about the subject of life. This idea will not have the transparency of a concept because it takes form at the moment when we let go of our ordinary intellectual categories and swim against the mechanistic current proper to scientific conceptualization. In effect, this is why the idea of life is given by way of an image, the image itself translating the intuition that lies at its source.

Before making explicit what the image chosen by Bergson designates, let us note what he wants to retain from the scientific hypotheses, the elements that he takes to be partial "points of view" on truth (Bergson 2007b, 86–8). From neo-Darwinism¹⁵ (the theory of mutations), he holds on to the idea of a tendency toward internal change, independent of the behavior of the individual; from the hypothesis of orthogenesis,¹⁶ that variations proceed from generation to generation in a definite direction; from neo-Lamarckism,¹⁷ the idea that the directions taken by evolution follow from a nonsubjective, nonindividual psychological causality: from a movement similar to an effort, that is, to an impulse or a will reaching toward the future (François 2008, 55).¹⁸

The image of the vital impetus translates these different aspects of evolutionary development and the organization proper to life. In this image, life appears as a "current" flowing from an original common impulse and which, in moving forward, branches into divergent evolutionary lines (Bergson 2007b, 53)-along which the distinct forms of life, species, and even different individuals are distributed. If you do not accept the hypothesis of radical teleology, how do you account for these divergences, which are organized in these directions? Even when divided, this impetus is no less continuous along those lines where it becomes actual through the accumulation of variations and differences, in the manner of a consciousness wherein the past remains active in the present. The structural similarities that one finds among these distinct lines arises from the fact that all the evolutionary lines have a common origin (Bergson 2007b, 51), as if the latter contained the virtualities (Bergson 2007b, 182) or the tendencies (Bergson 2007b, 51-3) induced to fulfill themselves through a labor of invention and creation. These virtualities are neither spatial forms of organization nor the structures of living beings, but first of all the virtuality of functions. Hence the formation of the eye over the course of evolution could be understood as the result of a "progress of vision"

(Bergson 2007b, 97). Its similarity in very different species simply expresses the acquisition by life, in each of its forms, of one and the same power of vision.

With the image of impetus Bergson is on his way toward assimilating the vital impetus with the stream of consciousness and toward the idea of a properly psychological, though nonsubjective and nonindividual, causality at work in life. First, the vital impetus manifests all the characteristics of the duration proper to psychological existence: unpredictable development, continuous change, qualitative transformation, and irreversible becoming, which is at once both conservation and creation. Second, the division of impetus into divergent directions amounts to the many "choices" (Bergson 2007b, 97) by which the intentions of life-that is to say, the virtualities of impetus-are realized, without these intentions ever requiring the representation of a goal to attain.¹⁹ Finally, saying that the virtualities or internal tendencies of impetus are virtualities of function serves to underscore that life is essentially action in the strong sense of the term, a free activity, which implies an act of consciousness to some degree. In sum, should we say that what is properly vital in life is consciousness (Bergson 2007b, 182-3)? At a conference in Birmingham in 1911,²⁰ Bergson confirms that the relation between life and consciousness is not only one of analogy. He claims that "de jure if not de facto, consciousness is coextensive with life" (Bergson 2007b, 180 and 2009a, 13).

Organization: Life and materiality

Though the vital impetus is a stream of consciousness, life does not express itself any less by its activity of material organization. We have seen that living bodies distinguish themselves from inert material bodies by their organization—that is to say, by a continuity of duration. It is now evolution itself which could be understood as a work of organization, in such a way that the nature of the relationship between consciousness and materiality, constitutive of life, becomes clearer. This point should allow us to specify the kind of relationship that exists in the living being between the function and the system that performs it.

On all of these points, the labor of organization distinguishes itself from fabrication, because the latter is precisely not a creation—"the artisan," says Bergson, "discovers in his product only what he puts in it" (Bergson 2007b, 93). Vital organization is something other than the assembly of means with a view to some end, something other than the arrangement of material elements according to a plan. The act of organization is, in fact, a simple one, which is

accomplished when impulse, like an explosive discharge of energy (Bergson 2007b, 99), encounters matter and seeks to cut a path through it. The resistance of matter makes it both the instrument and the obstacle that divides and clarifies impetus (*élan*) (Bergson 2008, 118), in such a way that impetus (*élan*) must actualize its virtualities in an original way. From this perspective, the material organization of the living body—but also, at another level, the organ, or any living element whatever it may be—manifests itself as the contingent effect achieved by impulsion when it successfully breaks through or "outflanks" the obstacle of matter. The materiality of the living body or the organ "no longer represents an ensemble of means employed, but rather an ensemble of obstacles that have been outmaneuvered" (Bergson 2007b, 94). If one can speak of an adaptation of life to external conditions, it is not in the sense that these conditions would be the *cause* of organic forms—either by direct or indirect actions—but in the inverse sense, where adaptation translates "the original solution, found by life, to the problem which the external conditions posed" (Bergson 2008, 117).

We have said that the original impulsion includes these virtualities of functions, that is to say of action, and that the resistance of matter divides and clarifies this impulsion. Everything happens *as if* the organic function—seeing, that is, capturing light—were this virtuality made actual, active, or effective thanks to the narrowing, to the "canalization" of this power of seeing imposed by matter's inertia. From this point of view, the organ is not the instrument of the function, born of an accidental assembly or guided by more or less complex material structures. The organ, the instrument, is less than all that: "the visual apparatus simply symbolizes the work of canalization" (95), a partial view taken on a simple and indivisible act, the "progress of vision."²¹

Metaphysical import of the image of vital impetus: The meaning of life

In a single phrase, Bergson summarizes the two aspects depicted in the image of vital impetus (consciousness and organization): "Everything happens as if a large current of consciousness—charged like all consciousness with an enormous multiplicity of interwoven virtualities—had penetrated into matter. It organized matter, but its movement was simultaneously slowed down and split up by it" (Bergson 2007b, 182).

The perspective on the evolutionary process that Bergson develops in the second chapter of *Creative Evolution* is a continuation of this image. This process is not a linear progress toward complexity (Bergson 2007b, 136). It is an act which, under the pressure of matter, diffracts itself into a multiplicity of life-forms. Such a multiplicity is nevertheless channeled into three principle directions along divergent lines which Bergson understands as so many different actualizations of a single *tendency to act on brute matter* (Bergson 2007b, 97).²² The focus bears less on the material forms of living beings than on the distinct modalities by which the operation of life realizes itself, that is to say, in essence, the eruption of consciousness. This is the reason why Bergson first distinguishes, in the world of living beings, between the nearly unconscious "torpor" of vegetal life *and* the vivacity of animal life. And second, among animal species, between the quasi-automatism of instinct and the free operation of intelligence (in the great vertebrates and human beings). From this point of view, human intelligence marks the highest achievement of the vital impetus, as if, at this level, life becomes more supple, dynamic, and conscious.

These considerations could have an impact on the biological sciences, but the real stakes of the image of the vital impetus are primarily theoretical and metaphysical; they overturn the philosophical tradition on at least four points.²³

By refusing to comprehend evolution according to the model of "fabrication," the image of the vital impetus neutralizes the model of intelligibility common to mechanism, classical finalism, and ordinary, practical intelligence. In effect, it inverts the perspective, deeply rooted in human intelligence, which leads us to impute positivity to matter and negativity to consciousness or to duration. Here, negativity is on the side of matter, which represents the diminution of the positive nature of the impetus (Bergson 2007b, 211).²⁴ The positive element in the living being is its duration: its becoming, its evolution.

For all that, Bergson does not reinstate a substance dualism.²⁵ The image of the vital impetus implies solidarity between impetus and resistance. This solidarity is essential to vital creativity, to the extent that life singularizes itself by an internal duality of tendencies. Here, philosophy introduces the fundamental theme of the finitude constitutive of life (Bergson 2007b, 254). We experience this finitude in the feeling of effort, that is to say, by way of the resistance that we oppose to the resistance of matter.²⁶

On several occasions we have spoken of the "virtualities" of impetus. Bergson uses the term often in order to qualify the *source* of the directions or tendencies present in the life's evolution, without relying on a traditional teleological model. The creation proper to the vital movement is therefore never *ex nihilo*: it implies virtualities. As Deleuze has stressed, the "virtual" must be carefully distinguished from the "possible," as conceived according to traditional metaphysics and enveloped in the model of fabrication.²⁷ Reality is not the actualization of a possibility, the realization of a plan through reproducing it. It is rather a multiplicity of virtualities of which the actualization requires not only an effort of creation or invention, but also a reduction (*rétrécissement*) or a choice. In this way, actualization obeys a regime of differentiation completely different from the regime of duplication, which in classical metaphysics articulates the real and the possible²⁸: in this way the evolution of life advances toward vision, but under different forms, "in species which have totally different histories" (Bergson 2007b, 87).

Finally, we must understand that in the Bergsonian perspective life no longer has the status of a general concept under which the totality of living beings will be grouped: "we must no longer speak of life in general as an abstraction, or as a simple rubric under which one inscribes all living beings" (Bergson 2007b, 26). Moreover, life is not a "principle" at the foundation of all living beings. Rather life is, in general, more aptly described as a "tendency to act on brute matter" (Bergson 2007b, 97). Its mode of action, however, is not predetermined. Understood in terms of evolution and the image of impetus, it is first of all "the ensemble of a very long history" (Bergson 2007b, 20), "a single, indivisible history" (Bergson 2007b, 37)—each evolutionary path, each species, and each individual life traces its own singular, unique history inscribed in the history initiated by the original impetus. The historicity of life, and similarly the historicity proper to each individual living being—that is to say, its pace as a singular, irreversible, creative and finite process-only appears when one forces oneself to think "in duration." This thinking in duration adopts an inverse approach to the reasoning mobilized by traditional metaphysics, since the latter proceeds, like science, through generalization and categorization. Constructing a theory of life does not mean, as we have seen, neglecting the "lines of evidence" established by the biological sciences, but adopting toward them a comprehensive method which would not make time an abstraction. Therefore, the theory of life aims to grasp "genuine nature" (vraie nature): the latter is not an essence fixed in place by a concept, but the totality opened by a history that the image of the vital impetus expresses.

Intelligence and intuition

Bergson's theory of life is bound up with some firmly held metaphysical positions, but it is far from dogmatic. The rejection of traditional metaphysics—forever too Platonic—in effect gathers its arguments from a knowledge (*connaissance*) which circumscribes the exercise of the mental faculties (*facultés de l'esprit*) according to their direction and their domain of application (Bergson 2007b, 179). Two traits distinguish this critique: first of all, it is not, as with Kant, tied to a priori reflection, but to an experience;²⁹ second, it offers philosophy, or metaphysics, the possibility of a new use of scientific, and in particular biological, knowledge.

Bergson's theory of the faculties deals first with intelligence. As we have seen, the latter is one modality of life's functioning that has arisen over the course of evolution. As with instinct, it is constitutively ordered toward action. But instinct is an immediate knowledge of its object and immanent to action itself, "sculpted to fit life," so to speak. Intelligence, however, proceeds in a mediate or indirect way, in order to know and get a hold on reality. In effect, Bergson defines intelligence as a faculty "for fabricating unorganized instruments, that is to say, artifacts" (Bergson 2007b, 151), a faculty by which the intelligent being acts on matter. Its object is, first of all, the "unorganized solid." Fabrication requires a specific, somewhat formal, externally oriented type of knowledge, which consists in representing relations (Bergson 2007b, 152) between discontinuous elements: a knowledge that envisions reality in terms of space, that is to say, in terms of a "homogenous and empty, infinite and infinitely divisible milieu completely open to any mode of decomposition whatsoever" (Bergson 2007b, 157). Indifferent to duration, novelty, and radical becoming, intelligence "is characterized by a natural incomprehension of life" (Bergson 2007b, 164). It is constituted in such a way that it comprehends inert matter, and anything in any way explicable, as a combination of unorganized solids.

Therefore, the mechanistic outlook roots itself in the operations of an intelligence focused on production all the while attempting to apply itself little by little to the whole of reality. The strength of formal knowledge lies in its capacity to reach every object, including those beyond the range of action (Bergson 2007b, 152). When it distances itself from its practical interest, intelligence is bound by its nature to want to reconstruct the whole of reality as a *system* regulated according to principles or laws, elaborating general concepts from elementary representations. This is the source of the tendency that led human knowledge to the physical sciences and then to a theory of matter, which in many ways served to confirm the most ancient metaphysics, itself based on intellectualism. But how could any metaphysics aiming to encompass the *whole*, or the essence, of reality be established on intellectualism, which precisely has the task of *abstracting*, that is to say of considering reality only *from an established point of view*, outside of any duration?

Bergson's theory of knowledge sets out a double critique: a critique of intelligence and science that circumscribes and measures their reach; and a critique of traditional metaphysics that radically inverts its direction. Although sufficient for the domain of action and the scientific study of inert matter, intelligence reveals its limits, its "clumsiness" (Bergson 2007b, 165), as soon as it has to deal with the life of the body or the mind, organic or spiritual life, that is, with living beings. For Bergson, it is not a matter of refuting the legitimacy of an intellectual approach to organic phenomena,³⁰ but of suspending it when it is time to grasp "the true nature of life," in other words what is properly "vital" in living beings.

In this case, the philosopher will have to take a different (*inverse*) tack than that of intellectualism, which decomposes, abstracts, spatializes, and reconstructs in order to explain. The philosopher will have to become reacquainted with that which disconcerts the intellect but which is, nevertheless, the very heart of life: duration. Bergson designates the effort that goes against the grain of intellectualism³¹ with the name "intuition." It recovers something of the instinct by which activity continues the labor of vital organization without rupture:³² an agreement, indeed, a coincidence with life. Intuition would be like instinct "having become disinterested, conscious of itself" (Bergson 2007b, 178). It is not the pure negation of intellectualism, but a comprehensive movement of enlargement, by which the mind (*l'esprit*) reunites with the life from which it derives its own impetus—and with the evolution in which the direction and limits of intelligence are rooted.

But what is at stake in intuition goes well beyond a theory of life. For the intuition of life is in essence an active hold on duration in the experience of life, the whole metaphysical weight of which, its status as absolute reality, Bergson put forward as early as *Matter and Memory* (Bergson 2007b, 338–9 and Bergson 2010, 232–3). The "comprehension in duration" of intuition can, in effect, expand to matter itself, which finds its place in the infinite plurality of "rhythms" or "tensions" of duration (Bergson 2009b, 95). In this way, intuition as the experience of duration is the point of departure for a philosophical act that breaks with traditional metaphysics.³³

In fact, it is by an act of intuition that "life" (Bergson sometimes says, "the biological") acquires its profound significance, or more precisely the "very comprehensive" meaning that scientific explication foresees but cannot reach. Traced back to duration, the notion of "life" can integrate the different dimensions that ordinary language spontaneously gives to it when speaking about organic *life*, psychic *life*, or social *life*.

But coming to an end, we have to add that the philosophical act would never reach the absolute if it were not the continuation or integration of multiple experiences we have of life, within us and outside of us.

Intuition would thrust us into consciousness in general. But is it only with other consciousnesses that we sympathize? If every living being is born, grows, and dies, if life is an evolution and if duration is here a reality, is there not also an intuition of the vital and, consequently, a metaphysics of life that will extend the science of the living? . . . the fundamental cause of organization . . . do we not reach it by recapturing through consciousness the impetus of life that is within us? (Bergson 1934, 28)

For it is in the most intense experiences of life, those that break the frameworks of our categories and intellectual habits, that we come back in contact with creative duration: the free act, emotion, artistic creation, and moral creativity (*la création moral*).³⁴ If the notion of duration is the crossroads of all the problems taken up in Bergson's metaphysics, it is, nevertheless, starting from our experience of living beings that we are able to grasp its scope and meaning.

Notes

- 1 The translator would like to thank Christian Martin for his invaluable assistance and Scott Campbell for reading drafts line by line to make this a much better translation.
- 2 In particular for the work of Herbert Spencer (1820–1903), who was committed to a mechanistic view of the world and who attempted to elaborate an evolutionary theory that could serve as the basis for defining the "principles" of psychology, biology, sociology, and ethics. Though he held on to Spencer's idea of a knowledge "modeled on the details of the facts," Bergson nevertheless vigorously rejected what he quickly came to think of as a "false evolutionism" (Bergson 2009b, 2 and Bergson 2007b, x, 363–9).
- 3 "Psycho-physical parallelism and positive metaphysics," discussion at the *Société française de philosophie*, May 2, 1901 (Bergson 2011, 259).
- 4 See *La pensée et le mouvant: Introduction, Deuxième partie. De la position des problèmes.* Each work offers to those that follow certain results, but each is organized around a different problem and constitutes an entirely new creation.
- 5 Notably its implications for anthropology and practical philosophy, which we take to be very important (Caeymaex 2012, 311–33).
- 6 This very important and original thesis links living (*le vivant*) to a process of individuation and not to strict individuality—which is "never perfect" according to Bergson (Bergson 2007b, 14).

- 7 Perhaps it is not possible to establish a rigorous distinction in organic life between the creative and destructive processes. This distinction has an essentially quantitative sense, signifying growth and diminution respectively. Bergson substitutes for this view that of a qualitative change (change of form), where creation means at once continuity and change.
- 8 For the critique of the notion of the "possible," see notes 24 and 25 below, as well as (Bergson 2009b, 99–116) ("*Le possible et le reel*").
- 9 Doctrines called "neo-vitalist" that postulate, alongside mechanistic processes, an independent vital principle: the "entelechies" of biologist and philosopher Hans Dreisch (1867–1941); the "dominants" of botanist, theist, and reactionary Reinke (1848–1931).
- 10 In addition to the indeterminacy of the notion of the vital principle, which by itself does not explain anything, this thesis of Aristotelian ancestry is inconsistent, like every theory that wants to make finality a principle internal to the individual. At what level will we effectively situate individuality: the organized body, the organ, or the cell? Bergson's idea is that if life is organization in the sense that it tends to produce systems, it is impossible to designate a sole organic entity as "individual," absolutely speaking. The cell itself is already "organized" and forms an organization with other cells. In these conditions, where individuality is never "perfect," there could be no "internal" finality (Bergson 2007b, 14 and 42–3).
- 11 "We suspect that the language of transformism now imposes itself on every philosophy, just as the dogmatic affirmation of transformism imposes itself on science" (Bergson 2007b, 26).
- 12 In the critical sense of the term. For Bergson it is not a matter of denying the legitimacy of a methodologically mechanistic approach to organic phenomena by the physico-chemical sciences, but of defining the field of application for this approach. It will become clear that another approach altogether will be necessary to comprehend "the whole" of life.
- 13 See (Bergson 2007b, 61-3).
- 14 The theory of "accidental variations," whether they be gradual or abrupt, whether or not they rely on an environmental selection (or adaptation) to take place, do not explain *how* the variations are maintained and add up in such a way that they produce the eye as an *effect*; it [i.e. the theory of accidental variations] does not explain either how such different causal series could result in similar or analogous effects, *except by bringing in, implicitly, the genie of species* which secures the arrangement. The same holds for the idea that the variations could be the direct effect of external conditions: must one say that the formation of the eye—an organ adapted to use light—is caused by the action of light? Obviously not. In fact one admits that organic matter possesses a "*sui generis* capacity" for "building machines . . . for taking advantage of the simple excitation the influence of which it receives:" another name for the final cause.

- 15 Hugo De Vries (1848–1935), Dutch botanist, cytologist, and hybridist, attempted to explain variations in species by the phenomena of "mutation" through the hereditary transmission of "pangenes" at the cellular level.
- 16 Theodor Eimer (1843–98), zoologist, countered the Darwinian idea of random variation with the idea of a variation operating in a determined direction (the idea of orthogenesis), resting on a physico-chemical causality.
- 17 Bergson, despite his vigorous opposition to the idea of heredity of acquisitions (*l'acquis*), nevertheless referred to the doctrine of Edward D. Cope (1840–97), known for his work in paleontology and embryology, who in a novel way countered the Darwinian theory of natural selection and understood evolution from an "energetic" perspective (clearly the point which influenced Bergson).
- 18 The notion of impetus refers back to the dimensions of time or the duration of a consciousness. If impetus looks like a will, it is so insofar as consciousness tends toward the future (François 2008, 55–71).
- 19 Bergson explicitly uses this experience in *The Two Sources of Morality and Religion*, in a key passage where, in order to clarify them, he returns to the ideas that he intended to convey via the image of the vital impetus (Bergson 2008, 115–20). He specifies, and this is very important, that one must not give an anthropomorphic sense to this notion of intention, because intention here is not at all the representation of a goal to attain, but rather a virtuality implicit in the original impetus. We could add that Bergson emptied this term, like that of consciousness, of all subjectivist signification.
- 20 The lecture is entitled "*La conscience et la vie*" (Henri Bergson 2009a, 1–28). The analogy is not immediate and assumes a detour through the external world (Riquier 2009, 388–93).
- 21 Bergson elaborated this idea with respect to the subject of perception in *Matter and Memory*, which he explicitly refers to in *Creative Evolution* (Bergson 2007b, 94): vision would be "a power which would accomplish, *rightfully*, an infinity of things.... But such a vision would not last in action.... The vision of a living being is an effective vision, limited to the objects upon which the being can act: it is a canalized vision...."
- 22 These three modalities of life are contained in the initial impulsion as virtualities, and their development comes about in the form of a dissociation: "Vegetative torpor, instinct, and intelligence, in sum elements which coincided in the vital impulsion common to plants and animals, and which, over the course of a development where they came forward in the most unexpected forms, broke away from each other by the sole fact of their growth (*croissance*)" (Bergson 2007b, 135–6).
- 23 These are fundamental themes that one discovers in the later writings where Bergson specifies the nature of his metaphysical project, notably in the double introduction to *La pensée et le mouvant*.

- 24 Bergson is a thinker of dualities, but not a dualist.
- 25 On this point, as well as on the status of the negative in Bergson, see (Jankélévitch 1959) (Caeymaex 2008, 629–40) and (Caeymaex 2010, 261–83).
- 26 See (Bergson 2009b, 99–116) and (Deleuze 1966, 99–103).
- 27 See (Bergson 2009b, 5 sq. and 19). Here "comprehending" means expanding the habitual logic of our thinking in the direction of duration.
- 28 In the *Introduction to Metaphysics*, Bergson shows that his method does not proceed by way of generalization but rather by way of integration and that metaphysics can be understood as "integral experience" (Bergson 2009b, 227).
- 29 Bergson admits in effect that the physico-chemical approach to organic phenomena finds its verification in the analysis of the functional activity of the living being (Bergson 2007b, 36).
- 30 Which is a torsion of intelligence on itself (Bergson 2007b, 162).
- 31 "Because it only continues the work through which life organizes matter, to such an extent that we could not say... where the organization ends and where instincts begins. When the little chick breaks its shell with one peck from its beak, it acts instinctively, even though it only follows the impetus which propelled it during its embryonic life" (Bergson 2007b, 166).
- 32 As Fr. Worms wrote, intuition is "the apprehension of the meaning of life of which human intelligence is the concrete incarnation" (Worms 2004, 224).
- 33 We have already noted some elements of this critique of metaphysics. This is also what is at stake in the final chapter of *Creative Evolution*.
- 34 These three vital experiences are clearly privileged by Bergson as inferior or superior intuitions akin to philosophical intuition. Free act, artistic creation, and emotion are thematized throughout Bergson's work. In *The Two Sources*, mystical intuition comes forward as the most intense intuition, the one which culminates in the highest form of creation: moral creation (the creation of moral sentiments).

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Part II

Converging Technologies

Information, Self-Reference, and the Magical Realism of "Life"

H. Peter Steeves

On Wednesday night, as they did every Wednesday, the parents went to the movies. The boys, lords and masters of the house, closed the doors and windows and broke the glowing bulb in one of the living room lamps. A jet of golden light as cool as water began to pour out of the broken bulb, and they let it run to a depth of almost three feet. Then they turned off the electricity, took out the rowboat, and navigated at will among the islands of the house.... And so they continued sailing every Wednesday night, learning how to use the sextant and compass, until their parents came home from the movies and found them sleeping like angels on dry land....

(García Márquez 1993, 57-61)

Light is like water. We live in the waves; we live off the particles. Their depths gave birth to us, to a world of gifts and instruments, of truth and fiction, and of blurry borders in between.

At the start of his autobiography, Gabriel García Márquez makes the blurry borders clear: interpretation is everything. "Life," he writes, "is not what one lived, but what one remembers and how one remembers it in order to tell it" [my translation] (García Márquez 2002, 1). Let's call this our first definition of life—unscientific and messy. And let's admit that there is nothing magical about magical realism. The genre marks, phenomenologically, an attitude, a *taking as*, that ushers in a new world. It is a world where Maxwellian demons with Spanish accents flood rooms only partially with light, keeping watch over counterpart human angels on dry land. It is our world, we who are alive.

To paraphrase Aristotle, "life" is said in many ways. Most attempts to define "life" run aground on familiar shores—or furniture, as the case may be. Common to most of them, however, is a sense of self-made destiny. Against Aristotle, there is little teleology these days in our understanding of life, unless that teleology is itself self-constituted. But what is lost when teleology is lost? Perhaps the universe did not mean to create life—it certainly did not *mean* to create humans—but in tossing out all talk of purpose and destination in our discourse we overlook the possibility that the definition of "life" might best be had by looking at what it does rather than what it is. Even the most hearty and strapping definitions of "life" are ultimately too boot-strappy and too without heart.

Traditional wisdom suggests that a thing is alive if it is autonomous, if it metabolizes, and if it reproduces itself. Immanuel Kant saw the difference between a machine and an organism to be that in a machine the parts exist for each other but not by each other; their operation has nothing to do with building the machine. The parts of an organism work together but also produce the organism: each part is cause and effect, and in this sense an organism is, for Kant, a self-organizing entity (Harold 2001, 220). More contemporary definitions give their own twist to this basic template. Lynn Margulis and Dorion Sagan see life as that which is autopoietic (Margulis and Sagan 1995, 24). From the Greek for "self" (auto) and "making" (poiein), autopoietic life continually produces itself, engages in self-maintenance. Stuart Kauffman defines life as an emergent property of an autocatalytic set of chemical reactions that is self-reproducing and capable of performing at least one thermodynamic work-cycle (Kauffman 2000, 4 and 35). And Johnjoe McFadden takes life to be "a system that uses internal quantum [self-]measurement to capture low-entropy states that sustain the state of the system against thermodynamic decay" (McFadden 2001, 258). In each of these definitions the key concept is one of self-reference. Life is taken to be something special, something that is made from nonliving parts yet as a whole is somehow self-made. The words "auto," "self-making," "self-measuring," and "self-reproducing" are the key terms. And they are all reflexive. Life becomes life by doing something to itself.

Philosophy has made a career of studying self-referentiality. For 2,500 years, Western thought has puzzled over, and turned in a crisis to, the self-reference. There seems to be something almost magical about it. It defies logic and appears on the scene to get us out of all sorts of binds. It is both trickster and savior.

In ancient Greece, the liar's paradox was well known. Whenever a liar claims something to be true, it is easy to know that it is in fact false. Unless the liar claims "I am lying." When the liar refers to himself in a sentence that refers to itself, all hell breaks loose. Seeking to tame the self-reference, René Descartes turned it into the foundation for all epistemology in his search for apodictic knowledge. Descartes found he could doubt everything he had ever been taught, everything that his senses were telling him was real, whether he was dreaming or awake, whether or not he had a body, even all of the claims of math and geometry. There was, in the end, only one thing that Descartes could not doubt: the fact that he was doubting. To doubt one is doubting requires an act of doubting and thus proves that one in fact is doubting. And given that Descartes was now sure that he was doubting, even if that doubting were going on in a dream or as a brain in a vat being tricked by a mad scientist, Descartes knew he must in some sense exist. I doubt—I think therefore I am. The self-reflexive *cogito ergo sum* thus formed the foundation for all further knowledge—and generations of philosophic inquiry.

Edmund Husserl updated Descartes nearly three centuries later, arguing that the mind is always directed and that if we wish to unlock its very structure we need only bend consciousness back upon itself thus making the object of consciousness consciousness itself. By undertaking a phenomenological *epoché*, we can consequently come to investigate intentionality (i.e., the mind's structure as it is necessarily directed toward some object). Jacques Derrida, who came from this phenomenological tradition even as he criticized it, would later go on to claim that everything is ultimately self-referential because "there is nothing outside of the text." We are all caught up in a hermeneutic of being and can find no place *outside* to comment objectively on anything. Even Niels Bohr once said that we must never forget that in the drama of existence we are ourselves both actors and spectators, the audience to our own performance—and then he went back to working on the Manhattan Project, building bombs in order to build peace.

Philosophers outside of the continent are also preoccupied with self-referentiality and the contradictions and foundations it creates, though in a more analytic way. Studying the logic and the language of self-reference, Gödel discovered that given any axiomatic system as or more thorough than arithmetic, there will be some statements that are true while at the same time cannot be proven true (cannot be derived from the axioms). These special statements are, of course, self-reflexive—as interesting set-theory statements often are. One way, crude but in the right spirit, of understanding Gödel's insight would be to imagine a book that would compile all books within its covers. It would have everything García Márquez ever wrote, every edition of Shakespeare, all of James Joyce, every book ever published anywhere. Yet it would always be incomplete because once all other books were finally compiled, it would still be missing one

book—namely, itself. And if we were to put a copy of itself inside its covers (thus doubling the contents) it would still be incomplete, because now there would exist a new book (its newly expanded self-edition) that would still be missing.

The move to self-referentiality is always done with flourish. It marks the demise or the salvation of a system of thought, but always something importantly system-shattering. Our preoccupation with self-reference, though, has its historical roots: it rises from a preoccupation with the self. "Autonomy" is neither an ancient nor a natural term. Seeing things as separate, self-sufficient, and self-directed has a political and metaphysical history. In the seventeenth century this radical individualism took a secure hold on our culture in the form of liberalism. Descartes' isolated monadic self-thinking self would be the start of all modern Western metaphysics and epistemology. Thomas Hobbes' isolated, selfish, and equal creatures warring in a state of nature would found all social contract theory, which is to say most political theory in the West. Galileo and Newton's mathematization of the natural world and conception of objectivity as the opposite of subjectivity would set the standard for scientific inquiry. In each of these projects of liberalism, the Other subsequently becomes a nuisance in the search for truth, knowledge, and security. Philosophy consequently undertakes a foolish centuries-long project of proving the existence of other minds; democracies spring up in which I am inexplicably most free when I am most left alone. Communities-being inherently with Others-are vilified. And thus when we go to define "life" scientifically, we "naturally" start by seeing whatever is alive as radically individual, a unit, an autonomous thing; and we see the spark that brought it into being as necessarily self-given. For what else is there apart from the autonomous self? Life, for the liberal, is an individual enterprise.

[F]iremen forced the door on the fifth floor and found the apartment brimming with light all the way to the ceiling. The sofa and easy chairs covered in leopard skin were floating at different levels in the living room. . . . Everyone's toothbrush floated in the bathroom, along with Papa's condoms and Mama's jars of cream and her spare bridge, and the television set from the master bedroom floated on its side, still tuned to the final episode of the midnight movie for adults only. ¶ At the end of the hall, moving with the current and clutching the oars, with his mask on and only enough air to reach port, Totó sat in the stern of the boat, searching for the lighthouse, and Joel, floating in the prow, still looked for the north star with the sextant, and floating through the entire house were their thirty-seven classmates. . . . For they had turned on so many lights at the same time that the apartment had flooded, and two entire classes at the elementary school of Saint Julian the Hospitaler drowned on the fifth

floor of 47 Paseo de la Castellana. In Madrid, Spain, a remote city of burning summers and icy winds, with no ocean or river, whose landbound indigenous population had never mastered the science of navigating on light. (García Márquez 1993, 157–61)

Water is like light. We die in the waves. Communities, especially, are precarious; they are more thing-like than people. The current may carry condoms, the TV may float by with sex on the screen, but whatever gives life also takes it away in a science few of us can every truly master.

I recall watching Carl Sagan on TV in my youth pour the elemental ingredients of a human body into a large glass box—mostly water, of course. He stirred it up, smiled in that way that he smiled, and asked why nothing was alive in there. The same sorts of questions had already been haunting me for years: what are we, where did we come from, what makes us alive, how did the cosmos begin, and what is this all for? My childhood answer to Carl's question about animating the stuff of life went back and forth between "soul" and "electrical-chemical energy." These seemed to me the two possible poles, divine and secular, and I flitted back and forth from one to the other with youthful life-force and indecisiveness.

The image has stayed with me all of these years: what was missing in that box? Order, of course. One cannot put the parts of an airplane on a runway and wonder why nothing takes off. But it seems to me today that there might be something more deeply problematic with the question itself. The chemicals that Carl stirred in his box were of just the right proportion to make a single human. One way or another, we are still searching for how that one, single, solitary, unitary, autonomous individual came to life: the first cell, the first strand of DNA, the first self-replicating peptide. And this is all very liberal.

Sometimes the liberal worldview in the search for life's origins is explicit. In trying to understand the birth of the first gene and of the first cell, for instance, zoologist Mark Ridley uses the ideas of liberal political-philosopher John Rawls's *A Theory of Justice* to explain why too-selfish genes do not arise (Ridley 2001, 197). More often, however, the assumptions are implicit. We are looking for that one thing that was first alive: the ur-Eve to us all, or—to mix mythological metaphors—that first Venus rising from the foam within the cell of her half-shell, alone in some warm and frothy little pond.

But what if the assumptions of liberalism are all wrong? What if I *am* the point of overlap of my roles and relationships? What if I am not prior to the Other, nor definable without her, for what it means to be an individual is to be in community, to be tied to and constituted by my communal enmeshment?¹ What

would it mean, then, to be the first living thing? Without a biosphere, without an ecological environment, without an Other? When we imagine the first living thing, is our liberalism shaping our experiments and our models? Are we looking for a Hobbesian peptide in a state of nature, a Cartesian RNA-self in radical isolation in a little pond, a Leibnizian mound of monads in the cell-bubbles atop a 4-billion-year-old percolating ocean? Is the myth of the capitalist's self-made man rewritten as the myth of the first self-made molecule, pulling itself up by its own bootstraps to make it in the big-time like a mitochondrial Bill Gates? Perhaps we need a radically new model of individuality before we can find the first individual instance of life—before we can even define that for which we are searching.

In 1906 Ludwig Boltzmann committed suicide. He had been instrumental in showing how entropy had to do with probability and thus information, arguing that the laws of thermodynamics would be true only for systems with an infinite number of particles. After Boltzmann's death, physics student Ludwig Wittgenstein decided to leave Germany and instead study philosophy in England. Suicide is not an action that affects a mere individual.

Wittgenstein would make a name for himself early in his career as a philosopher of individuality. Taking up the project of logical atomism, his *Tractatus* sought to found language (and epistemology and metaphysics) on a set of basic atomistic axioms, on a simple denotative theory of language mirroring the world. Later in his life—after a stint away from higher academics, after years of teaching young children—he would realize that meaning is only achieved in community, in context, thus developing the idea of the "language game" in his *Philosophical Investigations*. It was a journey from the one to the many. The *Tractatus* was written in part in the trenches of World War I; the *Investigations* in a kindergarten. The context may indeed be relevant. But constant throughout was Wittgenstein's insistence that there are no private languages, no possibility of meaning, of information, in isolation.

Information theory has become *the* way to investigate the origin and the nature of life. But like the assumed individuality of liberalism, such inquiry is poorly founded. What goes unacknowledged is that information requires a community and a context. "Information" is a term that has come to be nearly synonymous with all good things even outside of science, but this is a sign of a society that has commodified knowledge, reified it into something that can be exchanged on a market, and let it stand in for wisdom. Some people, for instance, believe that they have the wisdom of the world at their fingertips because they have access to the Internet. But a glut of information does not lead to wisdom (gluttony is, in fact, a vice).

One way to parse out the problem is by thinking through Erwin Schrödinger's attempt to explain the underlying structure of life. Schrödinger realized that if genes were built from merely a few hundred or a few thousand atoms there would be such great statistical fluctuation when those genes reproduced that the mutations would eat away at the base inherited information and destroy any real possibility of an inheritable "essence" across time. That is, with only a few atoms making each molecule, the chances of the atoms combining incorrectly in the next generation would make it nearly impossible for the gene to reproduce *itself* to any great extent. The "information" would not be secure.

We could think of Schrödinger's problem this way: imagine that we are a race of gamblers who want to tell our future generations all of the gambling truths we have learned, but we cannot come out and tell them directly. Instead we must encode the knowledge in a packet of so-called information and hope future generations see the truth in front of them. Suppose, then, that the message we want to get across time is that snake eyes tends to come up only once every 36 rolls of the dice in craps, so it is typically not a good bet. If the packet of information we send in order to advise our future generations is a record of the outcome of only 36 rolls of the dice, we can expect a statistical fluctuation of about 6 (the square root of 36). The fluctuation, that is, will be 6/36 or 17 percent. Consequently, there is a possibility that the sample will fluctuate so much that the truth we wanted to pass along, the truth we hope they will see about the bad bet, will not be evident to anyone looking at the information. Two ones might never come up—or have come up several times—if we only throw the dice 36 times and record each result. However, if we roll the dice 100 times and record the results, the fluctuation will only be about 10 percent. And better yet, a record of 1 million rolls will yield a tiny .1 percent fluctuation. That is, the greater the sample, the less the deviation of the snake eyes roll from 1:36, and the clearer-at least so goes the hope-the meaning of the information. As the sample approaches infinity, we might say that the message gets asymptotically clearer: more data tends to create a clearer message. Thus we roll the dice a trillion times, record the number of times we get snake eyes, and pass this along to our progeny, hoping that they will see just how close that result is to 1 in every 36 rolls and thus what a hard number that is to make in craps.

The genes, though, pass along their instructions for making a new organism with a transcript showing only a few dice rolls—they are made with relatively few atoms. And yet that information is somehow clear. What Schrödinger realized is that the origin of the order, of the clarity, must be somehow deeper. His suggestion—presaging Watson and Crick's discovery that the *structure* of the DNA molecule's double helix was important to its information content was that the form of the molecule would end up carrying part of that ordered information content. Crystals, for instance, have a set structure to them, with their atoms in a precise lattice formation. Such a formation would be a prime candidate for a template of life but for the fact that crystals are so overly ordered that their structure cannot carry much information at all (one part of the crystal is just like all the other parts; a simple algorithm could describe how to build one and thus little information can be stored). But an aperiodic crystal has a rigid structure without a regular pattern and thus, potentially, could be a greater conveyor of information. Schrödinger suggested, then, that the stuff of life would likely be aperiodically crystalline in form, and that the aperiodic structure itself and not just the atoms that were being structured—would encode important information. As a bonus, quantum fluctuations in the atoms comprising the crystal would likely lead to small mutations with each generation, thus finishing out the Darwinian picture.

Of course, Schrödinger was wrong about the details. But he was right about the big picture. He was right that the medium is part of the message. For now, though, I would like to focus on what we mean by "information" in such a context, for this is all, so far, a likely story.

The information content of a signal is often defined as the number of yes/ no questions that have answers that could be coded in that signal. As such, information in general is never infinite. Indeed, most theories of quantum gravity, incomplete though they are, conclude that spacetime is not continuous but rather, on "the Planck scale, space appears to be composed of fundamental discrete units . . ." (Smolin 2001, 169). There is a smallest length, and thus a finite amount of information the very structure of spacetime itself could contain.

Here, then, is the first indication that information and meaning are radically separate. Information is necessarily finite; but since contexts are infinite, meaning infinitely exceeds information. Put another way, the data from dice rolls might be thought of as information, but what to do with this, what it *means*, is something more—something that cannot be captured in terms of information theory. It is not that the informational content of the record of the dice rolls contains within it a predetermined set of possible yes/no questions. Rather, with each new context we bring to the record, a new set of questions presents itself: the information itself changes. One might think of this in terms of Thomas Kuhn's understanding of the structures of scientific revolutions. Once a new paradigm takes over, the old data appears in new ways, means new things. Equipment and experiments are designed to expose new parts of the world, and the answers

75

they receive will be partly determined by their own asking. This is the nature of a context. All possible contexts are not pre-statable; consequently what something can mean is not pre-statable. If we look, then, at only the information content, we are overlooking precisely what is important.

Again, to put it another way, all the information in the world cannot equal meaning. Even as the amount of information approaches infinity there is no guarantee that any message will be clearer. Surely a record of 100 dice rolls will show the statistical breakdown of how often snake eyes appears more thoroughly than a record of only 36 dice rolls. And a record of a trillion dice rolls piles on more information. But unless the reader, the interpreter, the Other, knows what to be looking for, all the information addition in the world will not make a difference. Imagine showing someone the record of 100 dice rolls and asking "Do you get it?" only to be met with "Do I get what?" We show them a record of a million dice rolls and ask "Now do you get it?" only to be met with "Do I get *what*?!" We show them the record of a trillion dice rolls, a quadrillion, a googol, but the conversation remains at a dead end. It might be thought that in such cases what we require is more information, but increasing the information in the signal is not the answer. Meaning and context are not at all functions of information. Indeed, there is nothing objective about information. A text and a reader co-construct information. What something means-if something means anything—depends on what I bring to the table as much as what is already there at the table. And when it comes to how the building blocks of life first came together, information theory cannot account for the context of what is read from those blocks.

When García Márquez is telling his own origin of life story—that is, how his own mother and father came together—he writes that his mother's family disapproved of his father's interest in their daughter, and so they took her away from town, traveling across Colombia, from village to village, in order to keep the girl hidden. But love—like life—will find a way, and the two kept up their communication and thus their romance by secretly speaking through the telegraph machines at each stop. There was a code. She would first ask "Are you my godson?" He would answer falsely, "Yes." They would know, then, that it was their one true love on the other end, still waiting, still longing.

How much information is in this little story? How many yes or no questions could be asked and answered about it? Within the story, how much information is encoded in the question "Are you my godson?" One cannot know what the question means to the boy on the other side unless one knows the context. And this is radically different from thinking that one cannot know what ATGCCA means until one cracks the code of the triplet sequence and how codons code to build one unit of a protein's structure. To see nucleotides written as information is to assume that there is one thing that they mean, that they refer, that they denote. This is a remnant of Platonism we must move beyond. To hear the telegraph crackling is to realize that there are many things that the scratches can mean depending on who is listening and who is sending. Indeed, even the noise on the line is not fairly thought of as "negative information," because it can come under scrutiny at some later date when the context makes it relevant and thus changes its status from noise to meaningful sound. Context carves up an ever-malleable world.

It is tempting to think that the reason an airplane does not take off when we dump all of the airplane's parts on the runway is that the information concerning how to assemble the plane is missing. But the reason plane-parts do not fly and random amino acids do not create peptides that reproduce and metabolize cannot be captured by information theory-and it certainly cannot be captured by an appeal to why one individual thing is not doing what we want it to do. Until we reevaluate our metaphors and our assumptions, prebiotic chemistry and the search for the origin of life will always come up short. Life, in the end, must be understood in a new way that structures the scientific search itself-perhaps as more of a verb than a noun, always as something that involves a community of things all at once, forever dependent on context and what life accomplishes by being life. Like magical realism, it seems at first fantastic—like light being a wave without a medium—until we realize that all of the stories we tell inform, implicitly or explicitly, the way in which we start to tell the story of science, too. It is thus that we can appreciate that there is nothing magical about magical realism. Its world is our world. And from it, every once in a while, something suddenly yet reasonably takes flight.

In García Márquez's story, "A Very Old Man with Enormous Wings," a very old man with enormous wings crash-lands in a small fishing town near the sea. He is silent and diseased. He is thought to be an angel. As he grows stronger, he develops the nasty habit of appearing in multiple places at the same time in the house of the family that takes him in—replicating his individuality over and over within the community. The woman of the house is distraught at the mad logic of it all, complaining about "living in that hell full of angels." He is, it seems, a superposition of beings, an apparently divine presence in a mundane world. His wings, when examined, though, are perfectly natural. So natural, so classical, that the doctor concludes that he cannot understand why all humans do not have them (García Márquez 1999, 217–25). Indeed, it is a mystery to some why we are not fully divine. But perhaps it is a greater mystery how we are not in the slightest divine, how we are alive and mortal and here—all together—in the first place.

In the end, the old man flies away, takes his leave, and everyone is relieved. He flies away over the sea and into the sunrise, across the waves of light and water. Light like water. Water like light. Life—and those of us left behind—somehow caught in the middle.²

Notes

- 1 For arguments for this claim, rather than mere declarations, see Steeves (1998).
- 2 My thanks to the members of the NASA Ames Workshop on "Quantum Mechanics, Information Theory, and the Origin of Life" where parts of this essay, in a radically different form, were presented—and especially to Jonathan Trent, Chris McKay, and Paul Davies who invited me to be a part of that most distinguished group.

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The Artificialization of Life: Designing Self-Organization

Jean-Pierre Dupuy

The ethical aporia

Our capacity to act is no longer limited to the human sphere. We are able to tamper with, and set off, *complex natural* phenomena. As Hannah Arendt put it in her masterpiece work, *The Human Condition*, we can now act *into nature*. As a consequence we have to confront a new kind of *uncertainty*. From a practical point of view the key issue is to develop new concepts of prudence that are suited to this novel situation. A long time ago Aristotle's *phronesis* was dislodged from its prominent place and replaced with the modern tools of the probability calculus, decision theory, the theory of expected utility, cost-benefit analysis, etc. More qualitative methods, such as futures studies, the scenario method, or the precautionary principle were developed to assist decision-making. I believe that none of these tools is appropriate to tackling the situation we are facing now.

German philosopher Hans Jonas, in his fundamental book, *The Imperative* of *Responsibility*, cogently explained why we need a radically new ethics to rule our relation to the future in the "technological age." His starting point was a philosophical aporia. Given the magnitude of the possible consequences of our technological choices, it is an absolute obligation for us to try and anticipate those consequences, assess them, and ground our choices on this assessment. Couched in philosophical parlance, this is tantamount to saying that when the stakes are high, we cannot but choose consequentialism, rather than a form of deontology, as our guiding moral doctrine. Consequentialism as moral doctrine says that what counts in evaluating an action is its *consequences* for all agents

concerned. By contrast, deontological doctrines evaluate the rightness of an action in terms of its conformity to a norm or a rule, for example the Kantian categorical imperative.

Something akin to the Kantian categorical imperative cannot do. The latter enjoins each of us to consider what would happen if the maxim of our present action were made the principle of a universal legislation: the self-consistency or inconsistency of such a *hypothetical* universalization is made the test for our private choices. "But real consequences are not considered at all, and the principle is one not of objective responsibility but of the subjective quality of our self-determination. We are in need of a different consistency: not that of the act *with itself*, but that of its eventual *effects* over time, and not in the abstraction of logic. What the *actual* future will be as a consequence of our actions is what matters" (Jonas 1985, 12).

However, the very same reasons that make consequentialism compelling, and therefore oblige us to anticipate the future, make it impossible for us to do so. Unleashing complex processes is a very perilous activity that both demands certain foreknowledge and prohibits it.

Now, one of the very few unassailably universal ethical principles is that *ought* implies *can*. There is no obligation to do that which one can not do. However, we, who live in the "technological age," do have an ardent *obligation* that we *cannot* fulfill: anticipating the future. That is the ethical aporia. Jonas tried to circumvent it by working out what he called an "Ethics of the Future" [*Ethik für die Zukunft*]—meaning not a future ethics, but an ethics *for* the future, for the sake of the future: the preservation of a future for humankind must become the major object of our concerns.

Jonas's credo, which I share, is that there is no ethics without metaphysics. It is only if we venture into metaphysics that we'll have a chance to escape from the ethical aporia. My topic is the NBIC convergence¹: I've tried to show in my work of the last ten years² that the most important ethical issues raised by it are inseparable from the metaphysical assumptions that govern the field. I will focus here on the metaphysics of *acting into nature*, including our nature, to take up Arendt's phrase.

The metaphysics of the NBIC convergence

Making the world over

The positivist philosophy that drives most of modern science and technology (and much of contemporary philosophy) takes "metaphysics" to be a meaningless

quest for answers to unanswerable questions, but Karl Popper, following the lead of Emile Meyerson, showed that there is no scientific (or, for that matter, technological) research program that does not rest on a set of general presuppositions about the structure of the world. To be sure, those metaphysical views are not empirically testable and they are not amenable to "falsification." However, that does not imply that they are not interesting, substantial, and that they do not play a fundamental role in the advancement of science. Those who deny metaphysics simply render it invisible, and it is very likely that their hidden metaphysics is bad or inconsistent. To the amazement of those who mistook him for a positivist, Karl Popper claimed that the philosopher or historian of science's task was twofold: first, unearth and make visible the metaphysical ideas that lie underneath scientific programs in order to make them amenable to criticism; second, proceed to a critical examination of those metaphysical theories, in a way that is different from the criticism of scientific theories, since no empirical testing is here possible, but nevertheless rational.

Two major philosophers from the seventeenth and eighteenth centuries can be said to have fleshed out the metaphysics underlying the new science the budding of which they were witnessing and of which we are the inheritors: René Descartes and Giambattista Vico. Descartes saw science and technology as aiming at making man master and possessor of nature and of himself. More subtly, Vico gave the postulate of the "new science" (1725) a celebrated formulation: Verum et factum convertuntur ("The true and the made are convertible"). This means that we can have rational knowledge only about that of which we are the cause, about that which we ourselves have made. The principle of verum factum was originally understood as implying a want or lack on the part of human beings: we can never know nature in the way that God does, for God created what we can only observe. Quickly, however, the principle acquired a positive sense more in keeping with the growing affirmation of modern subjectivism: what human beings make can be rationally—that is, demonstratively and deductively known despite the finiteness of human understanding. Among the branches of knowledge, ranked in descending order according to their degree of perfection, mathematics by this criterion of course comes first, followed, however, not by the natural sciences but by the moral and political sciences, supposed to be more scientific because they deal with the products of human activity.

As regards the science of nature, however, its first principle, according to Hannah Arendt, had to be that one can know only in making, or rather in remaking. Despite his human limitations, the scientist "nevertheless from the outset approached [nature] from the standpoint of the One who made it" (Arendt 1958, 295). This explains not only the scientist's emphasis on the "how" of physical processes rather than on the being of things, but also the considerable role assigned by science to experiment.

With the looming advanced technologies, we will be one big step further. The NBIC convergence presents itself as the ultimate culmination of the *verum factum*. It is no longer merely by doing experiments on it, it is no longer merely by modeling it, that men will now come to know nature. It is by *remaking* it. But, by the same token, it is no longer nature that they will come to know, but what they have made. Or rather, it is the very idea of nature, and thus of a given that is exterior to the self, which will appear outmoded. The very distinction between knowing and making will lose all meaning with the NBIC convergence, as will the distinction that still exists today between the scientist and the engineer. Already today, in the case of biotechnologies, the distinction between discovery and invention, on which patent law rests, is proving increasingly tricky to maintain, as the debates about the patentability of life-forms demonstrate.

Under this general heading, we can include what some philosophers call "the artificialization of Nature" and, in particular, of life and the mind. The metaphysical program that drives the NBIC convergence, a Promethean project if ever there was one, is to turn man into a demiurge or, scarcely more modestly, the "engineer of evolutionary processes." Biological evolution, with its clumsy tinkering, has often botched the job, and it cannot be especially proud of its latest handiwork, man. It is up to man himself, then, to try to do better. This puts him in the position of being the divine maker of the world, the demiurge, while at the same time condemning him to see himself as out of date. We are dealing here with an extraordinary paradox of the coincidence of opposites, which such philosophers as Hannah Arendt or Günther Anders have brought out: the overweening ambition and pride of a certain scientific humanism leads straight to the obsolescence of man. It is in this broad perspective that we must always set the specific questions which are termed "ethical" and which touch on the engineering of man by man.

The human condition is an inextricable mixture of things given and things made. This means that man, to a great extent, can shape that which shapes him, condition that which conditions him, while still respecting the fragile equilibrium between the given and the made. Now, already in the 1950s, Arendt prophesied a human rebellion against the given. She wrote:

For some time now, a great many scientific endeavors have been directed toward making life also "artificial," toward cutting the last tie through which even man belongs among the children of nature ... This future man, whom the scientists tell

us they will produce in no more than a hundred years, seems to be possessed by *a rebellion against human existence as it has been given*, a free gift from nowhere (secularly speaking), which he wishes to exchange, as it were, for something he has made himself. (1958, 2–3)

Indeed, the metaphysics of the NBIC convergence dreams of overcoming once and for all every given that is a part of the human condition, especially the finiteness of a human life—its mortality and its beginning in birth. If immortality has always had a place in man's thoughts or dreams, it is only very recently that death has come to be considered a "problem" which science and technology can solve by eliminating it. As for birth, the fact that we are born into the world without our having had anything to do with it has become a source of shame (Günther Anders). We discover that we have been *thrown* (the Heideggerian *Geworfenheit*) into the world and we feel abandoned. We experience forlornness when we realize that we are not the foundation of our own being. Technology fantasmatically promises a remedy for this feeling of nausea: (re)designing ourselves, partially or totally, as if we were our own machines.

At the heart of the metaphysical research program that drives much of contemporary technology, there is an enormous paradox. The metaphysics in question clearly wants to be monist: one would no longer say today that everything in the universe proceeds from the same substance, but one will say that everything is subject to the same principles of organization: nature, life, and the mind. The watchword of cognitive science is: "naturalizing the mind." It is a matter of fully restoring the mind (and life) to their proper place within the natural world. Now, it happens that the principles of organization supposed to be common to everything that exists in the universe are mechanistic principles. A device that processes information according to fixed rules, that is, the algorithm, constitutes the sole model of everything that exists. Chronologically, and despite what certain preconceptions might suggest, the mind was first to be assimilated to an algorithm (or Turing machine: McCulloch and Pitts' model, 1943); next was the turn of life, with the birth of molecular biology (Max Delbrück and the "phage group," 1949); and only later came the thesis that the laws of physics are recursive (or Turing computable). The naturalization of the mind thus merges with the mechanization of the mind.

Heidegger's error

Is the ambition to (re)make the world tantamount to *controlling* it, in keeping with Descartes' metaphysics? Therein lies Heidegger's fundamental error. The

author of Sein und Zeit thought he had found in technoscience in general, and in cybernetics in particular, the culmination of what he called "Western metaphysics." For Heidegger, metaphysics is the search for an ultimate foundation for all reality, for a "primary being" in relation to which all other beings find their place and purpose. Where traditional metaphysics ("onto-theology") had placed God, modern metaphysics substituted man. This is why modern metaphysics is fundamentally humanist, and humanism fundamentally metaphysical. Man is a subject endowed with consciousness and will: his features were described at the dawn of modernity in the philosophy of Descartes and Leibniz. As a conscious being, he is present and transparent to himself; as a willing being, he causes things to happen as he intends. Subjectivity, both as theoretical presence to oneself and as practical mastery over the world, occupies center stage in this scheme-whence the Cartesian promise to make man "master and possessor of nature." In the metaphysical conception of the world, Heidegger holds, everything that exists is a slave to the purposes of man; everything becomes an object of his will, fashionable as a function of his ends and desires. The value of things depends solely on their capacity to help man realize his essence, which is to achieve mastery over being. It thus becomes clear why technoscience, and cybernetics in particular, may be said to represent the completion of metaphysics. To contemplative thought—thought that poses the question of meaning and of Being, understood as the sudden appearance of things, which escapes all attempts at grasping it—Heidegger opposes "calculating" thought. This latter type is characteristic of all forms of planning that seek to attain ends by taking circumstances into account. Technoscience, insofar as it constructs mathematical models to better establish its mastery over the causal organization of the world, knows only calculating thought. Cybernetics is precisely that which calculates-computes-in order to govern, in the nautical sense (Wiener coined the term from the Greek xvbepvntns, meaning "steersman" and defined it as "the Control and Communication in the Animal and the Machine"): it seems indeed to be the height of Western metaphysics.

Thinking so Heidegger remained blind to a fundamental shift in the metaphysics of contemporary technology. It is often the case that the philosophy implicit to a new field is given away, admittedly in a crude way, by its visionaries and ideologues. On this score it is difficult to be more explicit than Kevin Kelly when he writes: "It took us a long time to realize that the power of a technology is proportional to its inherent *out-of-controlness*, its inherent ability to surprise and be generative. In fact, unless we can worry about a technology, it is not revolutionary enough."³

I will illustrate this assertion with the case of synthetic biology.

The metaphysics of making life from scratch

In recent years, the enterprise of "making life from scratch" has been organized as a formal scientific discipline under the seemingly innocuous name of synthetic biology. In June 2007, the occasion of the first Kavli Futures Symposium at the University of Greenland in Ilulissat, leading researchers from around the world gathered to announce the convergence of work in synthetic biology and nanotechnology and to take stock of the most recent advances in the manufacture of artificial cells. Their call for a global effort to promote "the construction or redesign of biological systems components that do not naturally exist" evoked memories of the statement that was issued in Asilomar, California more than 30 years earlier, in 1975, by the pioneers of biotechnology. Like their predecessors, the founders of synthetic biology insisted not only on the splendid things they were poised to achieve, but also on the dangers that might flow from them. Accordingly, they invited society to prepare itself for the consequences, while laying down rules of ethical conduct for themselves.⁴ We know what became of the charter drawn up at Asilomar. A few years later, this attempt by scientists to regulate their own research lay shattered in pieces. The dynamics of technological advance and the greed of the marketplace refused to suffer any limitation.

Only a week before the symposium in Ilulissat, a spokesman for the ETC Group, an environmental lobby based in Ottawa that has expanded its campaign against genetically modified foods to include emerging nanotechnologies, greeted the announcement of a feat of genetic engineering by the J. Craig Venter Institute in Rockville, Maryland with the memorable words, "For the first time, God has competition." In the event, ETC had misinterpreted the nature of the achievement. But if the Ilulissat Statement is to be believed, the actual synthesis of an organism equipped with an artificial genome ("a free-living organism that can grow and replicate") will become a reality in the next few years. Whatever the actual timetable may turn out to be, the process of fabricating DNA is now better understood with every passing day, and the moment when it will be possible to create an artificial cell using artificial DNA is surely not far off.

The question arises, however, whether such an achievement will really amount to *creating life*. In order to assert this much, one must suppose that between life and nonlife there is an absolute distinction, a critical threshold, so that whoever crosses it will have shattered a taboo, like the prophet Jeremiah and like Rabbi Löw of Prague in the Jewish tradition, who dared to create an artificial man, a *golem*. In the view of its promoters and some of its admirers, notably the English physicist and science writer Philip Ball,⁵ synthetic biology has succeeded in demonstrating that no threshold of this type exists. And even in the event that synthetic biology should turn out to be incapable of fabricating an artificial cell, these researchers contend, it would still have had the virtue of depriving the prescientific notion of life of all consistency.

It is here that nanotechnology plays an important symbolic role. It is typically defined by the scale of the phenomena over which it promises to exert control—a scale that is described in very vague terms, since it extends from a tenth of a nanometer⁶ to a tenth of a micron. Nevertheless, over this entire gamut, the essential distinction between life and nonlife loses all meaning. It is meaningless to say, for example, that a DNA molecule is a living thing. At the symbolic level, a lack of precision in defining nanotechnology does not matter; what matters is the deliberate and surreptitious attempt to blur a fundamental distinction that until now has enabled human beings to steer a course through the world that was given to them.

Once again, we find that science oscillates between two opposed attitudes: on the one hand, vainglory, an excessive and often indecent pride; and on the other, when it becomes necessary to silence critics, a false humility that consists in denying that one has done anything out of the ordinary, anything that departs from the usual business of normal science. As a philosopher, I am more troubled by the false humility, for in truth it is this, and not the vainglory, that constitutes the height of pride. I am less disturbed by a science that claims to be the equal of God than by a science that drains of all meaning one of the most essential distinctions known to humanity since the moment it first came into existence: the distinction between that which lives and that which does not; or, to speak more bluntly, between life and death.

Designing self-organization

All the paradoxes that I have brought out so far are epitomized in the paradox involved in the project of *designing self-organization*.

With the NanoBioConvergence, a novel conception of engineering has indeed been introduced. The engineer, far from seeking mastery over nature, is now meant to feel that his enterprise will be crowned by success only to the extent that the system he has created is capable of surprising him. For whoever wishes ultimately to create a self-organizing system—foremost life—is bound to attempt to reproduce its essential property, namely, the ability to make something that is radically new.

Natural versus artificial machines

One of the most outstanding conceptual breakthroughs of the second half of the twentieth century was the emergence and the development of the notion of *natural machine*. The current dynamics of technoscience thrives on the corruption and decomposition of that idea. The ethical and political implications are momentous.

The reader of Descartes may react here to what she may take as an anachronism. Obviously there was no need to wait for the twentieth century to treat nature and life as if they were machines. But one should avoid a confusion at all cost. One must not confuse the metaphysics that treats nature and life as artificial machines, on the one hand, that is, machines that have been designed by an artificer—in which case we remain caught in a form of finalism or teleology; and the metaphysics that treats them as natural machines, on the other hand, that is, that dispenses altogether with a conscious designer, be it God, the gods, or Nature itself. The theory of complex, self-organizing systems that emerged in the wake of cybernetics and in reaction to it permits us to give full consistency to the concept of a complex machinery such as life without a designer.

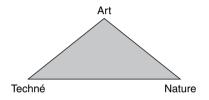
An impressive series of scientific and mathematical discoveries made during the second half of the twentieth century has completely changed the way in which we conceive of dynamics, the branch of mechanics that concerns the trajectory of a material system subject to purely causal physical laws. It is well known today that complex systems, made up of many elements interacting in nonlinear ways, possess remarkable properties—so-called emergent properties—that justify their description in terms that one should have thought had been forever banished from science in the wake of the Galilean-Newtonian revolution. Thus it is said of these systems that they are endowed with "autonomy," that they are "self-organizing," that their paths "tend" toward "attractors," that they are "path-dependent," that they have "intentionality" and "directionality"—as if their paths were guided by an end that gives meaning and direction to them even though it has not yet been reached; as if, to borrow Aristotelian categories, purely efficient causes were capable of producing effects that mimic the effects of a final cause.

In a sense, we are not far here from Kant's conception of nature in the second part of his third Critique, the *Kritik der Urteilskraft*, entitled "Critique of Teleological Judgment." Only explanations that ultimately appeal to causal mechanisms are considered adequate. Nonetheless, faced with the most surprising manifestations of complexity in nature (life for Kant), recourse to another "maxim of judgment"—teleological judgment—becomes inevitable.

Concepts such as "internal finality" are indispensable, and perfectly legitimate, so long as one keeps in mind that they have only heuristic and descriptive relevance. Teleological judgment consists in treating them as though—the Kantian *als ob*—they have objective value.

Dangerous metaphors

It is striking, to say the least, to observe how unstable this notion of natural machine has been in the ecology of scientific concepts.



In this golden triangle whose vertices are Art (construed as human workmanship), Nature (including Life), and Technique (construed as the science of the mechanical) and whose center is the concept of complex, self-organizing system, the Art-Nature side represents Kant's *Critique of Judgment* with its two legs: aesthetic judgment and teleological judgment; the art-*techné* side, the concept of artificial (man-made) machine; and the *techné*-nature side, the concept of natural machine. It is the Kantian side that keeps the natural and the artificial apart. When it collapses—that is, when the concept of immanent finality is lost track of—the semantic proximity between machine and artifact causes the concept of natural machine to disappear.

Confronted with the complexities of natural and biological systems, theistic philosophy inferred the existence of God via the argument from design. To challenge this, David Hume, in Part II of his *Dialogues Concerning Natural Religion*, presented this notorious argument in the following terms:

Look round the world: contemplate the whole and every part of it: You will find it to be nothing but one great machine, subdivided into an infinite number of lesser machines, which again admit of subdivisions to a degree beyond what human senses and faculties can trace and explain. All these various machines, and even their most minute parts, are adjusted to each other with an accuracy which ravishes into admiration all men who have ever contemplated them. The curious adapting of means to ends, throughout all nature, resembles exactly, though it much exceeds, the productions of human contrivance; of human designs, thought, wisdom, and intelligence. Since, therefore, the effects resemble each other, we are led to infer, by all the rules of analogy, that the causes also resemble; and that the Author of Nature is somewhat similar to the mind of man, though possessed of much larger faculties, proportioned to the grandeur of the work which he has executed. By this argument a posteriori, and by this argument alone, do we prove at once the existence of a Deity, and his similarity to human mind and intelligence. (1998, 15)

The best evidence that Vico's *Verum Factum* has carried the day is that a full-blown scientist today, confronted with the same complexities, will reverse the argument from design and conclude that "there are too many things that just don't make sense if they were designed. If they were designed then we should fire the designer." In other terms, if It were a designer, Nature would have botched the job. But we are on a very slippery slope. The design metaphor is so strong—and the concepts of natural machine, immanent finality, self-organization, etc., so elusive—that the metaphor of the artificial machine eventually wins the day. Instead of saying "there is no design" one says "the design is bad."

One further step and it is inevitable to ask questions such as "Can nanostructuring improve on *Nature's design*?"⁷ Or, like Damien Broderick, "Is it likely that nanosystems, designed by human minds, will bypass all this *Darwinian wandering*, and leap straight to *design success*?" (2001, 118). One can hardly fail to note the irony that science, which in America has had to engage in an epic struggle to root out every trace of creationism (including its most recent avatar, "intelligent design") from public education, should now revert to a logic of design in the form of the NBIC convergence—the only difference being that now it is mankind that assumes the role of the demiurge.

The important point here is not the mimetic rivalry between mankind and Nature—one admires the weight of contempt carried by "all this Darwinian wandering"; the French Nobel laureate François Jacob spoke of "bricolage"—but what the stakes are: it is a matter of being the better designer! But, of course, all the critiques that have been leveled at the "Intelligent Design" paradigm, leading to the concept of self-organization, are even more pertinent in the case of human design. There is way too much information, in the form of complexity, in the organizations presented us by Nature for a single mind, even if it is God's, to have been able to design them. If mankind strives to emulate a feat that God himself could not have achieved, doesn't it run the risk of playing the sorcerer's apprentice? Furthermore, human beings do those things for a purpose, for example, meliorate their well-being. However, as French poet Paul Valery once wrote, "*Artificial* means, that which tends toward a definite goal. Artificial is then the opposite of living.... If Life had a goal, it would no longer be Life."⁸ The notion of "artificial life" is a sheer oxymoron.

Last but not least, let us not forget our starting point: we are able to act into nature and our ambition is to design complex processes that escape our control. Traditionally, the notions of design and control belonged together. The new metaphysics associates design and out-of-controlness, a marriage that Heidegger could never envisage. In 1948, John von Neumann, in a famous lecture, defined a complex machine (which he called an automaton) as one capable of bringing about something more complex than itself: its own behavior. Soon, he went on to prophesy, the builder of automata would find himself as helpless before his creations as we feel ourselves to be in the presence of complex natural phenomena. With the NanoBio convergence, we may be nearing that moment. The sorcerer's apprentice myth will then have to be updated: it is neither by error nor by terror that Man will be dispossessed of his own creations but *by design*.

Notes

- 1 See (Bainbridge and Roco 2002, 13).
- 2 See in particular (Dupuy 2007a, 2007b, and 2008) and (Dupuy and Grinbaum 2004).
- 3 Kevin Kelly, "Will Spiritual Robots Replace Humanity by 2100?" in *The Technium*, a book in progress, www.kk.org/thetechnium/
- 4 The Ilulissat Statement, Kavli Futures Symposium, "The Merging of Bio and Nano: Towards Cyborg Cells," June 11–15, 2007, Ilulissat, Greenland. www.research.cornell. edu/KIC/images/pdfs/ilulissat_statement.pdf (accessed August 2012).
- 5 See (Ball 2007).
- 6 A nanometer is one-billionth of a meter.
- 7 See (Hongyou Fan et al. 2007).
- 8 See (Valéry 1926). As quoted in (Canguilhem 2006, 150).

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eLife: From Biology to Technology and Back Again

Jos de Mul

One of the most striking developments in the history of the science over the past 50 years has been the gradual moving toward each other of biology and computer science, and their increasing tendency to overlap. Two things may be held responsible for this. The first is the tempestuous development of molecular biology that followed the first adequate description, in 1953, of the structure of the double helix of DNA, the carrier of hereditary information. Biologists subsequently became increasingly interested in computer science, the science that focuses on, among other things, the question of what information really is and how it is encoded and transferred. No less important was that it would have been impossible to sequence and decipher the human genome without the use of ever stronger computers. This resulted in a fundamental digitalization of biology. This phenomenon is particularly visible in molecular biology to the digital world of the computer.

In turn, computer scientists have become increasingly interested in biology. One of the highly promising branches of computer science that has developed since the 1950s was the research into artificial intelligence and artificial life. Although the expectations were high—it was predicted that within decades computers and robots would exist whose intelligence would exceed by far that of man—success remained limited to some specific areas, despite the spectacular developments realized in information technologies. It is true that more than 50 years later we have computers that can defeat the chess world champion, but in many areas toddlers and beetles still perform better than the most advanced computers. Top-down programming of artificial intelligence and artificial life turned out to be much more complex than expected. This not only resulted in the fact that computer scientists started to study in depth the fundamental biological question of what life basically is, but it also inspired them to use a bottom-up approach, which consists of having computers and robots develop "themselves" in accordance with biological principles.

Biologists and computer scientists not only increasingly refer to each other's publications, they have also started to cooperate more often and more closely than ever before. In the past decades this has resulted in the development of a complete network of new (sub)disciplines at the intersection between biology and computer technology. From the field of biology areas of study have developed which are closely interwoven with information technology, such as biomics (genomics, proteomics, metabolomics, and related types of bioinformatics), computational biology, and synthetic biology. At the same time in informatics a whole range of subdisciplines inspired by biology came into existence, which were focused on the study of genetic algorithms, cellular automata, emerging systems, neural networks, and biomolecular computers. In the rest of this essay I will, for reasons to be explained, refer to this wide network of closely interwoven and partly overlapping biological and information-technological disciplines as *informationistic biotechnologies*.

The twentieth century is not called the age of physics for nothing. The technologies that have determined the face of the twentieth century, such as the car, the airplane, the telephone, the television and the nuclear installation, almost all, without exception, have their origin in this discipline. When we look at the developments mentioned above at the interface between biology and computer science, it is quite likely that the twenty-first century will become the century of informationistic biotechnologies. Biotechnology exceeds physics at this stage already in terms of the size of the research budgets, the number of scientists active in this field, and the impact of the discoveries that have been made in the past decades. And when we try to imagine what its implications for our everyday life and society may be, it does not seem too bold a presumption to expect that the impact of informationistic biotechnologies will be at least as large as that of the technologies based on physics in the twentieth century.

The fact that informationistic biotechnologies, in spite of the rapid developments which have taken place in the past decades, are in many respects still in their infancy and that their reception, management, and domestication in society are also subject to continuous change, makes it a hazardous undertaking to outline future scenarios. On the basis of the developments so far, however, a number of mutually coherent postulates may be formulated, which are among the foundations of the informationistic biotechnologies. With these postulates, we may begin to outline the advantages and disadvantages of biotech for human life.

From controlling reality to manipulating possibilities

The above-mentioned shift from physics to informationistic biotechnologies is more than a shift from one scientific discipline to another. It also indicates a transformation from the *mechanistic* worldview, which had been dominant since the rise of the modern sciences in the sixteenth and seventeenth centuries, to an *informationistic* view of the world.¹ Mechanical sciences are characterized by three fundamental ontological postulates or presumptions on the basis of which they address and approach reality.

The postulate of *analyzability* states that reality can be reduced to a collection of atomic materials. In physics and chemistry these are the elements as they are arranged in the periodical system. (In the meantime we have learned that those "atoms" consist of even smaller subatomic parts, but this does not contradict the postulate of analyzability; it rather shows its persistent power.) According to the postulate of *lawfulness* the interaction among the elements is determined by universal laws, which can be captured in mathematical formulas. The well-known gas law of Boyle and Gay-Lussac—pv/T=constant—thus states that the pressure times the volume divided by the temperature is constant and that this applies to every gas in a closed space. On the basis of such laws physical phenomena cannot only be explained, but they can also be predicted and thus controlled and this is what the postulate of *controllability* refers to. It is clear that one can not only explain in retrospect on the basis of the above-mentioned gas law why the pressure in a closed container has increased after the temperature has been increased, but one can, by means of a simple calculation, also predict exactly how high the pressure will be when you increase or decrease the temperature by ten degrees, and that knowledge also enables you to control the pressure in the container.

The informationistic view of the world, as it has developed in domains such as biotechnology, expands the mechanical view of the world, but it also transforms it in a fundamental way. This is shown by the three postulates that characterize these sciences. Although the informationistic sciences, too, dissect reality into elements—for example, in molecular biology, the four different types of nucleotide are the four "letters" in which the hereditary code of all life on earth is written—they are primarily based on the postulate of synthesizability, which states that the shape of a certain configuration of matter and energy may, time and again, turn into matter of a more complex shape of (self-)organization at a higher level. The evolution of life on earth is a good example of such self-organization. The subsequent levels of complexity cannot be (fully) reduced to their common elements, and they therefore need their own explanatory principle. Living systems that reproduce themselves are more than the sum total of the mechanical (physical and chemical) processes that take place at a cellular level. And though it is true that consciousness presupposes complex (neurological) processes in the brain, yet it cannot be reduced to these processes. Although life and consciousness without matter and energy are impossible, we can only understand them properly if we regard them as systems which process information to an increasing extent of complexity for each level.

It is true that among evolutionary theorists we also find proponents of a "greedy reductionism," which reduces the characteristics and behavior of organisms to their underlying physical and chemical processes and thus explains "too much with too little" (Dennett 1995, 82). If anything has been made clear by the Human Genome Project, however, it is that coding hereditary characteristics by the genes is an extraordinarily complex process, which virtually always, and in ever changing combinations, involves the collaboration of many genes. Moreover, the functions of genes can vary strongly, depending on the "genetic network" they are part of. And on top of that, the expression of genes and complexes of genes are dependent on the interaction with a great number of intra- and extracellular processes. When we want to understand this complex self-organization, which consists of various feedback mechanisms, the determination of the genes is only a modest first step. A deep understanding of the complex dynamics between the genetic networks and their surroundings requires advanced forms of data mining in the gene pool, in which statistical methods and advanced methods of clustering and classification are combined with ways of "machine learning," originating in research on artificial life and intelligence, such as genetic algorithms and neural networks.²

Contrary to the mechanistic worldview, in which a phenomenon is explained when the laws which it obeys have been discovered, in the informationistic sciences the postulate of *programmability* applies, according to which a phenomenon is explained as soon as we can simulate it by means of a computer program (Coolen 1992, 49). This happens, for example, in computational biology and research into artificial life, by writing computer programs that model and simulate biological processes. And in the study of artificial intelligence an effort is being made to get a better insight into what intelligence is by means of computer simulations of intelligent behavior.³

Not only scientific explanation acquires a different meaning by the postulate of programmability, however; so do prediction and control. For example, not only can simulations be made of spatio-temporally related processes in existing cells with the help of computer programs such as BioSPICE, but the behavior of genes and complexes of genes incorporated in a cell can be predicted, as well. Prediction means, in this context, the virtual presentation of potential life-forms *in silico*.

What may be programmed, however, can in many cases also be realized *in vitro* (in a test tube) or *in vivo* (in living organisms) by means of genetic modification of existing organisms or by the production of synthetic organisms. Research then shifts from reading to writing the genetic code.⁴ Thus, BioSPICE is not only used to study simulated organisms, but also to subsequently produce them. In the case of such a top-down *in vivo* approach, a beginning is made, for example, with the production of "minimal cells." These are cells of microorganisms from which all nonessential elements have been "removed," so that they may operate as a carrier of all sorts of new characteristics that are to be incorporated. This also makes it possible to transplant genomes, transferring all characteristics of a microbe to another one.⁵ Another example of *in vivo* techniques is metabolic pathway engineering, which adapts the metabolic routes of microbes and other organisms, for example for the benefit of the production of artemisinin, a raw material in a medicine against malaria.

Synthetic biology goes one step further in recombining genetic material, not using living organisms, but trying to build up *in vitro* cells from the bottom up, using self-assembling biological materials such as nucleotides and amino acids. This "bottom-up" method is used, for example, in the BioBricks project, a catalog that is accessible to the public and contains an increasing number of standardized "open source" biological materials. Just as in the case of standardized components in micro-electronics, synthetic biological systems that have been optimized for a certain production of specific biomolecules can be built *in vitro* with the help of BioBricks and the design program Bio-JADE. In 2008 researchers at the J. Craig Venter Institute succeeded in building a completely synthetic copy of the genome for *Mycoplasma genitalium*, which consists of 582,970 base pairs, and in 2010 they were able to insert a synthesized genome into a cell and cause that cell to start replicating.⁶ Much of the research in synthetic biology takes place at the interface with nanotechnology. For example, at the Delft Technological University "molecular engines" are being

developed which are used to regulate and manipulate the transport of proteins by means of a specific "railway system."⁷

Genetic modification and synthetic biology are characterized by a "database-ontology," which says that reality consists of atomic elements (atoms, inorganic molecules, genes, neurons), which may be recombined in numerous ways.⁸ This is certainly true when we realize that synthetic biology no longer is limited to the recombination of the four "letters" of the genetic alphabet, but increasingly applies itself to the adaption of these four nucleotides, for example to produce "extended DNA" (xDNA) or additional letters, synthesizing and assembling new types of bases. Thanks to these "alien genetics" the number of possible recombinations of DNA increases tremendously.⁹ In addition, in 2012 an international team of researchers created six altogether different polymers capable of storing and transmitting information, dubbed xeno-nucleic acids (XNAs).¹⁰ Thanks to the methodical selection of natural elements. In genetic biology, however, this process results in an artificial selection of artificial elements.

Sciences such as synthetic biology are therefore characterized by what we could refer to as the postulate of *manipulability*. Contrary to the mechanical sciences, which primarily focus on controlling existing nature by means of a technical application of existing laws, informationistic sciences focus on the creation of "next nature," recombining (increasingly modified) natural and artificially synthesized elements. They are *modal sciences* in the sense that they do not seem to be guided by the question of what reality is like, but rather by the question of what it could be like.¹¹ The convergence of biology on a nano scale, information technology, and engineering results in the creation of databases that enable us to recombine natural and artificial materials into self-organizing systems. In physicist Freeman Dyson's words: "The big problems, the evolution of the universe as a whole, the origin of life, the nature of human consciousness, and the evolution of the earth's climate, cannot be understood by reducing them to elementary particles and molecules. New ways of thinking and new ways of organizing large databases will be needed" (Dyson 2007).

From gray to green technology

Physics and inorganic chemistry were at the roots of the dominant technologies of the twentieth century, but on the basis of the developments described above it may be expected that informationalistic biotechnologies will play an increasingly important part in the twenty-first century. In the past decades the impact of these technologies on society has already become visible in, among other things, medical and legal applications of (prenatal) genetic screening, such as gene therapy, the use of DNA evidence, and the genetic modification of crops and animals. In view of the fundamental nature and virtually unlimited scope of new disciplines such as synthetic biology, new developments may be expected in many fields. Given the increase of the world population (from about 1 billion around 1800 to 3 billion in 1960 to more than 7 billion now), which still takes place at an increasing rate, in combination with the increase of the consumption of food and the use of sources of energy, which takes place at an even faster rate, it is not bizarre to presume that our attention will especially be focused on the production of food and the development of biofuels, in addition to medical applications. At the moment, those two targets are, in a certain sense, somewhat in conflict, as biofuels such as ethanol and butanol are made from crops that are also meant to provide food. The challenge, therefore, is to increase the efficiency of the transformation of sunlight through biomatter into biofuels, using crops that are not used to provide food and/or trying to develop methods of production that do not make use of agricultural soil.

In "Our Biotech Future," an essay that was published by the *New York Review* of *Books* in 2007, Dyson advocates the "green technology" of the future in a way which is as passionate as it is stimulating.¹² According to Dyson "open source" biology offers unlimited opportunities in this respect. Even the most efficient crops such as sugar cane and maize do not transform much more than 1 percent of sunlight into chemical energy. Contrary to this, silicon solar panels yield about 15 percent from sunlight. According to Dyson, by replacing the green chlorophyll in plants with black-colored silicon through the aid of genetic modification techniques, the soil that is required for the production of biomatter could be reduced by at least a factor ten. We might have to get used to it, and the *Black* Forest would have competition all over the world, but it would also provide great opportunities to combat poverty in rural areas all over the world. Everywhere in the world, we see people flee rural areas to try their luck—often to no avail—in overpopulated metropolises. This drift to the cities causes not only social problems, but major environmental problems, as well.

According to Dyson, green technologies could lead to a revitalization of rural areas. It is true that it was green technologies, too, which marked the transition, in the neolithic age, some 10,000 years ago, of a hunter/gatherer culture to an agrarian society in prosperous villages. Think of the domestication of plants and

animals and the agriculture and cattle breeding linked to it, the production of textiles, cheese and wine, etc. The "gray industry," which started in the iron and bronze ages when the wheel was invented, of the paved road and the production of ships and metal weaponry, is, to the contrary, closely linked to the emergence of cities. In subsequent centuries, the gray technology also led to the iron plough, tractors and bio-industries, which not only increased production, but also resulted in a move of much of the wealth it yielded in the direction of city-based corporations and financiers. The contrast between poor rural areas and the rich city increased especially in the twentieth century, which gave birth to a whole range of gray technologies based on physics.

It is Dyson's hope that biotech, which in the past 50 years gave us an insight into the basic processes of life and in the last 20 years has led to a veritable explosion of green technology, may be a new source of wealth for rural areas and thus restore the balance between rural areas and the city. Just like 10,000 years ago this will lead to the development of many new sorts of plants and animals, but this time it will not take place by means of a slow process of *trial and error*. Thanks to new insights and techniques it will happen much more efficiently and more quickly. According to him, it will result in more wholesome crops that do not require herbicides and will thus help save the environment. Modified and synthetically produced microbes and plants will enable us to deal with many things in a cheaper and cleaner way than the gray technologies do.

In addition, says Dyson, they offer the prospect of numerous new applications in which gray technology failed. Ecologically sound green technologies will replace polluting mines and chemical factories. Genetically modified earthworms will extract metals such as aluminum and titanium from the clay soil, and magnesium and gold, in their turn, may be extracted from salt water by means of synthetic seaweeds. According to Dyson, this will be a sustainable world, in which fossil resources will not become exhausted, but in which sunlight will be the most important source of energy and genetically modified and synthetic microbes and trees will recycle cars and exhaust fumes. Because the new green technologies require land and sun, they will provide wealth especially to the rural areas in tropical parts of the world and thus create a greater balance between rich and poor countries.

Limits to green

The future scenario drafted by Dyson is attractive, but the question is how realistic it is. In any case, some serious comments need to be made. Much can

be said in favor of Dyson's proposition that the future technology will—in view of the development of informationistic biotechnologies as described above be "greener" than the technologies that we have known in the past. There is a question, however, about whether this green technology will be the "open source biology" providing wealth to the poor that Dyson envisages. Although it is true that there has been an open source biology movement among biotechnological researchers since the 1990s, active among other things in the nonprofit BioBricks Foundation, it is now being surpassed by commercial companies (like the J. Craig Venter Institute) which are financed by venture capital. Many of the objects mentioned in the previous section (such as new nucleotides, proteins and amino acids, and synthetic cells) and methods to produce them (such as biosynthetic pathway engineering) are covered by patents. Patents have even been obtained on the (parts) of genes on the basis of information about their sequence (ETC Group 2007, 32f.).

It therefore remains to be seen whether biotech will not lead to "synthetic slavery" for poor countries and for rural areas, as they—in view of the commercial interests involved-will have to pay a lot of money for the modified and synthetic crops. Especially when we realize that, chances are, these new crops, if they result in higher or qualitatively better yields, will increasingly replace the existing natural crops or the crops that are the result of traditional growth. This could also happen when the modified crops would propagate and, as a result, mix irreversibly with other species. In both cases, that could be an attack on biodiversity. Moreover, a more efficient synthetic production of crops in richer countries would, in fact, imply competition for the traditional production in poorer countries. For example, the Yulex Corporation, established in California, tries, in cooperation with the Colorado State Agricultural Experiment Station, to incorporate genetic networks into microbes for the benefit of the production of rubber. The target is to completely satisfy the homeland demand of rubber, which at the moment is being met by third-world rubber plantations that are often small in size (ETC Group 2007, 32). Another example is the previously mentioned production of artemisinin for medical applications in large "Bug Sweatshops," to the detriment of African farmers who have always extracted this substance from the Artemisia plant (ETC Group 2007, 52).

According to Dyson, the fear of a dominance of multinationals is unjustified. He envisages that biotech will go through the same development as did ICT. Whereas the first mainframe computers were monopolized by major companies, computer technology has become accessible to and domesticated by many layers of the population within a few decades. Dyson envisages that within a few decades cheap DNA-scanners and DNA-printers will appear on the market that will enable consumers to design their own plants and animals (Dyson 2007). That such a "DNA-printer" is not mere science fiction is proven by the fact that people can purchase a used DNA-synthesizer at this very moment for less than \$1,000 and order synthesized DNA for a few dollars through online mail-order firms. A combination of both technologies results in a biological variety of the 3D printer that enables consumers to "print" their own flowers and pets. Due to the high security costs, obligatory risk analyses, and liability rules, the development of modified crops has in the meantime become so expensive that it can only be paid for by a small number of multinational seed companies and chemical concerns. It is not without tragic irony that the development of "open source biology" in Europe in the past few decades has been frustrated by environmental action groups such as the Seething Spring Potatoes (Ziedende Bintjes). These groups have made testing by university researchers operating independently of multinationals almost impossible by destroying the experimental fields in which modified crops are tested in vivo.

But there are also good reasons not to welcome the domestication of biotech. Informationistic biotechnologies may severely damage human beings and the environment-by accident or on purpose. With the aid of a laptop, DNA-databases that are accessible to the public, and synthetic DNA obtained through mail-order, for example, a rather simple and deadly pathogen may be constructed. The molecular biologist Eckhard Wimmer proved in 2002 that a functional poliovirus can be built in such a way, and in 2005 researchers at the US Armed Forces Institute in Washington succeeded in reconstructing, with the aid of tissue from the victims, the very same virus that had caused the death of between 20 and 50 million people during the Spanish flu epidemic of 1918. According to Craig Venter, who never shies away from a sweeping statement, this was "the first true Jurassic Park scenario" (ETC Group 2007, 24). It is not surprising that this "militarization of biology" causes great concerns among many. Not only because this development may lead to the use of biological weapons by conventional armies, but especially because all possible forms of biohacking and bioterrorism are to be feared. It is expected that within five years or so, with simple means, every conceivable virus may be constructed, which may then affect society. The structure of such a virus can also be easily distributed by means of the internet. And when Dyson's DNA-printer is realized, the concept of "computer virus" will get an uncanny second (at the same time retro) meaning.

From bio*tech* to *bio*tech

People develop technologies hoping to be able to control nature and thus control their own destiny. The technical "domestication of fate" has been very successful since the rise of the modern mechanistic sciences in the sixteenth and seventeenth centuries. Technologies not only result in "controllability," however; they also entail risks. Technologies can be abused for evil aims, but even when intentions are good, technologies may still cause a great deal of damage. This is the case because most technologies have unforeseen and unforeseeable side effects. In principle, the impact of interventions in nature can be fully predicted and controlled in the case of the mechanistic sciences, so that the risks involved can also be calculated in advance. We can calculate relatively easily how large the risk is that a container filled with gas will explode when the temperature exceeds a certain value. In practice, however, prediction and control depend on strict limitations. Full prediction and control are only possible in closed, determined systems. In reality systems are usually open, which means that there are a great number of unforeseen elements that may affect the outcome of technical interventions. Due to the finitude of human knowledge, it is impossible to take into account all relevant elements in a prediction.¹³ In the case of chaotic systems—that is, systems that are completely determined yet also characterized by a sensitive dependence on initial conditions—even longer-term predictions are characterized by a fundamental uncertainty.14 Weather forecasts are a notorious example. Uncertainty, unlike risks, cannot be calculated. Informationistic biotechnologies produce such uncertainty. This has to do, first of all, with the complexity of living systems. However impressive the increasing knowledge of fundamental life processes is, we are only at the beginning of deciphering the complex interplay between genes and complexes of genes. Also, the regulating role of the noncoding part of DNA, which determines whether genes are or are not expressed (DNA consists of almost 98 percent of this wrongfully called *junk* DNA), still greatly puzzles researchers.

The uncertainty produced by informationistic biotechnologies is not only due, however, to the finitude of our scientific knowledge and the fact that an increase of knowledge does not automatically entail an increase of controllability. The uncertainty is of a more fundamental nature, which is the result of the postulate of synthesizability. Biotech creates artifacts that are characterized by a greater or lesser degree of independent activity. Organisms develop themselves and, therefore, show unpredictable behavior. This is not only the case because self-assembling characteristics of natural and synthetic biological molecules are used, but also because it is always possible that spontaneous mutations take place when organisms are reproduced under the influence of (among other things) cosmic radiation and chemical effects. Moreover, living organisms also continuously interact with their surroundings. As a result, built-in characteristics may, by means of horizontal transfer, jump over to other natural, modified, or synthesized organisms. As the number of possible modifications is enormously large, the effects of mutations and horizontal transfer are in essence unpredictable. It is sometimes said of nanotechnology that there is a danger of self-reproducing nanorobots getting "out of control" and covering the surface of the earth with "gray goo"; in a biotechnological world of continuously evaluating "engines" the chance that a suffocating "green goo" will develop seems at least as likely.

Although we can intervene in nature in more depth than ever before, thanks to the postulate of manipulability, the "object" of research and manipulation inevitably and ever more strongly appears as an actor itself. Whereas Latour's attribution of being an actor to a safety belt may in his own view be dismissed as a form of exaggeration,¹⁵ informationistic biotechnologies actually create actors with a "program" of their own and, as complexity increases, with intentionality. Bio*tech* always is, in a fundamental way, *bio*tech as well and therefore in principle "out of control."¹⁶ Dyson's idea that we will soon have domesticated biotech is, for that reason, rather naïve and shows a considerable degree of technological *hubris*. We must rather hope that the "biological engines" for their part will not domesticate us. The threat of aggression in the future might sooner come from the "seething spring potatoes" *themselves* than from their self-appointed spokesmen in the environmental movement.

The face of the unknown

In view of the considerable dangers that may arise from the modification and synthesis of genetic substances, extensive legislation in this area has been developed in the past decades. These laws should make sure that no organisms can escape from the laboratory to the outside world and that people working in the laboratories cannot be contaminated by them. In addition to regulations regarding design and equipment there are also a large number of procedural stipulations. Moreover, an extensive risk analysis methodology has been developed, focusing on an analysis of the characteristics of the modified or synthesized organisms, the extent to which man and the environment will be exposed to these, the nature of possible negative effects, and the chance that these effects will take place. To limit risks, safety is often "incorporated" into the organism, for example, by programming cells in such a way that they destroy themselves after a lapse of time or when the number of reproductions exceeds a certain limit.

In light of the aforementioned fundamental uncertainty inherent in informationistic biotechnologies, however, the question is of whether it is not an act of hubris to think that it is possible to control the development of synthetic biology. Let alone whether it would be possible to realize a moratorium on synthetic biology, as was called for in the United States by 50 environmental groups in 2011 in a letter to the government in reaction to the 2010 report of the Presidential Commission for the Study of Bioethical Issues recommending self-regulation by synthetic biologists.

Given the "natural artificiality" of human life and the fact that *Homo sapiens* from its prehistoric origin has been defined by its technologies, it would be rather naïve to think that we would be able to abandon technological possibilities that we have already disclosed (Plessner 1975, 382ff.). Although we are the inventors of technologies, this does not mean that we uniquely control them. They control us as well, and the more uncertain the effects of our technologies, the more uncertain will be the impact they have on human life.¹⁷

It might be a comfort to know that the evolution of life on earth for as long as 4 billion years has been governed by contingency and chance (varying from mutations and genetic drift to environmental changes). The fact that in the course of this evolution one of the millions of species—*Homo sapiens*—has become responsible for the further development of life on earth certainly is less comfortable. We might even call this human condition tragic. Yet it is not without heroism: "Playing God is indeed playing with fire. But that is what we mortals have done since Prometheus, the patron saint of dangerous discovery. We play with fire and take the consequences, because the alternative is cowardice in the face of the unknown" (Dworkin 2000, 446).

Notes

- 1 See (De Mul 1999).
- 2 See (Zvelebil and Baum 2008).
- 3 See (Bedau 2003; Johnston 2008).
- 4 See (Venter 2007).

- 5 See (Lartigue et al. 2007).
- 6 See (Gibson et al. 2010).
- 7 See (Seldenthuis et al. 2010).
- 8 See (De Mul 2009).
- 9 See (Benner, Hutter, and Sismour 2003).
- 10 See (Pinheiro et al. 2012).
- 11 (Emmeche 1991, 161).
- 12 See (Dyson 2007; also see his contribution in: Brockman 2008).
- 13 See (De Mul 2004).
- 14 See (De Mul 2009).
- 15 See (Latour 2002).
- 16 See (Kelly 1994).
- 17 See (De Mul 2009).

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Philosophy of Life in the Age of Information: Seinsgeschichte and the Task of "an Ontology of Ourselves"

Charles Bonner

Beginning in the late nineteenth and early twentieth centuries, the concept of life emerged as a central question or theme in various lines of philosophical inquiry (Nietzsche, Bergson, Dilthey, etc.), and perhaps as a result, the popular conception of philosophy as a quest for "the meaning of life" has persisted to this day. But by the middle of the twentieth century there was no longer any mystery about the ultimate nature of life-at least not from the perspective of the life sciences, which had reached their properly scientific status, epistemologically speaking, in two stages marked respectively by the Darwinian theory of evolution and the Watson-Crick model of the structure of DNA. The latter development in particular established the biological sciences on a rigorous mathematical foundation. But the mathematical foundations involved here were not those of the infinitesimal and/or differential calculus, articulated by Newton and Leibniz in the seventeenth century, which had established the rigorous foundations for mathematical physics and determined the epistemological model toward which all of the sciences oriented themselves. The mathematical foundations for the "neo-Darwinian synthesis" of evolution, genetics, and molecular biology were provided by recent or concomitant developments in cybernetics, computer science, and the mathematical theory of communication. The "meaning of life" thus came to be determined precisely in the same conceptual terms that provide the foundations, broadly construed, for what we now call the Age of Information.

If we pose the question, as the following pages attempt to do, "What is life in the Age of Information?"—we are not asking, or not only asking, a strictly scientific question, a question that can be answered or pursued by means of scientific inquiry, experiment, or demonstration. But what would it mean, today, to claim a specifically philosophical dimension to the inquiry into life itself, into human life, or the meaning of life as such? Neither of the two great philosophical traditions of the last century, analytical philosophy and phenomenology, oriented themselves specifically toward an inquiry into "life itself," nor did they pursue the question of the meaning of life. (Heidegger's early project of "fundamental ontology" did seek to articulate the basic existential structures, the *modes of being*, that correspond to human existence—but only as a preliminary stage of the inquiry into the *meaning of being* as such, which is the real goal of philosophical inquiry.) Neither the life sciences nor the human sciences (including philosophy) provide explicit resources for reviving or revitalizing, as it were, the kinds of reflective inquiry that flourished under the heading of *philosophies of life* only a century ago.

And yet, the original motivations that inspired the various philosophies of life more than a century ago have not been entirely lost. These motivations may be described roughly in terms of quasi-Romantic reactions to the political, economic, and social developments associated with the Industrial Revolution. In our time it is the postindustrial economy, the "digital revolution," and the "computerization" of societal relations and structures that shape our reality. Whatever would take the place of the philosophy of life, in any of its various forms, would confront this reality, and the forces and institutions of the Information Age function as both adversary and effective determination of our contemporary understanding and experience of *life itself*. This, in any case, is the general framework in which the present study situates itself.

Not only are we not, today, entirely satisfied with our epoch's prevailing determination and description of life, but more importantly—and perhaps more urgently—we have come to recognize a potential conflict between our advanced industrial or postindustrial *way of life* and the basic physical, chemical, and biological conditions that sustain "life as we know it" on this planet. In other words, *life itself* has emerged at the center of a new problematic distinctive of late twentieth century. Moreover, developments in the life sciences, now directly linked to advances in information technology (soon to be coupled with nanotechnology, and thereby tremendously accelerated), have led to unprecedented capacities to manipulate life, to control basic processes of life, and (in theory, at least) to "program" the anatomy, physiology, and behavior of organisms and to alter the structure and functioning of the Earth's ecosystems. These tremendous new powers *over* life do not coincide with a deeper understanding or appreciation of

human life, as our technological advances are not informed or directed by any set of human values based on a meaningful conception of life—as would have been sought by earlier philosophies of life.

In one of his later interviews, Michel Foucault remarked on the ambiguity of his concept of *bio-power*: it refers, he said, both to the power *over* life, including human life, which can now be manipulated in all sorts of new ways (social, political, psychological, medical, genetic, pharmacological, etc.) and to the power of life to resist all such mechanisms of control. I would like to take up this informal indication in order to situate the problematic of "life in the Information Age" in a particular philosophical context, indicated above in very preliminary terms by references to the link between the life sciences and information technology, on the one hand, and to certain motifs from the later thought (in both cases) of Heidegger and Foucault. This line of inquiry should not be construed as an attempt to set a quasi-romantic or neo-Nietzschean conception of life against a "mechanistic," scientific, and technological determination of life. Both Heidegger and Foucault recognized the profound changes—in culture, in human existence or subjectivity (to use the latter's preferred term), and in thinking-associated with the onset of what we now know as the Information Age. So the task to be taken up here, or at least outlined in very preliminary and schematic form, is not one of combatting the technological developments or the essential structures of the Information Age by means of a revived philosophy of life. Rather, as both Heidegger and Foucault understood, the task is primarily one of reflecting on the altered "reality" of the world we inhabit by questioning the status of life in the new ontological regime that grounds the epoch, our own, in which the ultimate nature of reality is determined, understood, and experienced in terms of information.

An ontology of ourselves

Our heading here is a phrase invoked in several remarks made by Foucault in lectures, essays, and interviews from the early 1980s,¹ but the intended meaning can be clearly indicated by citing a passage from Paul Ricoeur. In the chapter on "The Critical Philosophy of History" in his magisterial work, *Memory, History, Forgetting*, Ricoeur reflects briefly on the (then fashionable) theme of *modernity vs. postmodernity* and concludes by asking, "how can one even enter into a debate that avoids the preliminary question of the very possibility of characterizing the epoch in which one lives?" (Ricoeur 2004, 314). Whether the

debate concerns an interpretation of a historical event, a literary assessment, or a scientific controversy, Ricoeur's insistence that one must begin by reflecting on one's own epoch implies that the starting point must be what Foucault designated as *an ontology of ourselves*. Without first questioning whether or to what extent and in what terms one can characterize one's own epoch, the implicit assumptions, epistemological and ontological biases, remain implicit and therefore obscure. Only by first attempting to determine the ontological ground on which we stand, the tacit understanding of being, the prevailing self-understanding of human being as such, the ontological status attributed to nature, to works of art, and to God or the gods, can we hope to clarify (which is not to say eliminate) the assumptions that shape our mode of inquiry and focus our attention on specific aspects of the matter at hand.

For our present concerns, what this means is that prior to inquiring into the status or the meaning of life we must first consider whether and in what terms we are capable of conceptualizing our own epoch—that is, engaging in a critical inquiry under the rubric of an ontology of ourselves. As we will see, such preliminary ontological reflection situates the problematic of life at the core of the fundamental understanding of *being as information* that determines the essential contours of our epoch. To be sure, the kind of ontological inquiry that Foucault demanded amounts to more than merely reflecting on the labels attached to particular ages or historical epochs (Renaissance, Enlightenment, Age of Information . . .), but when the inhabitants of a historical epoch designate themselves or "their own time" in a specific way, as we do today, this can be taken as an indication of a fundamental self-understanding of the age in question.

In referring to our current reality as the Age of Information we are usually pointing to the importance of certain technological developments associated with the computer, the internet, or the recent developments with hand-held digital devices. The "computerization of society" has been a theme since the invention of digital electronic computing machines in the 1950s. But instead of rehearsing the series of advances involving vacuum tube technology, transistors, microprocessors, etc., I would like to direct our attention toward the underlying ontological shift that renders reality itself as digital or digitized domain, in principle subject to binary computation, as potential "input" for information processing machines. In focusing on this ontological "working up" of the data, we see how the contemporary scientific conception of life in terms of *information theory* (the "blueprint" of an organism understood as a set of biochemical instructions *encoded* into DNA) occupies a privileged position embedded in the ontological foundations of our present epoch. Just one indication of this shift in the fundamental understanding of life in terms of information (which is all that can be offered here): already in 1943, nearly a decade before the revolution in molecular biology touched off by the discovery of the structure and reproductive mechanism of DNA, the physicist Erwin Schrödinger wrote a very interesting short book entitled What Is Life? Reflecting developments in several branches of the natural sciences in which, broadly speaking, the thermodynamic paradigm was being replaced by a paradigm based on informatics and communication theory, Schrödinger's book already conceives of "life itself" and the basic processes that distinguish organic matter from inorganic entirely in terms of information. Such an indication can be taken as part of a larger development which of course would have to be analyzed in more detail-in which various aspects or dimensions of reality are conceptualized in binary, digital, information-theoretical terms. Developments in psychology during the middle of the last century, for example, recast thinking itself, the unique characteristic of the rational animal that designated itself as *Homo sapiens*, in terms of cognitive science as modules of information processing at various levels. Overall, the shift in our basic conception of reality (our understanding of being itself) prepared the ground for the "computer revolution" of the 1950s, so that the powerful techniques of information processing could, in principle, be applied to all aspects of reality.

At the center of this ontological shift, I would like to suggest, is the dramatic change in the scientific understanding of life which simultaneously provided new mathematical grounds for rigorous methodology in the life sciences, and placed the life sciences at the center of our scientific civilization, so that over the course of the last half century the leading edge of scientific and technological advance is provided not by mathematical physics, but by molecular biology and genetics. This new status of the life sciences, moreover, is not merely an incidental effect of the new ontological order (being qua information) but should be recognized as a decisive motivation for the fundamental reordering of the world we inhabit. To give just one further indication of this repositioning of the life sciences, and to point again to the concept of life that emerges concomitantly with the Information Age, we might consider a recent work of Evelyn Fox Keller, professor of the history and philosophy of science at MIT, and one of the most astute observers of developments in the life sciences over the past century. Her book Making Sense of Life is not an existential meditation on the question of the meaning of life, but a detailed analysis of the new mathematical, cybernetic, and informational foundations of the life sciences. For present purposes it will

have to suffice merely to cite the subtitle of this work, "Explaining Biological Development with Models, Metaphors, and Machines." It is, as this author shows rather compellingly, through metaphors borrowed from information theory, computer science, and cybernetics that we "digital denizens" of the Information Age make sense of life.

Foucault: Subjectivity and subjectivization

Taking our task as "an ontology of ourselves" as suggested in the late work of Michel Foucault, it may be worthwhile to characterize, briefly and informally, the so-called *ethical turn* that demarcates the studies devoted to the ancient Greeks and Romans in Foucault's final years from the earlier works dealing with the essentially modern institutions and practices of power that shaped our essentially modern mode of subjectivity. Foucault himself described his turning away from those early modern institutions and practices, and turning toward the "practices of the self" in Greek and Roman antiquity, in political-ethical terms as an inquiry into the capacity of the subject to determine its own mode of being. This "practice of freedom" or care of the self should not be confused with the modern, juridical notion of the autonomous subject as self-legislating (as in Kant's moral philosophy), since Foucault is seeking the practical and theoretical resources, forged by Western subjectivity in antiquity, that enable the self to "work on itself" (*askesis*) in order to shape and fundamentally transform its own mode of being.

We can discern an indication of this theme, widely discussed throughout his later lecture courses and essays, in an interview from the early 1980s where he invokes the concept of *spirituality* to designate this self-transformative capacity of subjectivity found in the ethical practices of classical Athens and imperial Rome: "By spirituality, I understood that which precisely refers to a subject acceding to a certain mode of being and to transformations which the subject must make of himself in order to accede to this mode of being" (Bernauer and Rasmussen 1994, 14). Such a "spiritual" capacity to transform one's mode of being is sharply distinguished from early Christian practices of *askesis*, according to Foucault, insofar as the latter efforts were oriented toward other-worldly notions of salvation, whereas the "pagan" practices of *askesis* (including those of the Stoics and the Cynics) were clearly oriented toward *this*-worldly goals of transforming one's way of life. "In antiquity, this work on the self with its attendant austerity is not imposed on the individual by means of civil law or religious obligation, but is a choice about existence made by the individual. People decide for themselves whether or not to care for themselves" (Dreyfus and Rabinow 1983, 244). *Philosophy as a way of life*, to take up the title of an important work by Foucault's friend and colleague, Pierre Hadot, implies this free choice of an individual to engage in the practices of the care of the self in order to transform his or her form of subjectivity, mode of existence, way of life. It is here that a connection with our approach to philosophy of life as a *form of resistance* becomes apparent.

Without going into detailed analyses of Foucault's reading of early Platonic dialogues, his interest in the Roman moralists such as Epictetus and Marcus Aurelius, or his painstaking treatment of the development of practices of *parrhesia* (speaking out)—all of which would, no doubt, be relevant to our present concerns—I would like to point here to just one indication of what might be claimed as the "real motivations" or intentions of the ethical turn. The following, highly suggestive passage is taken from a piece written in English by Foucault, entitled "Why Study Power: The Question of the Subject." It is worth quoting at length:

When in 1784 Kant asked, Was heisst Aufklärung?, he meant, What's going on just now? What's happening to us? What is this world, this period, this precise moment in which we are living. ¶ Or in other words: What are we? As Aufklärer, as part of the Enlightment? . . . Kant's question appears as an analysis of both ourselves and our present. The task of philosophy as a critical analysis of our world is something which is more and more important. Maybe the most certain of all philosophical problems is the problem of the present time, of what we are, in this very moment. I Maybe the target nowadays is not to discover what we are, but to refuse what we are. We have to imagine and to build up what we could be to get rid of this political "double bind," which is the simultaneous individualization [of the subject] and totalization of modern power structures. ¶ The conclusion would be that the political, ethical, social, philosophical problem of our days is not to try to liberate the individual from the state, and from the state's institutions, but to liberate us both from the state and from the type of individualization linked to the state. We have to promote new forms of subjectivity through the refusal of this kind of individuality which has been imposed on us for several centuries. (Dreyfus and Rabinow 1983, 216)

Here we see a rare glimpse into "what Foucault is really calling for"—which is often notoriously difficult to discern, however lucid his conceptual analyses and exegeses of texts may be—and these remarks express a clarion call of sorts, opening up new possibilities, new forms of subjectivity, new ways of life envisioned through the radical *refusal of what we are*. To be sure, the political and ethical resistance called for here takes *the modern state* and its correlate, *the modern form of subjectivity*, as that which must be refused. Invoked in our present context, circa 2013, the forces and the institutions and the practices that shape and deform the mode of subjectivity in our Information Age are to be located not in the state apparatus itself, but in the rapidly evolving technologies of communication and control that constitute our reality as a cybernetic totality. *What we are* and *our present reality* are determined increasingly by the encroachment of digital technologies into all aspects of human life, by the internet and cloud computing, by the reduction of thinking to information processing, by the ruling paradigm in the life sciences where genetics and evolution are understood in terms of information processing, by forms of communication that facilitate the exchange of useless information while alienating human beings from one another and from themselves in unprecedented ways.

The form of subjectivity that emerges as correlate to the technological developments and institutions that constitute our reality as Age of Information can be designated Homo cyberneticus (with a nod to Norbert Wiener who coined the term cybernetics in 1948): a form of human existence entirely subjected to-Foucault would say subjectivized by-technological forces of communication and control (two terms invoked in the subtitle to Wiener's seminal work.) And Foucault's ethical-political imperative, glimpsed in the passage cited above, can be articulated today as the necessity of refusing the mode of existence in which our subjectivity is subjectivized as Homo cyberneticus, in order to open up possibilities for other forms of subjectivity, other modes of being, other ways of living. This would be the formulation for our present epoch, Age of Information, of the forces of life rising to creative resistance against the powers over life, powers that determine life as information and thought as information processing. That is to say, the revived tasks of a philosophy of life today entail the resistance or refusal of the subjectivization of life to modes of information processing, for the sake of opening possibilities for new forms of subjectivity to be shaped from within: care of the self against Homo cyberneticus.

Heidegger: Seinsgeschichte and the Information Age

In metaphysics reflection [Besinnung] is accomplished concerning the essence of what is and a decision takes place regarding the essence of truth. Metaphysics

grounds an age, in that through a specific interpretation of what is (das Seiende) and through a specific comprehension of truth it gives to that age the basis upon which it is essentially formed. This basis holds complete dominion over all the phenomena that distinguish the age. (Heidegger 1977, 115)

Metaphysics grounds an age—but not ours. The origins and foundations of our Age of Information are generally understood to lie somewhere in the middle of the last century, with the rise of cybernetics,² electronic computing machines,³ and the mathematical theory of communication⁴—all stemming from and directly motivated by scientific research conducted during World War II and oriented explicitly toward military goals. So for those who wish to establish a historical starting point for the Information Age, 1945 and the postwar years (that is to say, the onset of the Cold War) might seem like a reasonable suggestion. A little further consideration will recognize, however, that the theoretical origins of what eventually came to be electronic digital computation go back to the work of Alan Turing in the 1930s. This groundbreaking work can only be understood, in turn, against the background of the radical upheaval in the foundations of mathematical logic brought about by Gödel's incompleteness theorem-demonstrating the necessary incompleteness of any formalized systematic attempt (such as that of Russell and Whitehead presented in their Principia Mathematica two decades earlier) to ground the basic principles of arithmetic and number theory. The motivation for the work of Russell and Whitehead, in turn, and the "original motivations" that led eventually to the practical implementation of Turing's so-called universal machine in the fully programmable electronic computing machine, constructed under von Neumann's direction at Princeton in the early 1950s, would have to be traced back to the German mathematician David Hilbert, whose radical work on the foundations of mathematics set the stage, at the turn of the twentieth century, for the theoretical work that eventually became the basis for what we now know as computer science.

Nowhere in this research in the fields of logic and "pure mathematics" do we find explicit theories about the nature of truth or determinations of the ultimate nature of reality. The Age of Information is self-consciously *post*-metaphysical. But if there is not an explicit understanding of *what is (das Seiende)* or a conscious formulation of epistemological grounds for *truth* in the theoretical work that underlies and makes possible the digital revolution of the latter decades of the last century, can we perhaps discern an ontological framework and a unique determination of the reality of *what is* (the reality we presently inhabit) emerging from the technological, political, economic, sociological,

and psychological developments associated with our Information Age? Is there not a unique ontological regime, a particular configuration of the fundamental constituents of what we take to be reality, that determines our historical epoch as the Information Age? However this prevailing (or emerging) ontological order is to be conceptualized, it is clear that the fundamental "metaphysical" grounds designated by Heidegger in ontological and epistemological terms as an understanding of what is and a basic conception of truth, also shape our theoretical understanding of life—in terms of information—and our practical experience and self-understanding as human subjects operating in the Age of Information.

It follows, then, that the motivations and intentions of a revived philosophy of life in the Age of Information would have to take as its task not only the refusal of a certain mode of subjectivity, as enjoined by Michel Foucault, or the correlation between a certain mode of subjectivity and the modern state apparatus which is its correlate. Heidegger's ontological thinking points to the underlying understanding of being and the prevailing conception of truth as the ultimate ground in which contemporary human being (Dasein) situates itself. Accordingly, the implications for the sort of philosophical reflection outlined above would take on a more radical orientation: what must be interrogated, undermined, or ultimately "refused" (as Foucault would say) are the fundamental contours that shape our epoch and ground the decisive features of our reality. These fundamental contours also determine the ruling paradigm in the life sciences today (where life itself is understood in terms of information) and the way of life that corresponds to the mode of being of contemporary subjectivity. So the task of thinking that might inform a revived philosophy of life today would entail an ontological deconstruction, as announced in the last section of the Introduction to Heidegger's Being and Time, taking as its object not the history of Western theories of being, from Plato and Aristotle to Kant and Hegel, but a deconstruction of our present reality, undermining the essential structures of our Information Age.

Foucault's later thinking seems to complement this Heideggerian formulation of the radical task of ontological reflection by articulating the project in terms of an ethical-political care of the self. What this task entails, as both thinkers realize, is a simultaneous inquiry into the prevailing understanding of being that determines our epoch as the Age of Information and into human subjectivity, our present mode of existence, our current self-understanding and experience of life. Whether or to what extent such a two-fold critical inquiry proves to be feasible will determine the chances for a philosophy of life to emerge today as an efficacious and fruitful line of theoretical and practical engagement. This essay has attempted to point to just one possible line of inquiry in which Foucault's call for an ontology of ourselves can be understood in the context of Heidegger's *Seinsgeschichte* thinking—for it is clearly implied that *an ontology of our present epoch* both recognizes the unique layout of being and truth that characterizes an age and demarcates it from other epochs. The pragmatic implications of such an inquiry, as hinted at here, orient the task of thinking toward the "refusal" or undermining of the ontological foundations that ground our historical present in information and determine life, subjectivity, and being itself in terms of information.

Notes

- 1 See (Foucault 2011).
- 2 See (Wiener 1948).
- 3 See (Dyson 1950).
- 4 See (Shannon 1950).

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Part III

Life, Power, Politics

"Without Inside or Outside": Nietzsche, Pluralism, and the Problem of the Unity of Human Experience

Michael J. O'Neill

Whether Nietzsche is a political thinker or not is a matter of some dispute.¹ My contention is that Nietzsche's comments on politics are intimately related to his theory of culture. To the extent that a political regime produces an authentic culture, it is worthwhile, or worth living under. If that regime is structurally unable to do so, Nietzsche critiques it as such. A "good" or authentic politics is one that serves the development of culture. And only culture can provide content and meaning for political regimes revolves around their structural inability to produce a culture. Using his critique of democracy as an example, I will argue that Nietzsche criticizes political forms for their failure to provide the possibility of a unified experience of thought and action—a unity of values embodied in expression. This unity is a hallmark of culture for Nietzsche. Corrupt political forms instead create, by design or inadvertently, a disunity—a fracturing of thought and action—in human experience. Even Nietzsche's discussion of *agon* is subsumed under this principle of unity.

Nietzsche's analysis of liberal democracy is relevant to our current circumstances since democratic liberalism continues to be the dominant political ideology in the world. In the vacuum created by the collapse of communism, forms of theocratic fascism and various postmodern critiques of globalization have arisen to fill the void. What we are seeing in the rejection of democratic liberalism in our current age is a critique of democracy that is similar in form to Nietzsche's. In short, the complaint is that liberalism destroys the unity of human experience. It replaces the meaningfulness of a unified culture with a plurality of moral and aesthetic views, each with equal claim. If this is true, then it stands to reason that the ideologies that arise to challenge liberalism will share this criticism—simply in that they are liberalism's dialectical "other." Knowing this, we ignore Nietzsche at our peril, for his is a remarkably articulate and paradigmatic critique of democracy.

Nietzsche's attack on the modern philosophical project and especially on modern epistemology is relevant here as well. Modern epistemology, he claims, makes it impossible for thought to "see" value. It is a kind of thought whose main value ("objectivity") is in fact value-neutral. In its objectivity, this thought attempts to make no commitments. Democracy is the modern politics that mirrors this "objectivity." It too attempts to make no commitments—at least none it can avoid.² It is modern democratic liberalism's indifference to the seriousness of life that is Nietzsche's main complaint. Democracy is indifferent in that it is pluralistic (in its ethics, its aesthetics) by design. According to Nietzsche, this indifference is manifest in the kind of human being produced by democracy and in its inability to produce a unified aesthetic.

The "soul" of the state: Nietzsche's Machiavellian reading of Plato

Nietzsche accepts the Platonic idea that the state is a soul writ large and in turn produces a certain type of soul in its citizens. This view is bound up with Nietzsche's admiration for the Greeks and an aristocratic *ethos*. Whereas the model of the soul that produces the form of the *polis* in Plato is the philosophical/political genius who acts as founder of the community, Nietzsche asks the provocative question whether the political community should be formed by and aim at producing an aesthetic genius. Put another way, in the *Republic*, Plato insists that the king be a philosopher and the poets be banished from the city. However, other manifestations of the political genius are possible, with the aesthetic or artistic genius being Nietzsche's preference. He writes,

That in his perfect state [Plato] did not place at the head the genius, in its most general sense, but only the genius of wisdom and of knowledge, that he altogether excluded artistic geniuses from his state, that was a rigid consequence of the Socratic judgment on art, which Plato, struggling against himself had made his own. (Nietzsche 2008, 46)

Plato and Nietzsche are in agreement in their rejection of democracy. In the *Republic*, Plato complains that democracy is indifferent to philosophy and to the noble.

And this regime's sympathy and total lack of pettiness in despising what we were saying so solemnly when we were founding the city—that unless a man has a transcendent nature he would never become good if from earliest childhood his play isn't noble and all his practices aren't such—how magnificently it tramples all this underfoot and doesn't care at all from what kinds of practices a man goes to political action, but honors him if only he says he's well disposed toward the multitude. (Plato 1991, 558 b–c)

Nietzsche makes a similar complaint. The problem with democracy, for Nietzsche, is its indifference to everything including philosophy, the artist, and anything important to the meaning of human existence.

Despite Nietzsche's basic agreement with Plato on the structure of politics, he follows Machiavelli in arguing that the form of a regime is less important than its permanence because the durability of a regime is a precondition for the development of culture. In §224 of *Human All Too Human* he writes:

So far as the state is concerned, Machiavelli says that "the form of government signifies very little, even though semi-educated people think otherwise. The great goal of statecraft should be *duration*, which outweighs everything else, inasmuch as it is much more valuable than freedom." Only when there is securely founded and guaranteed long duration is a steady evolution and ennobling inoculation at all possible: though the dangerous companion of all duration, established authority, will, to be sure, usually resist it. (Nietzsche 1994, 108)

With that said, whatever form the regime takes, its purpose is the production of an authentic culture. The characteristics of culture can and will vary based on language, historical circumstances, and ethnicity for Nietzsche. All "true" cultures, however, will share a unity of expression of aesthetic values. While Nietzsche is not tied to any regime based on any ends intrinsic to human nature, he criticizes or approves regimes based on the emergent culture (or lack thereof) that they produce. Certain forms of regime are structurally deficient in this regard. Since culture is, for Nietzsche, the unified presentation of aesthetic values, those regimes that foster disunity and pluralism as an ideal, Nietzsche finds deficient.

Before I turn to his analysis of the pluralism engendered by liberal democracy, I will examine what Nietzsche means by the "unity" of culture.

Nietzsche and the unity of a culture "without inside or outside"

It is a common misconception that Nietzsche is a worshipper of power. I would argue that his interest in power stems from his concern for the unity of the values of a culture. The extent to which a thinker can impose her will on a culture in such a way that that culture is unified in an expression of value, especially aesthetic value, that is the measure and worth of her power. It is important to bear in mind that Nietzsche's primary concern is aesthetic value. He writes, "The existence of the world is justified only as an aesthetic phenomenon" (Nietzsche 1967, 21). By justification, I take Nietzsche to mean something like "the assertion of value or the creation of beauty in the face of the experience of pessimism." Tracy Strong summarizes the importance of The Birth of Tragedy for understanding Nietzsche's politics succinctly. He writes, "[The Birth of Tragedy] is about how, through the sociopolitical cultural practice of the tragic festivals, the Greeks managed to 'remain themselves,' that is, Greek" (Strong 2008, 35-6). Strong rightly points out that in §21 of Birth of Tragedy Nietzsche claims his subject matter is the "most basic foundation of the life of a people." To "remain Greek" is to embody some value identifiable as "Greek." If it is identifiable, that is because it is in some way a unified presentation of value-thought embodied in action.

If value is to be asserted in the face of pessimism, then what would constitute a unified aesthetic or an authentic culture? In this context, Nietzsche describes the achievement of the Greeks:

Never have they lived proudly untouchable: for a long time their "culture" was rather a chaos of foreign, Semitic, Babylonian, Lydian and Egyptian forms and ideas, and their religion a veritable battle of gods of the whole orient . . . And nevertheless Hellenic culture became no aggregate, thanks to that Apollinian motto [know thyself]. The Greeks learned gradually *to organize chaos* by reflecting on themselves in accordance with the Delphic teaching, that is, by reflecting on their genuine needs and letting their sham needs die out . . . Thus the Greek concept of culture . . . [is] a new and improved nature, without inside and outside, without dissimulation and convention, of culture as a unanimity of life, thought, appearance and will. (Nietzsche 1980, 64)

The unity "without inside and outside" that Nietzsche admires so much is also expressed in Greek virtue ethics—a harmony of the parts of the soul and a unity between thought and action. This is why Nietzsche can speak of "justice" without irony.³ Justice for Nietzsche is still a kind of harmony, as it was for Plato and Aristotle, except that it is the harmony of the great soul reflected in the culture it creates, and reflected in the hierarchical ranking of an aristocratic society.⁴

In turn, the unity or harmony of the soul is the precondition for the creation of what Nietzsche calls culture. Aesthetic culture, the creation of beauty, provides an affirmation which can be lived by others. He writes, "Culture is, above all, the unity of artistic style in every expression of the life of a people." Education and politics must serve this endeavor, since, "Much knowledge and learning is neither an essential means to culture nor a sign of it, and if needs be can get along with the very opposite of culture, barbarism, which is lack of style or a chaotic jumble of all styles" (Nietzsche 1986, 5–6). This is fitting with the theme of unity and harmony, since an education that is counter to the creation of culture, for Nietzsche, will only give birth to a generation of citizens who carry the seeds of disunity in them.⁵ Politics and education must work together to produce the aesthetic genius because the aesthetic genius as creator of value is the source of the unity of culture. What this effort results in is the expression of value that provides content for politics as the vision of the aesthetic genius demands to be expressed and imposed on reality. Nietzsche explains that,

Thus only he who has attached his heart to some great man receives thereby the *first consecration to culture* . . . We have to make the transition from the inward event to an assessment of the outward event; the eye has to be directed outwards so as to rediscover in the great world of action that desire for culture it recognized in the experiences of the first stage [the *first consecration*]; the individual has to employ his own wrestling and longing as the alphabet by means of which he can now read off the aspirations of mankind as a whole . . . culture demands of him, not only inward experience, not only an assessment of the outward world that streams all around him, but finally and above all an act, that is to say a struggle on behalf of culture and hostility towards those influences, habits, laws, institutions in which he fails to recognize his goal: which is the production of genius. (Nietzsche 1986, 163)

However, Nietzsche never meant his idea of culture to be interpreted as a form of total or monolithic politics. Within this culture there will be agonistic striving. But it is a prior unified vision that provides the arena for this striving.

Agon and Demos: Recent readings in radical and genealogical democracy

Some recent readings of Nietzsche's politics have encouraged the application of his thought to the idea of radical democracy.⁶ In particular, there has been much work done on the idea of *agon* as supporting a robust pluralism. Schrift,

for instance, calls for an agonistic pluralism which prevents the appropriation of any "fixed notions of identity" and aids oppressed groups in overcoming the "traditional . . . distribution of power, goods and privileges" (Schrift 2000, 220). His reading aims to put the critical tools of Nietzsche's thought-the hermeneutic analysis of power, perspectivism, and the idea of agon-to work in creating a robust pluralism where no identity is affirmed and the understanding of the self in society is one that is empathetic to multiple perspectives and is constantly in a process of becoming. Forcefully in opposition to this reading of Nietzsche's agon is Don Dombowsky. Dombowsky argues that "Nietzsche's critique of democracy proceeds in the spirit of the revocation of democratic rights and the legitimation of the dispossession or non-recognition of certain human beings. The differential social space Nietzsche opens up is predicated on order of rank and class division; it is not a horizontal field" (Dombowsky 2002, 280).7 Dombowsky further argues that, in general, the radical democratic reading in its endorsement of the idea of an agonistic self omits consideration of the "strong will" that orders the competing drives and instincts within it.8

The omission of the idea of the "strong will" in the radical democrats' use of Nietzsche's thought is not just misrepresentative of his philosophy, it raises a serious issue for their project. How is the integrity of plural elements of a democratic society to be preserved? In the absence of the strong will or a principle like the subsidiarity of institutions within the state,⁹ what principle other than the inertia of habit provides the basis from which a healthy agonistic contest can occur? Nietzsche's concern with modern liberal democracy is that it does not allow for the assertion of unified identities. In its insistence on the public/private distinction, on agnosticism in the public sphere, liberalism makes its limited form total. The distinction between "inner" and "outer" is present as the essence of the regime and it pervades all groups and the individual soul as well. He writes:

Our institutions are no longer any good; on this point we are all agreed. But the fault does not lie with them; but with *us*. Now that we have lost all the instincts out of which institutions grow, the latter on their part are beginning to disappear from our midst because we are no longer fit for them. Democracy has always been the death agony of the power of organization . . . For institutions to be possible there must exist a sort of will, instinct, imperative, which cannot be otherwise than anti-liberal to the point of malice: the will to tradition, to authority, to responsibility for centuries to come, to *solidarity* in long family lines forwards and backwards *in infinitum*. (Nietzsche 1964, 96) Even if one were to argue, as Siemens does, that Nietzsche approves of democracy in parts of his thought, in particular what he identifies as Nietzsche's "middle period," his return to an acerbic critique of democratic "values" in *Genealogy of Morals* and *Beyond Good and Evil* is telling. In these books, he refers to the democratic mood as "misarchism" and weakness of will and instinct.¹⁰

In a similar vein to Schrift's radical democracy, Wendy Brown provides an interesting application of Nietzsche's ideas as a genealogical approach to politics. Her Politics Out of History suggests Nietzsche's use of genealogy can be productively applied as an ongoing critique that undermines established identities and power structures as a check on institutions and institutional oppression (Brown 2001). Both Schrift and Brown look to establish a perpetual undermining of institutions and identities in order to allow space for freedom in the absence of oppression. However, the radical democrats and Brown's genealogical approach share the difficulty of adopting the critical aspect of Nietzsche's philosophy without regard for the appropriative element. While Nietzsche is rightly famous for having done philosophy with a hammer, the hammer had the purpose of clearing the way for a new appropriation of values (aesthetic and moral) that can be lived. Dialectically speaking, both the radical democrats and the genealogists are proposing a politics of ongoing and perhaps endless critique without an appropriative move to the affirmation of some value. Both movements are in danger of turning the disease Nietzsche is diagnosing (Enlightenment and modern philosophy's inability to ground values on reason alone) into a virtue and the diagnostic tool he uses into a way of life.

The agnosticism of liberal democracy

The genius of the design of liberal democracy in its solution to the particular political problem it is confronted with is precisely the issue that makes it so distasteful to Nietzsche. To take a paradigmatic example, Locke's *Second Treatise of Government* was published in 1689, just after the installation of William and Mary and the triumph of Constitutional monarchy (the "Glorious Revolution") in England. England, with Europe, was weary of the wars of religion and needed a workable political solution that would allow the coexistence of plural religious views within a unified state. Attempts to solve this specific problem had been brewing for more than half a century.¹¹ The brilliance of Locke's solution was to provide a theory of government whereby the ends and purposes of the state are

reduced to what he believed was the common denominator for all people—the protection of private property (which is the state's "chief end"), the defense of the state, and the expansion of individual freedom (which is law's purpose). On matters religious, moral, and aesthetic, Locke's liberal democracy remains agnostic publically.¹² By removing matters of conscience from the public sphere, except as expressed freely in public debate (that is to say, reduced from the fabric of law to mere public discussion and expression), and protecting them as freedoms of conscience in the private sphere, Locke hoped to disarm the cause of the lethal conflicts of his age.

What succeeds as a model for plural political community, fails as a model for a unified lived experience. By bifurcating public and private, liberalism may reduce the deadly sources of conflict to a discussion. However, it ensures that lived values that were thought to be worth dying for can never be fully embodied in a unified experience. What is public is bound to the parameters of discussion and must ultimately remain discussed but never fully asserted as an affirmation of life. In order for the government to remain formally agnostic, the discussion must continue in this way without resolution. And since it is unresolved, a value is never fully lived, only discussed. This is the case in any liberal democracy that contains a bicameral legislature, even in the creation and promulgation of law. All legislation is ultimately compromise and an aggregate of perspectives and interests. What is a private matter of conscience therefore remains removed from the public sphere, since it is never embodied in law. It is either lived only partially or not at all. Of course, the obvious strength of this is moderation and flexibility in the finding of legislative solutions to problems. The design of democratic liberalism with its separation of powers is to prevent a dangerous centralization of power, not to promote virtue. It is a negative ideal. For Nietzsche, however, what liberalism results in is a partial or complete bifurcation within the experience of the human being living within it. Except in opposition to liberalism itself, matters of conscience are always private and can never be fully affirmed publically. In solving the problem of pluralism, liberalism introduces a tension within the individual. The liberal citizen, in order to live within liberalism, must harbor a tolerance for the incompleteness of their own lived experience. What pluralism really amounts to is a kind of agnosticism where no value can be affirmed in a unified way. By design, there is no harmony between the private thoughts and beliefs of the citizen and the public face of the state. In this way, for Nietzsche, citizens of liberal states are always inauthentic.

How the unity of aesthetic values comes to be destroyed

In *Birth of Tragedy*, it is Euripides, speaking in the voice of Socrates, who shatters the unity of Greek values. Nietzsche writes, "The deity which spoke through [Euripides] was neither Dionysus nor Apollo, but an altogether newborn demon, called Socrates." It is Socrates' relentless subjection of value to the criticism of reason that is the key to the corruption of Greek values. For Socrates demands, "to be beautiful everything must be intelligible" (Nietzsche 1967, 82). In that demand is contained the source of the devolution of Greek values into disunity. As aesthetic values come under the bright light of critical reason, as they become an object for reflection, the Greeks become separated from these values as a lived reality and reduce them to an object of study and discourse. In short, Socrates creates disunity by making values an object for analysis.¹³ Nietzsche's opinion of Socrates is complex. He is both an admirer and a critic.¹⁴ However, Socrates is the first to take the blame for spreading the disease of separation of thought and value whose contemporary carriers Nietzsche feels compelled to diagnose.

In the modern period, Nietzsche finds symptoms of the disease in historical education, democratic liberalism, modern natural science, and utilitarian ethics. Each of these manifestations of Socratism is gathered under the heading of "objectivity." This objectivity is modernity's primary value—a value that values a noncommittal attitude toward life. In politics, Nietzsche prefers the agonal unity of the *polis* to the reflective disunity found in Socrates' approach to philosophy. An agonal unity should be contrasted with the endless agon-as-pluralism suggested by the proponents of using Nietzsche's philosophy to support the idea of radical democracy (see Schrift and Connolly). There seems to be a mistake on the part of the radical democrats in assuming that pluralism is or can be agonal in Nietzsche's sense of the word. Modern pluralism is neither an agonal unity nor endless agon precisely because the politics of classical liberalism is designed to be publically agnostic. That is to say, pluralism is preserved not by agon and contest, but by indifference and toleration. It is this indifference which allows the continual realignment of liberal democratic parties with what were often very recent political "enemies."15

As a rebuttal to the idea of *agon* as a possible ground of a radical democratic politics, consider the following. The motivation for agonal striving is *eris* (envy). There are two kinds of envy Nietzsche finds in Greek culture—a healthy and an unhealthy form. The unhealthy form of *eris* will be profitably developed later by Nietzsche in his analysis of *ressentiment*. The healthy form of *eris* is that

emotion experienced by the aristocratic soul in its perception of competition with those worthy of it. Nietzsche writes, "And not only Aristotle but the whole of Greek antiquity thinks of grudge and envy otherwise than we do and agrees with Hesiod [in *Works and Days*], who first designates as a wicked one that Eris who leads men against one another to a hostile war of extermination, and secondly praises another Eris as the good one, who as jealousy, grudge and envy incites men to deeds but not to deeds of annihilation but to deeds of *contest*." And later, "The greater and more sublime a Greek is, the brighter bursts out of him the flame of ambition, devouring everybody who runs with him on the same track. Aristotle once made a list of such hostile contests on a grand scale: among them is the most striking instance of how even a dead person can still incite a living one to consuming jealousy" (Nietzsche 2008, 54–5). So, *agon* has a fundamentally different psychological motivation than modern pluralism.

The essential emotion associated with pluralism, according to Nietzsche, is indifference.¹⁶ Nietzsche writes, "If love and hatred are wanted from [the democratic person] . . . he will do what he can and give what he can. But one should not be surprised if it is not much—if just here he proves inauthentic, fragile, questionable, and worm-eaten" (Nietzsche 1989,127). Contempt for other embodiments of value on the part of the pluralist would be better because it would indicate judgment and engagement—a realization that values as lived are important enough to compete over. Pluralism, however, devolves into a tired relativism whose inability to see other forms of life as competitors in a worthwhile contest is an indication of the pluralist's inability to live their own values fully. A separation between thought and action, a structural disunity in democratic politics, becomes a disunity within the soul of the democratic person. Then, the separation of the person from her values makes all values equally foreign, equally unlivable, and finally not valued at all.¹⁷

In sum, *agon* is competition within a unified culture motivated by the envy of the aristocrat who strives to be the most excellent of types of soul. In contrast, for Nietzsche, pluralism is a disunified agglomeration of attempts at culture. However, none of these attempts will ever become an authentic culture because each will always be prevented from doing so by the designed disunity of liberal democracy. The type of person formed by this regime carries that disunity and the indifference that is a consequence of it within her.

For Nietzsche, the Socratic tradition of reflective philosophy practiced while one is assuming optimism or modern objectivity is a dissimulation—or at least only half of the story. The transmission of Socratic reflective philosophy and optimism down through the history of the West, through the development of Christianity and into modernity, is, for Nietzsche, a history of corruption in the guise of progress. Worse still, it is the history of a culture that in the modern period, despite its conceit about itself, refuses to be serious in the sense that pessimism is never confronted and value never authentically created.¹⁸ The "objectivity" of modern liberal democracy with the rhetoric of progress that comes out of the Enlightenment has a parallel in the history of post-Periclean Greece. Nietzsche suggests, "Could it be that the Greeks became more and more optimistic, superficial and histrionic precisely in the period of dissolution and weakness—more ardent for logic and logicizing the world and thus more 'cheerful' and 'scientific?'" (Nietzsche 1967, 21). The suggestion here is that the Socratic reflective tradition and its modern descendant are masks pulled over our fear of the ultimate nature of the world. Socrates' achievement is a kind of lie that reassures us that we are reflecting on our nature, when all the while we assume that this nature is good and inhabits an intelligible universe.

Conclusion: The critique of modernity and democracy

For Nietzsche, as was said above, the Socratism of the modern period values "objectivity." Objective science, objective knowledge, the search for certainty, the greatest happiness principle of the utilitarian ethic, these are all symptoms of the disease carried by Socrates. They are attempts to be reassured about the well-ordered structure of our existence. He writes, "A matter that becomes clear ceases to concern us.-What was on the mind of that god who counseled: 'Know thyself!' Did he mean: 'Cease to concern yourself! Become objective!'-And Socrates?—And 'scientific men'?" (Nietzsche 1989, 81). The value of objectivity is pernicious for Nietzsche. It is particularly pernicious in that it commands the scholar and the artist to a kind of reserve from what they might value. Instead, it demands that they make what they might value merely an object for thought, and so denies the aristocratic soul the value of her nobleness. The effect of the modern demand for objectivity is found most clearly in its education of its people and in its politics. In its politics, especially modern liberal democracy, objectivity finds its expression in pluralism. Pluralism requires, at least in the public sphere, the toleration of disparate forms of aesthetic, ethical, and religious value. For Nietzsche, it creates a kind of human being that is indifferent to what is important. He writes of the modern democratic person, "He has lost any seriousness for himself, also time.... His habit of meeting every thing and experience halfway, the sunny and impartial hospitality with which he accepts everything that comes his way, his type of unscrupulous benevolence, of dangerous unconcern about Yes and No . . . And as a human being he becomes all too easily the *caput mortuum* of these virtues" (Nietzsche 1989, 127).¹⁹ In contrast, the agonal striving in the *polis* seeks victory in contest, the affirmation of value in the creation of culture, not endless indifference. Nietzsche argues that the purpose of politics with education ultimately can only be redeemed in the creation of value, in a (primarily aesthetic) affirmation of life. In democratic liberalism, because of its structure, which includes the distinction between public and private and because of its inherent agnosticism, this affirmation can never be achieved.

To those of us who are believers in democratic liberalism, Nietzsche's unflinching criticism is difficult to stomach. However, it is essential to reengage with his critique. Nietzsche's concern with the unity of the soul that lives its values "without inside or outside" is a hermeneutic key, as important as the concept of *ressentiment*, to understanding the extreme antiliberal (both left and right) elements of the domestic politics of Western democracies. And, the root of the hatred of pluralism by theocratic movements who declare themselves the enemies of Western liberal capitalism is in part explained by the anxiety caused by the fracturing of human experience in liberalism. In short, the issues of meaning and identity raised by Nietzsche's critique are at the center of any discussion of the nature of cultural pluralism and its role in human flourishing.

Notes

- 1 For two prominent examples of those who argue Nietzsche is not a political thinker, see M. Nussbaum (1997), "Is Nietzsche a Political Thinker?" *International Journal of Philosophical Studies* 5(1): 1–13; and T. Brobjer (1998), "The Absence of Political Ideas in Nietzsche's Writings," *Nietzsche-Studien* 27: 300–19. Don Dombowsky makes a persuasive case that Nietzsche is a political thinker in his response to Brobjer. See D. Dombowsky (2001), "A Response to Thomas Brobjer's 'The Absence of Political Ideas in Nietzsche's Writings," *Nietzsche-Studien* 30: 387–93; and, Dombowsky and Cameron (eds) (2008), Introduction to *The Political Writings of Friedrich Nietzsche*, New York: Palgrave Macmillan.
- 2 One could argue that democratic liberalism's central commitments are to the protection of property, the expansion of freedom through law, and the maintenance of a robust police force. See John Locke (1980), *Second Treatise of Government*, with an introduction by C. B. MacPherson. Indianapolis: Hackett.

- 3 See Nietzsche, *Human All to Human*, §§444–57; *The Wanderer and his Shadow* §§22–9; *Genealogy of Morals* §11; and *Beyond Good and Evil* §262 to name but a few sections.
- 4 Of course the unity sought by Plato's and Aristotle's virtue ethics is supported by a metaphysical worldview much different from Nietzsche's pessimism.
- 5 The main theme of *On the Advantage and Disadvantage of History for Life* is to warn Nietzsche's contemporaries of just this problem with education, and especially historical education. "The oversaturation of an age with history seems to me to be hostile and dangerous to life in five respects: such an excess creates that contrast between inner and outer which we have just discussed, and thereby weakens the personality; it leads an age to imagine that it possesses the rarest of virtues, justice, to a greater degree than any other age; it disrupts the instincts of a people, and hinders the individual no less than the whole in the attainment of maturity; it implants the belief, harmful at any time, in the old age of mankind, the belief that one is a latecomer and epigone; it leads an age into a dangerous mood of cynicism: in this mood, however, it develops more and more a prudent practical egoism through which the forces of life are paralyzed and at last destroyed" (Nietzsche, History, §5). Those of us in higher education who are engaged in presenting sweeping accounts of the history of "civilization" to our students would do well to reflect on this passage.
- 6 For example, see W. Connolly (1991), Political Theory and Modernity. London: Blackwell; L. Hatab (1995), A Nietzschean Defense of Democracy. Illinois: Open Court Publishing; and A. Schrift (2000), 'Nietzsche for Democracy?' Nietzsche-Studien 29: 220–33.
- 7 D. Dombowsky (2002), "A Response to Alan D. Schrift's 'Nietzsche for Democracy?" Nietzsche-Studien 31: 278–90. While interesting, the debate between the two sides does not gain much traction because the radical democrats do not claim to be explicating Nietzsche's position but instead are applying it in ways Nietzsche never intended. Schrift quotes Foucault approvingly as saying, "The only valid tribute to thought such as Nietzsche's is precisely to use it, to deform it, to make it groan and protest" (Schrift 2002), "Response to Don Dombowsky," Nietzsche-Studien: Internationales Jahrbuch fuer die Nietzsche-Forschung 31: 291–7. Hatab makes a similar observation when he says that, "Defending democracy by way of Nietzsche's thought would seem to be adventurous at best, oxymoronic at worst" (Hatab 1995, 1). Of course, Hatab's honest admission is followed by a subtle and sustained attempt to put Nietzsche to work in support of contemporary democratic politics.
- 8 See Beyond Good and Evil, esp., §200, §203, §208, §224.
- 9 For a well-articulated presentation of the importance of the idea of subsidiarity to the health of plural forms of religious identity, see the papal encyclical *Centesimus Annus*. It is available online at www.vatican.va, Pope John Paul II (1991).

- 10 See *Genealogy of Morals II*, \$12 and *Beyond Good and Evil*, \$\$238–9. For an account of the development of Nietzsche's thinking on democracy, see Siemens (2009).
- 11 In particular, the Peace of Westphalia (1648) which ended the wars of religion and gave the Imperial States within the Holy Roman Empire the right to determine their religious preference locally.
- 12 It can be argued that the extreme public agnosticism of Locke's version of liberal democracy rests on a foundation of English cultural tradition. That tradition adds much public content to the formal structure of liberalism. Values are present that Locke may have been counting on to define "Englishness." The American experiment is so interesting precisely because it is a tradition cobbled together from so many others. It is a much more thoroughly pluralistic experiment in liberalism than its English progenitor.
- 13 It is this corruption of Greek values that leads Nietzsche to support the Athenians' treatment of Socrates. He writes, "Could Socrates have been the corrupter of youth after all? And did he deserve his hemlock?" See the Preface to *Beyond Good and Evil*.
- 14 Walter Kaufmann gives an excellent and subtle account of Nietzsche's thinking about Socrates. See W. Kaufmann (1974).
- 15 Consider the alignment of socialist parties with far right parties in France over the issue of the wearing of the Burqa. Or, in the United States, consider the alignment of American Evangelical Protestant groups with conservative Catholic groups on the issues of abortion and gay marriage. The indifference of pluralism allows that one's "traditional enemy" may become a political friend as soon as circumstances allow for a common foe. While Nietzsche considers this a weakness, an absence of truly affirmed values, it is also a source of flexibility and stability within liberal democracy.
- 16 Both Kojève and Fukuyama suggest that liberal democratic capitalism and liberal democratic socialism are politics that aim at universal recognition. If my reading of Nietzsche is correct about the psychology of pluralism, then it is possible that they are both wrong in that these are in fact politics of indifference. See Kojève's *Introduction to the Reading of Hegel* and Fukuyama's *The End of History and the Last Man*.
- 17 In addition to the radical democrats, another prominent conception of agonal politics comes from Carl Schmitt. Schmitt's critique of liberal democracy is in part based on Nietzsche's conception of the *agon* and includes an extreme conception of political strife culminating in an existential challenge that defines and motivates states. Schmitt's thought is not liberal or democratic, and tends more toward a form of theocratic fascism. Those who propose radical democracy as a kind of agonal pluralism would do well to notice how fluid the concept of agonal politics is. See C. Schmitt (1988), *The Crisis of Parliamentary Democracy*; George Schwabb

and Tracy Strong (eds), University of Chicago Press; and Schmitt (2007), *The Concept of the Political*, Ellen Kennedy (ed.), MIT Press.

- 18 "It is not their love of men but the impotence of their love of men [which] keeps the Christians of today from burning us" (Nietzsche, *Beyond Good and Evil*, §104).
- 19 Nietzsche, *Beyond Good and Evil*, §207. The Latin phrase means "dross" or "refuse," as in the leftovers of the smelting process.

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Anachronism and Powerlessness: An Essay on Postmodernism

Leonard Lawlor

In Plato's *Theaetetus*, we find thinking defined by means of an interior monologue (189e–190a), that is, by means of a kind of auto-affection. Until he proves in the Third Meditation that God exists, Descartes is also engaged in a kind of auto-affection, a meditation on himself. Indeed, the Cartesian formula of "I think therefore I am" is an expression of auto-affection, since we find the same ego on both sides of the "therefore." If we progress in large steps across the history of philosophy, we see then that Descartes' *cogito* forms the basis for the Kantian idea of autonomy. The Kantian idea of autonomy of course means that I am self-ruling; I give the moral law to myself—unlike animal life, for instance, on which nature imposes its laws. But, in order to give the law to myself, I must tell it to myself. Kantian autonomy therefore rests on the specific form of auto-affection called "hearing oneself speak." Hearing oneself speak seems to include two aspects. On the one hand, I seem to hear my own self speak and not someone or something other. Let us now examine the particular experience of hearing oneself speak.

When I engage in interior monologue, when, in short, I think—it seems as though I hear myself speak at the very moment I speak. It seems as though my interior voice is not required to pass outside of myself, as though it is not required to traverse any space, not even the space of my body. So, my interior monologue seems to be immediate, immediately present and not to involve anyone else. Interior monologue seems therefore to be different from the experience of me speaking to another *and* different from the experience of me looking at myself in the mirror, where my vision has to pass through, at the least, the portals of my eyes. It is important to hear the "seems" in the preceding sentences. We are going to expose the essential structure below what is apparent or believed. So, the problem with the belief that interior monologue (in a word, thought) is different from other experiences of auto-affection is twofold. On the one hand, the experience of hearing oneself speak is temporal (like all experience). The temporalization of interior monologue means, as we have just seen, that the present moment involves a past moment, which has elapsed and which has been retained. It is an irreducible or essential necessity that the present moment comes second; it is always involved in a process of mediation. The problem therefore with the belief that interior monologue happens *immediately* (as if there were no mediation involved) is that the *hearing* of myself is never immediately present in the moment when I speak; the hearing of myself in the present comes a moment later; there is a *delay* between the hearing and the speaking. This conclusion means that my interior monologue in fact resembles my experience of the mirror image in which my vision must traverse a *distance* that differentiates me into seer and seen.¹ I cannot, it is impossible for me to hear myself immediately. But there is a further implication. The distance or delay in time turns my speaking in the present moment into something coming second. Temporalization implies that the present is not an origin all alone; it is compounded with a past so that my speaking in the present moment is no longer sui generis. Therefore it must be seen as a kind of response to the past. The fact that my speaking is a response to the past leads to the other problem with the belief that interior monologue is my own. Beside the irreducible delay involved in the experience of auto-affection, there is the problem of the voice. In order to hear myself speak at this very moment, I must make use of the same phonemes as I use in communication (even if this monologue is not vocalized externally through my mouth). It is an irreducible or essential necessity that the silent words I form contain repeatable traits. This irreducible necessity means that, when I speak to myself, I speak with the sounds of others. In other words, it means that I find in myself other voices, which come from the past: the many voices are in me. In the auto-affection of hearing oneself speak, we discover therefore a kind of deafness. I cannot—here is powerlessness—it is impossible for me to hear myself speak, but the inability to hear myself speak allows me to hear other voices, to hear a multi-vocality. Others' voices contaminate the hearing of myself speaking. Just as my present moment is never immediate, my interior monologue is never simply my own. As Deleuze would say, quoting Rimbaud, "I is an other" (Deleuze 1994, 86).²

The investigation in which I just engaged is phenomenological. In the strict sense, determined by the epoche, all phenomenological investigations are *anti-Platonistic*. To quote Deleuze again, the project of contemporary philosophy is the reversal of Platonism. The reversal of Platonism is the reversal of the

priority of objects to the priority of the subject, the reversal of the priority of the forms to the priority of experience. This definition of the reversal of Platonism however implies that anti-Platonism is *anti-Cartesian* only in the sense that it denies a *substantial distinction* between the subject and the object, between thought and extension. *It remains Cartesian* insofar as it pursues the sphere which Descartes opened up (even though Descartes does not himself investigate this sphere): the sphere of the subject, the soul, the *cogito*. Unlike Plato, who in the *Republic* investigates the soul on the basis of an investigation of the *polis* (Book II, 368c–369b), we anti-Platonists investigate the *polis* on the basis of an investigation of the *psyche*. This claim about anti-Platonism—that anti-Platonism means that we must investigate the self prior to the investigation of the political—explains, I hope, my opening problematization of auto-affection, that is, the problematization of immanent subjective experience.

This essay pursues the problematization of immanence. Anti-Platonistic thought is immanentist thought. Such immanentist thought defines not only phenomenology, but also postmodernist thought. As is well known, in 1979, when The Postmodern Condition: A Report on Knowledge appears, Lyotard defines the postmodern as the contemporary decline in the belief in a transcendent world of forms or any transcendent domain (however this may be conceived) that exists separately from the world of appearance or of experience.³ Lacking a transcendent measure to hierarchize and systematize the discourses (or "genres," as Lyotard would say⁴)—a transcendent measure not only like a realm of forms but also like an origin or an end (a prelapsarian principle or a final purpose)immanence results in differences among discourses, differences which cannot be ultimately unified. In other words, there is no one genus or genre of being (there is no unifying meaning of being); there are only multiplicities of things that exist (multiplicities of beings). The primary consequence of immanence therefore is heterogeneity. Heterogeneity means that, just as there is no transcendent measure for discourses, there is no identity constitutive of the self (or of the subject). Instead of identity, I find, inside of myself, difference. Again we can say: "I is an other." The other in me turns the "I," the self, into a "we." But this "we" is heterogeneous, and therefore not strictly a "we" at all.

The fact that the self is a "we" and yet that the "we" is absent (i.e. the "we" is a collectivity but one that lacks unity and identity) leads to what is really at issue in what I am presenting here. What is at issue is what Lyotard calls "the social bond" (Lyotard 1984, 11). To put this as clearly as possible, *what is at issue in postmodernism is the political subject*. How is the political subject—called "the people"—possible when immanence makes discourses, "selves,"

and, most generally, beings, heterogeneous? The recognition that beings are heterogeneous (a heterogeneity which, as we shall see, is fundamental and irreducible) is really the reason why postmodernism, for Lyotard, consists in the loss of belief in any transcendent form of identity. But in particular, as Lyotard shows, the recognition of heterogeneity has made the modern social bond at least questionable if not impossible. No longer, it seems, are we able to constitute the identity of a universal humanity by means of a large narrative (large because it refers to a collectivity consisting of all humans) about history having an end or purpose in absolute knowledge or universal freedom. As well, it does not seem possible to return (except perhaps under the guise of nationalism) to the primitive social bond, in which a tribe's identity is constituted by means of a small narrative (small because it refers to a collectivity the size of a tribe) about the origin of that tribe. Instead, in the postmodern epoch of the demise of the narrative constitution of the social bond, we find that something like a bond among peoples can be constituted by means of the criteria of optimal performance and efficiency, the building up of power and time; it is what Lyotard in his 1983 The Differend calls "the hegemony of the economic genre" (Lyotard 1988, 178).⁵ Almost 30 years later, it is still the case that the economic seems to be the sole genre or genus of being; the economic seems to be the sole genre or genus of thinking. The domination of global capitalism over every other genre of thinking and being, for Lyotard, amounts to a kind of totalitarianism (Lyotard 1992, 58 and 66–7). Therefore, what is most at issue in postmodernism and therefore in what I am presenting in this essay is the attempt to conceive a "we" that is not totalitarian (Lyotard 1988, xiii).

The project of determining the nontotalitarian "we" divides into two problems. Thanks to Kant, we are able to formulate the first problem with the question: what ought we to be? (Lyotard 1988, 178). More precisely, if the victory of capitalist techno-science is a kind of totalitarianism, then the first problem consists in determining a "we" that does not totalize or homogenize all the differences into a unity and identity. In other words, can there be a people who do not do violence to singularities? Is it possible for us to *imagine* such a people—a people who is somehow bound together and yet composed of singularities? The question of imagination brings us the second problem. We can express it in this way: if the nontotalitarian people is absent, then how are we to call it forth? More precisely, if, as Lyotard shows, the social bond is constituted by narratives, by stories, then are we able to imagine a kind of narrative, a kind of literature that would call forth a nontotalitarian people? Now, while I shall suggest, at the end, solutions—albeit insufficient—to these two problems, I shall be concerned

primarily with determining the conditions that allow not only the two problems (the determination of the nontotalitarian people and the imagination of a literature that would constitute the nontotalitarian people) to be posed but also solutions. To say that the problem of the political subject (the people) consists in finding consensus among heterogeneous individuals and groups does not see the true problem arise. Consensus implies that people-formation aims at the goal of totalization as if the solution was possible and the problem was merely an obstacle to be overcome. The true problem comes into view only when we recognize that totalization (a universal people) is impossible and yet the dispersion into groups is also impossible. Posed in the terms of impossibilities, we see that the goal and the solution have changed, but also the problem looks no longer to be an obstacle. Now the problem is a spur for more thinking, for more writing. What stimulates more writing can be indicated with two words: anachronism and powerlessness, hence the title of this essay. As we shall see, the conditions of impossibility called anachronism and powerlessness link in an inseparable and dis-unified way both heterogeneity and unity, both event and repeatability. As I indicated already, we shall be able to discover these conditions, however, only if we start with individual and not with collective experience, with the self and not the people. It is incontestable that my immanent subjective experience is temporally conditioned. Therefore, we shall begin by reconstructing the descriptions of time presented by two philosophical movements who have most influenced postmodernist thinking: phenomenology and Bergsonism.6

Phenomenology and Bergsonism: The beginnings of postmodernism⁷

In order to be brief, I am merely going to summarize the descriptions so that we can see what is implied in them. The secret of the descriptions of time given to us by phenomenology and Bergsonism lies in the fact that time is a medium (continuity) which heterogenizes (discontinuity). We are able to reformulate the secret in this way. *At the same time*, the present experience is an event because it is singular and it is not an event because it is repeatable; *at the same time*, the present experience is alteration and it is not alteration because there is continuity. This "at the same time," this simultaneity, is the crux of the matter. Because of temporalization, we can have no experience that does not essentially contain these two forces of event and repeatability in a relation of disunity *and* inseparability. In other words, because of temporalization, we are confronted with *two necessities* (the need to repeat and the need to singularize) related in an irreducibly necessary relation. Derrida would call this relation the undeconstructible itself; he would also call it *anachronism*, against time, never on time, always coming at the wrong time (Derrida 1993, 65). Time is out of joint, and we are *powerless* to put it in joint: anachronism and powerlessness. We have already indicated the powerlessness when we found a kind of deafness in the auto-affection of hearing oneself speak. But here there is also a kind of blindness due to anachronism since the present now finds itself always repeated and replaced, the "eye" of experience, so to speak, finds itself always "gouged out." It is impossible to stop repetition and singularization. It is impossible to foresee all the singular events that will come about within repetition; it is impossible to remember all the events which are being repeated. We cannot stop the contingency, the accidents, and the supplements from clouding our vision of what is being repeated, and we cannot stop the repetitions, the reproductions, and the essences from clouding our vision of the events. We cannot see into what will happen in the future, and we cannot see back into what has happened in the past. We cannot see the origin or the end. If the origin is conceived—as it always has been in philosophy-as self-identical, then we must say now, in light of our descriptions, that the origin had always been already, immediately divided. If we shift our focus to the future and think about the end, then we must say that the end will always be still, immediately divided. A prelapsarian and a post-lapsarian principle, neither of these principles is possible.8

The social bond and totalitarianism

The two impossibilities of origin and end anticipate the two ways in which, according to Lyotard, narrative attempts to constitute the social bond (Lyotard 1984, 19; also Lyotard 1988, 155). The uses of narrative "legitimate," as Lyotard says, criteria for evaluating what is performed or what can be performed within a given society. But especially they constitute the identity of a people (Lyotard 1992, 39–43). The two uses of narrative are the wild or primitive (*le récit sauvage*) and the cosmopolitical or modern (Lyotard 1988, 155; also Lyotard 1984, 19). On the one hand, the primitive narrative—Lyotard always refers to the Brazilian tribe called the Cashinahua—such as myths, tales, and legends always concern the origin of the tribe. In particular, the myths provide the origin of names, proper names, through which one who has this name now understands his position in the society (Lyotard 1988, 153). The narratives, in other words, set

up a world of names, the Cashinahua world. In order to hear the narrative, you have to have a Cashinahua name, and in order to recite the narrative, you have to have a Cashinahua name. According to Lyotard, the sense of the story, which recounts the origin of the names, constitutes the social bond, but so does the present act of recitation. The narratives are repetitive; each narrative begins and ends with a fixed formula: "On this date, in that place, it happened that, etc." (Lyotard 1984, 21–2). Through the fixed formulas, the differences between each recitation are consigned to oblivion, and therefore it seems as though the stories were told "forever" (Lyotard 1984, 20). The stories seem to be at once evanescent and immemorial, as if the origin was always present and will always be present (Lyotard 1984, 22). There seems to be no hiatus between the current narrator and the ancients, there seems to be no hiatus between the narrator and the hero of the story. In this way the "we" of the Cashinahua, the identity of this one tribe, is what it has always been: "the true men," as the Cashinahua people call themselves. Because these myths legitimate only the one particular tribe, they are, according to Lyotard, "small narratives" (récits petits) or "little stories" (petites histoires) (Lyotard 1988, 155). In contrast to the wild narratives, cosmopolitical narratives tell a "large story" (grande histoire) (Lyotard 1988, 155).9 Like the wild narratives, the cosmopolitical ones are also concerned with legitimation and with establishing identity. According to Lyotard, the modern or cosmopolitical narratives ask this question: "since this x, this date, and this place are proper names [like the Cashinahua], and since proper names belong by definition to worlds of names and to specific 'wild' narratives, how can these narratives give rise to a single world of names and to a universal narrative" (Lyotard 1988, 155). The Cashinahua little stories allow the Cashinahua to distinguish themselves or even to make themselves an *exception* in relation to other humans. The universal history of humanity, however, consists in the extension of particular narratives to the entire set of human communities (Lyotard 1988, 157). The extension is possible because here, unlike the primitive narratives which ground legitimacy in an original founding act, legitimacy in the modern narratives is grounded "in a future to be brought about, that is, in an Idea to realize" (Lyotard 1992, 50). In contrast to the primitive narratives, the modern narratives do not tell a story of proper names, a story of particulars. They tell the story only of a general or universal name. For Lyotard, German Idealism plays an important role here. There is a subject of history called spirit or humanity. In regard to spirit, the end of history is absolute knowledge; in regard to humanity the end of history is universal freedom. Either we have a meta-narrative of spirit—an abstract and theoretical subject above humanity-which comes to know itself by overcoming

ignorance, or we have an epic in which the people—a concrete and practical subject—emancipates itself from what prevents it from governing itself. Finally, unlike the primitive narratives, which are evanescent and immemorial, the modern narratives consist in memory and projection, as if the end was intended in the past and will be fulfilled in the future (Lyotard 1984, 26; also Lyotard 1992, 50). We see the distinction Lyotard is trying to make in these kinds of narratives. Primitive narratives are little, while modern are large: particular versus universal; primitive narratives concern origins while modern concerns ends: myth versus history; primitive narratives concern the proper name of a tribe, while modern concern the general name of humanity; and finally, primitive narratives are projection and memorial: panchrony versus diachrony. Overall, the distinction between primitive and final social identity.

As we noted at the beginning, when Lyotard is making his report on knowledge, near the end of the twentieth century, the belief in the modern, cosmopolitical large narratives is in decline: postmodernism is arising. Since the 1980s (The Differend was originally published in 1983, as we noted above), perhaps we have seen as well the return of primitive narratives under the heading of a revitalized nationalism (e.g. in the Balkan states). But more clearly, as Lyotard himself notes, and here he coincides with Deleuze and Guattari and with Derrida, we have seen the rise, after the dissolution of the Soviet Union, of global capitalism. According to Lyotard, indeed according to all the postmodernist philosophers, capitalism, being global, makes the economic genre hegemonic over all other genres or kinds of discourse, over all other modes of thought, over all other genera of beings. The economic genre, as Lyotard argues, does not strictly form a social bond; the economic genre takes account neither of proper names (the Cashinahua) nor of general names (humanity). By means of globalization, however, the economic genre seems to be universal; it seems to form a kind of unity among peoples since now there seems to be a universal way of speaking, of thinking, of being (Lyotard 1988, 177). What becomes universal with the economic genre is the criterion of optimal efficiency or optimal performativity (Lyotard 1984, 41-7, and 64). Something like a piece of knowledge expressed in a sentence must meet the criterion of efficiency in order to be accepted in the universal discourse, and for acceptance to happen all knowledge must be converted into information (Lyotard 1988, 177; also Lyotard 1984, 47). In other words, after being converted into information (i.e. into a commodity), it is possible to evaluate all sentences, indeed, all actions, all institutions, in terms of efficiency. These conversions

allow "the tribunal of capitalism" to resolve all disputes and to resolve them as efficiently and as quickly as possible.

The criterion of efficiency (speed) indicates that the economic genre has a specific relation to time (Lyotard 1984, 61). For Lyotard, the work that goes into production does not expend energy; it expends time. Work "stocks up time" in the product (Lyotard 1988, 174). It is then the amount of stocked-up time which determines the value of the product. As well, money amounts to stocked-up time since it is or ought to be the more or less faithful equivalent of the product's values (i.e. the faithful equivalent of the time incorporated in the product). But having more capital means having more time and having more time means having the ability (or power) to gain more time. Time is here not the experience of temporalization and duration which we analyzed above, temporalization and duration always including the heterogeneity and contingency of the event, its incalculability and unforeseeability. Here time must be countable, a quantity about which we can calculate. What follows from Lyotard's definition of value in terms of countable time is that the exchange of products consists in the attempt to recover, or better, "to cancel" the time lost in work (Lyotard 1988, 175). The more delays there are in the process of exchange, however, the more time is lost. So, as Lyotard says, "we see what the ideal is: to make up time immediately" (my emphasis) (Lyotard 1988, 176). The ideal is to have the smallest hiatus or distance in between the exchange. The goal of the economic genre is to get time back as quickly as possible, "to gain time." If the small primitive narratives are panchronic and the large modern narratives are diachronic, then the economic genre is *ortho-chronic*, that is, it aims at traversing time as quickly as possible so that the payment is paid back never at the wrong time, always at the correct time, on time. The economic genre demands that there must be no anachronism. And yet the economic genre is hyper-chronic insofar as it wants to gain as much time as possible: not just equal to the quantity of lost time, but more time. Because of this "more" (always more), the economic genre seems to resemble universal history: everyone is making progress toward having more time for doing things, more time for adventures (Lyotard 1988, 178). But in fact, the aim of gaining time is nothing but a quasi-aim since the economic genre never asks what we ought to be. Global capitalism therefore shifts the emphasis from ends (from finality) to means (Lyotard 1984, 37; also Lyotard 1988, 179). The question constantly being asked in the economic genre is: what are the most efficient means to gain more time (i.e. to gain more capital)? In order to find answers to this question, the economic genre engages in stories, simulations (which are really calculations) of possibilities, probabilities, and improbabilities (Lyotard 1988, 148). The

economic genre engages only in hypothetical thinking. Its only concern lies in the possibility of gaining more time: *power and hyper-chronism*. We can see already that with its quasi-end of gaining time, the economic genre is totalitarian (or global): "the complete hegemony of the economic discourse" (Lyotard 1992, 58). Global capitalism presents itself to the world as a necessity, since, in order to live, it seems as though one has to participate in the world market and in order to participate in the world market one has to have capital. Behind the appearance of the necessity of capitalism, however, according to Lyotard, the quasi-aim of gaining time totalizes all peoples, all things, all ideas (Lyotard 1992, 59).

For Lyotard, however, the two narrative modes of constituting the social bond are also totalitarian: they attempt to shelter the social identity from heterogeneity and contingency.¹⁰ We have seen that the tradition of the Cashinahua myths about the origin legitimate obligations and prescriptions through the authority of the Cashinahua name. The legitimation is total since it is based in the totality of life instituted by the narratives. But more importantly, for Lyotard, any event, human or natural, for which there is no Cashinahua name has no authority to exist since it is not part of the whole of life set up by the Cashinahua myth of the origin of names. The myths therefore allow the Cashinahua to see themselves as the exception among peoples: again, they are the "the true men" (Lyotard 1992, 46). There is no question of the final identity of the "we," an identity to be accomplished in the future, since the Cashinahua narrative always says that we ought to be what we are-Cashinahua (Lyotard 1992, 49). Importantly, Lyotard extends the myth of origin legitimation to the Nazis who developed the fabulous stories of the "Aryan ancestors." In the Nazi myths, the Aryans are the "true men," the exception among peoples, and just as in the Cashinahua myths there is no question of a future "we" to be accomplished: "We ought to be what we are-Aryan." In the myth of Aryan origin, other peoples then do not participate in the vital principle of the Aryans; therefore, all that remains to be done is finish them off, exterminate them (Lyotard 1992, 51-2). Lyotard's extension of the primitive myths to the Nazis shows us the modern (not primitive) importance of the small proper name narrative function.

Let us now turn to the large modern narrative function. So, in contrast to the primitive myths of origin, the modern large myths are myths of a future to be brought about, an idea to be realized: the idea of universal freedom or enlightenment. For this idea to come into realization, it must be the case that a singular people's identity pass through an identity crisis, that is, its identity must decompose or fissure (Lyotard 1992, 52). In other words, the proper name of this people must be questioned, turning the people into a mass or a crowd (Lyotard 1992, 56). Then the mass asks itself what they ought to be. But, as Lyotard points out, there is an equivocation in the concept of the people. With the concept of the people, one does not know whether what is being invoked is based on the tradition of a narrative of origin or on a tendency toward the idea of freedom. In other words, the name of a people-the French people, for example, in the 1789 Declaration of the Rights of Man-encompasses at once the singularity of a contingent community and the incarnation of a universal sovereignty (Lyotard 1992, 53). The equivocation implies that the ideal community already seems to be real; the people already seem to know how to name themselves. For Lyotard, the equivocation in the concept of the people leads once more to the Nazis. In the 1930s, the Nazi cure for the German community's identity crisis consisted in presenting (in their "festivals") the Aryan myths as the exceptional people (das Volk) who imparts its name to the end pursued by human history. The Nazis do not simply say, "Let us become what we are-Aryans"; they say, "Let the whole of humanity be Aryan" (Lyotard 1992, 56). For the Nazis, the imparting of this name to everyone led to the violence of a world war. Therefore, as Lyotard shows, because of the equivocation in the concept of the people, the modern myths are different from the primitive myths only in terms of the size of their domination. Both are totalitarian insofar as they produce an identity that dominates an entire collectivity such as a tribe ("the Cashinahua") or an identity that dominates all humans ("the Aryans"): "the true men." The myths, however, are totalitarian in a more dangerous sense: they exterminate anything heterogeneous or contingent, the non-exceptional singularities, that might disturb the identity.

Conclusion: There will never be enough written

We are now able to return to the two problems which we outlined at the beginning, the two problems of immanentist or postmodern thought. The two problems concern the constitution of a nontotalitarian "we." I shall conclude by suggesting solutions to them. At the beginning we were able to formulate the first problem with Kant's help, his question of what we ought to be. But now we are able to formulate the problem more precisely with this question: is a social bond possible which does not bind in a totalitarian way—as we have seen both the small primitive narratives and the large historical narratives are totalitarian—and, more precisely, does not bind by means of the aim of gaining more time and having more calculable possibilities, which does not succumb to the economic goal of power? The condition for this problem lies in time. By means of panchronism, diachronism, and hyper-chronism, these modes of constituting the social bond aim to shelter the social identity from contingency and heterogeneity. Yet, as we have seen, the absolute of temporalization or duration necessarily includes contingency and heterogeneity. Therefore, anachronism always persists despite and below these other chronisms (Lyotard 1988, 144).

We are able, therefore, to formulate a solution to this problem by reflecting more on anachronism. Time is fundamentally ana-chronic because time temporalizes or endures by means of two forces, the force of repetition and the force of singularization, the force of universality and the force of event. The necessity of these two forces is so strong that we are powerless not to obey their command. But if we are unable not to obey, then we are able. If we are unable to stop repetition and if we are unable to stop singularization, we are able to be unable. In other words, our powerlessness gives us a kind of power. Unable to stop repetition, we are able to let it happen; unable to stop singularization, we are able to let it happen. Instead of calculable possibilities, our ability to be unable opens up an incalculable and uncontrollable potentiality. Therefore, unlike the economic genre which calculates in order to make the hiatus pass as quickly as possible, we devote ourselves to the passing of time, letting the hiatus take the time it needs, stretching the link out as long as possible. We devote ourselves, which takes time, to being deaf and blind, a deafness to what cannot be heard, a blindness to what cannot be seen: totality, homogeneity, and identity-in order to see better, in order to see heterogeneity, to see difference, and contingency; a deafness to what cannot be heard: my own or your own voice-in order to listen better, to hear the multi-vocality of all living things. This ability to be unable amounts to a new sensitivity, a sensitivity that turns away from the molar and majoritarian forms toward the micro and minor informalities. Taking up the equivocation in the concept of the people which Lyotard has pointed to, we contest the singularity of a people in order to make it pass into universality, in order to pass over the limit and become otherwise; we contest the universality of a people in order to make it pass into singularity, in order to pass over the limit and become otherwise. There would be no consensus here just as there would be no dispersion. This would be a people who do the least violence to singularities because it is unified around powerlessness. So far, we have only used a negative name for this "we" who are bound together by the power of powerlessness: nontotalitarian. Now, we are able to give it a positive name: the friends of passage. Friends, however, require names, proper names, and the question of the name brings us to the second problem.

How are we able to call forth these friends of passage? Lyotard has shown that the social bond of a people is based in narratives, in stories or histories, in literature in a broad sense. But he has also shown that both the primitive myths of origin and the modern myths of end constitute a people who are totalitarian. He has pointed out as well that even the economic genre, which is totalitarian in its own way, makes use of stories insofar as it simulates hypothetical possibilities, foreseeable future outcomes of possible means. We must therefore try to imagine a literature that differs from all of these kinds of stories. As we have seen, the anachronism of time implies that there is no experience that does not include a repetition. The primacy of repetition means that there is no original identity or original presence being repeated. In other words, if repetition is necessarily first, then we are never able to know what is being repeated. Likewise, anachronism shows that there is no experience that does not include an event; if an event is necessarily last, then we are never able to know what is going to happen. Due to this inability to know, we can suddenly imagine a kind of story. It would concern a secret. Throughout the story two questions would remain unanswered because they are unanswerable: what happened and what is going to happen? No calculation of means and ends would be possible here. This literature would recount the unrememorable and the unforeseeable. In the story, perhaps there would be a central character with a proper name; or perhaps the story would be recounted in a letter addressed to someone with a proper name. The proper name would not indicate a self in the traditional sense, a singular identity. No, it would indicate a singular potentiality. Unable to find the answers to the questions of what happened and what is going to happen, being deaf and blind, this person or persons would hear and see better. They would hear and see better the others within themselves, allowing them to become otherwise. And then their proper names would no longer be appropriate. They would no longer know what name is proper to them. Other names would be needed and, therefore, other letters addressed to other addressees. In the end we would have neither the small narrative of one proper name (the Cashinahua) nor the large narrative of one proper name (the Aryans), but an ever-changing cloud of stories calling forth these friends whose proper names are never able to be appropriate because they are letting others pass.¹¹ As we said a moment ago, however, friendship is not possible without knowing the other person's proper name. Therefore, this friendship will never be present, this people will never be complete. The people will always be in the future and still coming, which means that whatever we write, it will not be sufficient.¹² We must continue to write more: never will there be enough written in the name of passage.¹³ Writing more, we recognize that the self (either individual or collective) is always absent (there is no original identity) and always to come (there is no final purpose). Writing more, we recognize (we postmodernists) that the problem of the self is more than an obstacle. It is a spur to thinking.

Notes

- 1 Although time (temporalization and duration) has been the principal idea so far, space (the porous limit, the hiatus, and now distance) plays an equally important role. Fundamentally, the hiatus is neither time nor space.
- 2 Deleuze is quoting one of Rimbaud's "Letters of a Visionary" (Letter of May 15, 1871 to Paul Demeny): "Je est un autre."
- 3 For Lyotard's work, I have consulted (Williams 1998) and (Bennington 1988). For postmodernism, I have consulted (Cahoone 1996).
- 4 The French word "genre" must be heard in two ways, as referring to literary genres and to genera or kinds. So, the term in Lyotard is supposed to invoke not only language games as in Wittgenstein but also Aristotle's multiple meanings of being.
- 5 In his 1983 *The Differend*, however, he makes a much stronger claim than the claim that heterogeneity is irreducible, saying that the event of the Holocaust (the name "Auschwitz") permanently disrupts the teleological constitution of a "we" (Lyotard 1988, 97–9; also Lyotard 1989, 360–92). Lyotard's reflections on Auschwitz are inspired by Adorno.
- 6 It is important to keep in mind that Lyotard wrote his first book on phenomenology. See (Lyotard 1991).
- 7 This essay continues an earlier text on postmodernism found in Ch. 7, "The Beginnings of Postmodernism: Phenomenology and Bergsonism, Derrida and Deleuze," of (Lawlor 2003, 109–22). I am still arguing that postmodernism flows out of the philosophy of life.
- 8 Vincent Descombes calls this impossibility "the supposition of the eternal recurrence" (Descombes 1980, 182).
- 9 Lyotard also calls these narratives "modern."
- 10 Here I am relying on Lyotard's 1984 essay called "Memorandum on Legitimation" which is found in *The Postmodern Explained* (Lyotard 1992, 39–60).
- 11 Lyotard makes use of the image of a cloud (Lyotard 1984, xxiv and 64).
- 12 This entire essay extends ideas I formulated in (Lawlor 2007).
- 13 This sentence alludes to something that Deleuze and Guattari say in *A Thousand Plateaus*: "In short, we think that one cannot write sufficiently in the name of an outside" (Deleuze and Guattari 1987, 23).

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Taking Hold of Life: Liberal Eugenics, Autonomy, and Biopower

Serena Parekh

Recent developments in biotechnologies raise important ethical questions. This essay examines one such biotechnology, liberal eugenics. Liberal eugenics refers to genetic technologies designed not to improve health or to fight disease, but to augment the lives of ordinary, healthy individuals. It is "liberal" insofar as it does not involve state coercion; individuals are free to choose or refrain from choosing certain enhancements, either for themselves or for their children. For some, liberal eugenics is acceptable in a liberal political state because it protects and promotes the autonomy of individuals. They see the protection of autonomy—understood as noninterference with a given choice—as the *sine qua non* of an ethically acceptable technology. If this is the case, then it appears that we have little reason to question the ethics of liberal eugenics.

Looked at in a different light, however, the ethical dimension of liberal eugenics is not so simple. Indeed, I argue in this essay that in order to better understand this, we need to reorient the way the debate has been framed and employ a richer conception of autonomy. I argue that we ought to consider liberal eugenics as a form of *biopolitics*, or more specifically, as a biopolitical and disciplinary technique. Biopolitics is a concept first developed by Michel Foucault to describe the way in which power functions in modernity. As I will explain below, power in modernity functions not through repression but through *taking hold of life*, through the management of life in the name of the well-being of the population. In order to explain this, I look at the concept of autonomy, both as it is understood within liberal political thought and through the lens of biopolitics. I show that the latter perspective gives us a fuller sense of autonomy. I argue that autonomy in modernity is shaped not only by state coercion (or the lack of it), but also through the biopolitical techniques of

discipline and normalization. This will help us to see that the absence of state coercion alone does not in itself guarantee autonomy and hence does not imply that liberal eugenics is morally or politically acceptable. To make my argument, I draw on the work of Susan Bordo in order to clarify the way in which liberal eugenics can be thought of as a biopolitical and disciplinary practice. I conclude by discussing the ethical questions that are raised when we view liberal eugenics as a biopolitical technology.

Human enhancement in a liberal state

A liberal state is one that, in virtue of being neutral on questions of the good life, allows its members the autonomy to develop and seek out the good for themselves. A liberal state thus only intervenes in the lives of people by guaranteeing basic rights so that they are able to attain their chosen good in a fair and equal way. As noted above, it is the absence of state coercion that makes liberal eugenics *liberal* and hence, for many, morally acceptable. Here freedom is understood as a lack of state coercion. For authors like Nicholas Agar, one of the leading proponents of liberal eugenics, liberal eugenics is permissible because it is compatible with the right of parents to choose what they think is best for their children. It is all the more compatible because liberal eugenics can be thought of as enhancing human autonomy insofar as it increases the range of choice for parents. For proponents of liberal eugenics the fact that it promotes and enhances autonomy and in no way violates individual rights means that it ought to be considered an ethically acceptable practice.¹

For many, this is the fundamental, decisive issue. On this view, because liberal eugenics does not violate autonomy, it ought to be seen as a morally acceptable practice and one which is promoted by states. It is not possible to constrain people's choices by limiting enhancement within a liberal framework without smuggling in a substantive conception of the good (which is impermissible in a non-perfectionist liberal state). I will argue below that proponents of liberal eugenics employ an overly simplistic conception of autonomy and that if we understand autonomy through the lens of biopolitics, we will see that liberal eugenics raises important ethical questions.

Biopower and autonomy

In the account above, and in liberal political theory more broadly, autonomy plays a large role. But what makes a choice autonomous to begin with? That

is, how do we arrive at a decision or a choice that is free, that is genuinely our own? The answer that is usually given to such a question contains two elements. First, it must not be coerced or manipulated by the state in any way. As Matthew Clayton puts it, "autonomy is essentially a matter of not having one's informed choices coercively interfered with by others" (Clayton 2004, 191). Second, my choice must be "informed," that is, it must be rationally deliberated upon, which implies a broad capacity to reason and a basic level of education that would allow me to do this in a sufficient way. If these conditions are met, the choice that is arrived at is deemed autonomous. We can say, then, that autonomy involves two moments—the moment before we make our decision and the moment after. If both of these are sufficiently free of coercion we can say that a decision was made autonomously.

The focus of liberal political theory has largely concerned the second moment, the period after we have arrived at our decision. This is, in part, because liberal political theory is still based on a sovereignty model of power, a model that says that power is what comes from "on high" and is exercised negatively, through constraint. The power of a state lies in its ability to constrain, detain, and prevent us from fulfilling our freely arrived at decisions.

The focus of biopolitics, by contrast, is on this first moment, but understood in a different way. According to this view, our choices are not purely self-generated just because they are not manipulated by the state. Rather, power is still operative in this context through norms and normalization. This is grounded on an alternative view of power, namely biopower. Biopower is power that impacts all areas of life. According to Paul Rabinow and Nikolas Rose, biopower can be understood as "modes of subjectification, in which individuals can be brought to work on themselves, under certain forms of authority, in relation [to] truth discourses, by means of practices of the self, in the name of individual or collective life or health."2 Biopower is a "mode of subjectification" in the sense that it is part of the way that we are formed as subjects. Biopower trains us in how to think about ourselves. We are formed through working on ourselves, under certain forms of authority, such as scientific or medical discourse or the pseudo-medical discourse often connected to cosmetic enhancements. To say that this occurs in relation to truth discourses implies that these forms of authority just mentioned have privileged claims to truth-to speak with the authority of science or medicine is to have unique access to the truth, a truth that remains fundamentally unquestionable. Finally, biopower is unique in that it is connected to the concept of health broadly construed—the health (physical, psychological, moral) of the individual or of a people, a state, or a group. Biopower as a practice on the self is always done in the name of this good.

The concept of biopower emerges out of the work of Michel Foucault who observed that at the advent of modernity, the way that power operated within a state began to change. Rather than coming from on high by a monarch who exercised it through "taking away" things such as time, life, or the body, power became productive. Power became a matter of shaping and ordering, rather than impeding. Importantly, it was exercised at the level of *life* (both of the individual and the species) and took several distinct forms. The form of power most relevant to our discussion is disciplinary power. Disciplinary power was concerned with disciplining individual bodies, by optimizing their capabilities, increasing their usefulness, and making them more docile.

Disciplinary power works not through imposing on the individual from a position of authority, but through letting the individual internalize what is demanded or expected of her so that she imposes it on herself. In other words, we work on ourselves in order to make ourselves conform to certain given norms because we know we will be, or could be, seen, judged, and hierarchized based on our ability to do this. It is in this sense that our bodies are both the objects and instruments of power. Often this is for our own benefit-we become more productive, useful, better liked, and better able to fit in. In all of these moments, power is at play but it is not experienced as a constraint on my freedom as a rational chooser. Rather, being disciplined is the very condition that allows me to make my decisions. Power here does not constrain me but produces me in a certain way; it does not harm me, but rather benefits me, allows me to fit in, and rewards me for doing so. The subject on whom this power is operated is no longer the legal subject for whom death is the ultimate constraint and punishment; rather the subject is the living being for whom power is operative on the level of life itself. Power takes hold of life, rather than threatening death (Foucault 1990, 143).

What is essential for both biopower and disciplinary power is that they operate not primarily through law but through the *norm*, and as such, part of their power consists in *normalization*. The norm acts as a continuous regulatory and corrective mechanism. Unlike law, it does not wait until it has been violated to respond. Further, unlike the law, the norm does not threaten with punishment (although the penalties for violating the norm are often well known³), but qualifies, measures, appraises, and hierarchizes. While it is true that laws also set up norms (e.g. the illegality of same-sex marriage upholds the norm of heterosexuality), the law functions primarily through punishment. Further, the norms that arise as a result of the law are but one way that norms appear—norms appear out of other historical and social practices as well (such as hospitals, schools, and prisons).

Biopower, autonomy, and cosmetic surgery

I would like to reconnect this discussion of biopower and normalization with the topic of autonomy with which the previous section began. To do this, I would like to draw on the work of Susan Bordo who brings to light the impact of norms on autonomy. Bordo has written extensively on what motivates women to have cosmetic surgery and how women themselves understand their motivation. Bordo sees the pursuit of beauty especially through cosmetic surgery as a normalizing discipline that is masked behind a rhetoric of personal agency. What is so dangerous about this rhetoric is that it renders invisible the norms to which individuals are, in fact, aspiring-norms that often seek to eliminate diversity and perpetuate pernicious social norms connected to race and gender. In other words, behind the rhetoric of autonomy and self-empowerment lie the biopolitical norms discussed above that are active in shaping how we see ourselves and the decisions we make about our bodies, our lives, and our health. Though decisions about which plastic surgery to engage in are not dictated by the state, they nonetheless are not completely free and self-generated in the way that many people insist that they are.

When women are asked why they are undergoing a particular plastic surgery, the answer, overwhelmingly, is "I'm doing it for me." What is usually meant by this is that the individual is not doing it to please a boyfriend or husband, but to please herself. It is simply her preference that she seeks to satisfy. In such a statement, Bordo writes, the self is thought of as a "pure and precious inner space" that is untouched by external values and demands (Bordo 2007, 193). That is, such a decision is thought of as being autonomous simply in virtue of the fact that the individual woman claims that it is. The very idea that a woman is, for example, having breast augmentation surgery in order to conform to social or cultural norms is often greeted with hostility and downright denial. Such a suggestion is thought to take away from the empowering possibilities of these surgeries. The result is an impasse, a failure to recognize that there is anything more than pure personal choice at work.

In Bordo's view, this obscures what is really going on in these decisions. The first thing that is masked with the rhetoric that we are fully in charge of our decisions is what she refers to as a "pedagogy of defect" (Bordo 2007, 197). Women learn to see themselves and various parts of their bodies as being defective, faulty, or unacceptable. This of course goes on within a particular consumer culture that, not surprisingly, is able to offer the means that promise to cure the defect. It is a seamless package of defect and cure that has the added

benefit of allowing the individual woman to feel that she has been put in charge of her life and empowered. What this effaces, however, is the question of what made the woman dissatisfied to begin with. What makes the normal standards for beauty normal? Bordo emphasizes that there is a consumer system operative that depends on our perceiving ourselves as defective in order for us to find new ways to alleviate our defects; it is precisely this system that is masked through the language of personal empowerment or preference satisfaction.

Second, what is masked with the language of personal empowerment and preference satisfaction is that cosmetic surgery is a *normative* cultural practice; it is not simply a matter of individual choice. Plastic surgery is normative in the sense that it sets the standard for what counts as an acceptable body or face. For example, if the unwrinkled face becomes the norm for older women, the decision to have a facelift becomes "free choice under pressure" (Bordo 2007, 203). It is not that anyone, and certainly not the state, is forcing the individual to have surgery—there is no explicit coercion. But those who choose not to have the surgery may face certain social, professional, or personal disadvantages. Everyone's face is judged, evaluated, hierarchized by the presence or absence of wrinkles. This is by no means exclusive to people of a higher socioeconomic level; indeed, most plastic surgeries are done by middle to lower income people who either go into debt or spend their savings (Bordo 2007, 220 fn 9 and 10). More importantly, we learn to evaluate ourselves in these terms, deeming our own faces acceptable only when they are wrinkle free and young looking.

Finally, the rhetoric effaces the disciplinary reality of cosmetic surgery—it is a practice that does not merely transform the individual, but normalizes her. Most individuals who have cosmetic surgery are trying to conform to a model of what is normal. We have internalized what is expected of us and through these practices we make ourselves conform to an image of what is normal. For example, women are normalized to Caucasian standards of beauty. African-American women, among other non-Caucasian groups, aim to conform to Caucasian norms of beauty such as straight hair.⁴ For most of these women, this is perceived as merely a free choice or a preference to be satisfied. Yet this choice occurs within a cultural context of historical discrimination based on race. Bordo reminds us of the nineteenth-century "comb test" in which the only people who could enter a certain church or club were people who could pass a comb through their hair that hung outside the door. The choice of straight hair is not an arbitrary one. This remains true for other forms of plastic surgery such as reshaping of the nose, eyes, or particular body parts to be more in line with these Caucasian standards. For Bordo, individuals are "choosing" to assimilate ethnic and racial features to a white norm and these choices cannot possibly be taken to be simply individual preferences. Further, participation in a process of racial normalization makes it harder for others to refuse to participate; there is a high price to be paid for resisting a well-established norm.

Liberal eugenics as a biopolitical and disciplinary practice

Bordo's analysis is helpful, I think, because it can help us to understand the way in which liberal eugenics can be understood as a biopolitical and disciplinary practice. Further, it can help us to understand how autonomy can be compromised even when it is not done directly by the state. Recall that disciplinary power works by "making" individuals, or to be more precise, by making individuals work on themselves. In this way, the individual is both the object and instrument of power. This is done not through the state imposing its will on the individual, but through letting the individual internalize what is demanded or expected of her and then impose it on herself. In other words, we work on ourselves in order to make ourselves conform to certain given norms. Precisely because we know we are or could be observed and judged, we make ourselves conform to what is expected of us. Our decisions, then, certainly appear as free choices, but are much more akin to the "free choice under pressure" that Bordo describes. We are aware of the penalties that accrue for failing in this practice.

It is easy to see how liberal eugenics can be understood as a disciplinary power. The reason we may want certain enhancements, and not others, is because we have all internalized expectations of what is normal and hence desirable.⁵ Liberal eugenics is characterized precisely by the absence of state coercion so the impetus for these decisions appears to be entirely self-generated. What is clear from Bordo's analysis is that the norms that we aim to conform to are certainly not self-generated but emerge from within a particular context that is anything but neutral. Yet the emphasis on the self-sufficiency of the autonomous decision obscures this particular context and prohibits any interrogation of it. The claim in cosmetic surgery that "T'm doing it for me" or in liberal eugenics that it is being done to satisfy the preferences of a parent are both revealed to be highly misleading. It shows further why proponents of liberal eugenics like Agar are wrong to think that lack of state coercion is sufficient to vindicate the practice.

Recall further that what is essential for both biopower and disciplinary power is that they operate not primarily through law but through the *norm*, and as such, part of their power consists in *normalization*. In other words, these powers are often independent of the law and are certainly not enforced through law. Rather, the norm acts as a continuous regulatory and corrective mechanism. Normalization, I would argue, is inherently a part of liberal eugenics even though this is precisely what is disavowed with the language of preference satisfaction and autonomy. The enhancements that are chosen conform to our understanding of what a normal person is and seeks to enhance certain "normal" traits (height, normal social skills, normal features of appearance). The "pedagogy of defect" is also at work in the process of normalization insofar as we learn to see certain traits as defects or undesirable qualities. Genetic enhancement, as a commercial venture, promises the cure that our children will not have to suffer with these undesirable traits. The cycle of defect and cure as a process of normalization is no different with liberal eugenics than with cosmetic surgery.

It might be objected that unlike cosmetic surgery, genetic enhancement is done to make people "better than normal" thus showing that individuals want to exceed or transcend these norms. While it is true that genetic enhancement is best understood as techniques not intended to heal a disease or disability but to enhance an already "normal" person, it is a misunderstanding to see it as something that seeks to subvert the norm. Instead, genetic enhancement ought to be understood as an even more disciplined way of trying to achieve the norm. The norm is never something that is static but rather is fluid and changing. Genetic enhancements never diverge from what would be considered good for a human being and hence what is "normal" (even if it is something that only few people achieve), even though our understanding of this might change over time.⁶ Any deviation from this, such as genetically changing your children to carry a defect or social disadvantage, would be prohibited by proponents of enhancement like Nicolas Agar since they are *harmful* to children. What could be more harmful than not allowing your child to be seen as normal? Indeed what is aimed at in liberal eugenics is to make the child a superlative example of what is normal.

Because of the way that liberal eugenics works as a biopolitical and disciplinary technology, it is possible to see why it is so difficult to find a ground within liberalism to prohibit liberal eugenics. Recall that biopower takes hold of life, rather than threatening death. A legitimate, properly functioning government is one that takes care of the basic needs of life and allows individuals to realize their potential. Unlike sovereign power, both forms of power are rarely experienced as a constraint or a limitation. They do not constrain our desires or suppress our ability to satisfy our preferences, but rather construct and shape our desires and our preferences. These two conditions—that a legitimate government is one that takes care of the

basic needs of life and that biopower is never experienced as a constraint—mean that there is going to be little ground on which to object to liberal eugenics within liberal political theory. It appears to give us exactly what we want.

Conclusion

In sum, recognizing liberal eugenics as a biopolitical and disciplinary technology helps us to see that: (i) the decisions we make about enhancement are not as autonomous or as self-determined as we usually think of them as being. Much like the choice of conforming to Caucasian standards of beauty, we can no longer think of our decisions as mere personal preference; (ii) enhancement must be understood as a normalizing discipline that sets the standards of what is normal, of what we must achieve, and what the penalties are for those who fail to achieve it. It sets the standard for both how we judge ourselves and how we judge others; and (iii) the rhetoric of sovereign power—that if we are not coerced by the state, our decisions are free and therefore any noncoerced biotechnology is unobjectionable—masks the first two claims. It has been the goal of this essay to show that liberal eugenics must be understood as biopolitical technology precisely because it helps us to understand this hidden dimension of liberal eugenics.

Yet simply being a form of biopower does not in itself mean that liberal eugenics must be abandoned or prohibited. Indeed, given that biopower is rarely experienced as a constraint on our freedom, and further, that it has positive consequences it allows us to fit in, to be more productive, to feel good about ourselves-what precisely is the problem with it? What I would like to suggest is that seeing liberal eugenics as a form of biopower shows us that the ethical concerns raised by liberal eugenics are not limited to the usual concerns around practical consequences or upholding liberal values such as freedom or equality. Indeed, it introduces a new domain of ethical concern and ethical interrogation. The new questions raised include: Ought we to conform to this or that norm? What is at stake in making our children conform to these norms? How do these norms impact relations between people? How should we treat people who do not live up to or conform to these norms? Ethically speaking, what a new technology like liberal eugenics demands of us is to understand not only whether it should be banned or publicly funded, but the way in which it acts as a form of domination-marking some forms of life as acceptable and others as worthy of elimination. Once we understand liberal

eugenics as a form of biopower this new set of ethical issues comes to light and demands our attention.

Notes

- 1 Not everyone, of course, accepts this. For Michael Sandel, removing coercion does not by itself vindicate eugenics. Genetic enhancement remains problematic for him because of the human disposition it expresses and promotes, in particular, the aspiration to remake nature in order to serve our purposes and satisfy our desires (Sandel 2009).
- 2 Rabinow and Rose (unpublished), p. 3.
- 3 It might be argued that the penalties for violating social norms—such as economic disadvantage or even physical harm—function effectively as a form of coercive punishment. While this is true, we must make a distinction between power that functions directly through coercion and punishment and power that does so indirectly. Biopower is coercive and punishing only indirectly and as a last resort—if punishment for failure to uphold a norm is necessary, power has failed in its job. Biopower is primarily enforced through making people work on themselves, through internalizing what is expected of them, not through punishment, though this option is never taken off the table.
- 4 Sixty-eight percent of *Essence* readers (a magazine targeted to African-American women) chemically straighten or hot comb their hair. Cited in Bordo 2003, p. 254.
- 5 As Bordo points out, not just any choice will do. When women claim that they are making a decision for themselves and are not influenced by external demands, what is implied is that they could have made any decision they wanted. For Bordo, this is just not the case. Women have breast augmentation surgery to make their breasts look bigger and more appealing, not less; women lighten their eyes and skin, change their noses, straighten their hair in order to look more Caucasian, and it rarely if ever works in the other direction. This is because we all know what it is to be an acceptable woman and this means conforming to particular standards of beauty. Hence, not any choice will do. See (Bordo 2003).
- 6 The point is that we never or rarely achieve the norm. This is why we must be constantly interrogating ourselves, our behavior, our bodies, and our thoughts, in order to make sure that they are as close as possible to the norm.

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Part IV

Philosophies of Life

The Care of the Self and The Gift of Death: Foucault and Derrida on Learning How to Live¹

Edward F. McGushin

In Plato and Europe, Jan Patočka asks the question: "Can the care of the soul, which is the fundamental heritage of Europe, still speak to us today?" (2002, 14).² The series of lectures of which the book is composed do not so much attempt to answer the question as to rigorously develop it, such that it might become a question and a *problem* for us. Patočka is not alone in posing the question of the care of the self and of making it a living problem for us. Michel Foucault and Jacques Derrida were drawn to his work precisely because they were both already engaged in their own attempts to problematize the care of the self. It should be no surprise that Derrida and Foucault were drawn to the work of Patočka, as they each were able to see something of their own project reflected in his. Foucault's final works focused on the interconnection of the themes of the care of the self, the practice of freedom, and the concern for truth as forming the foundation of ancient, and potentially contemporary philosophical practice. Derrida, on the other hand, characterizes deconstruction as "openness to the other" and the incalculable gift of the other which in some sense constitutes the relationship to the self (2004, 155). Becoming and remaining open to the other, being responsible before the other, is the central task of deconstruction (Derrida 2004, 149). In the work of Patočka we see both of these themes-care of the self and the gift of responsibility before the other-combined. For Patočka, a fully realized care of the self, a full authentic relationship to the self, is accomplished through being responsible to and before the other, through becoming fully receptive to the gift of that responsible life.

In what follows I will look down the divergent paths taken by Foucault and Derrida in order to see whether or not they intersect at a point where care of the self might begin to speak to us today. This task involves two steps. First, we have to answer the question: What is it in our present that both silences the voice of care of the self and yet makes hearing that voice a pressing need? Second, we must think through the history of care of the self both as a relationship of the self to itself defined by freedom and truth (Foucault) *and* as a gift of responsibility before the other (Derrida).

First: what is it about today that both calls for care and yet disables care? On this point, we would do well to turn to Patočka and Foucault who devoted themselves to the diagnosis of the contemporary situation and who are largely in agreement on that diagnosis: the problem of today is the multiplication, extension, and intensification of power. Patočka argues that from Plato until the rise of modernity, European civilization was rooted in a metaphysical conception in which the purpose of human life and hence the purpose of the *polis* was to care for the self, to constitute a shared way of living ordered toward the formation of free, responsible virtuous citizens; after the Christian conversion of Rome this task began to take the form of a civilization ordered toward eternal life through the salvation of souls. But the rise of modernity marks a movement away from the care of the self and toward a civilization founded on a very different organizing principle: the task of accumulating and consuming power (force) and wealth. While the Greeks first defined freedom in terms of the care of the self-the care that frees us from fear of death as well as from the spiritual enslavement that results from carelessly indulging our appetites—modernity begins to reconceive of freedom in terms of the liberation of individuals to pursue their interests or desires and to make use of reason as an instrument in the pursuit of happiness understood as satisfaction of inclinations. Modern civilization involves a new conception of knowledge itself and a new metaphysics of the human place in the world:

Bacon will formulate a wholly new idea of knowledge and cognition, profoundly different from that which motivated the care and concern for the soul: knowledge is power, only effectual knowledge is real knowledge . . . knowledge is to lead us back to paradise, the paradise of inventions and possibilities of transforming and mastering the world to suit our needs while those needs remain undefined and unlimited; soon thereafter Descartes will say that knowledge is to make us the masters and owners of nature. (Patočka 1996, 84)

According to Patočka's genealogy, the result of the modern project of technology is somewhat paradoxical. On the one hand, to quote Patočka, humans

have ceased to be a relation to Being and have become a force, a mighty one, one of the mightiest. Especially in their social being, they became a gigantic transformer, releasing cosmic forces accumulated and bound over the eons. It seems as if humans have become a grand energy accumulator in a world of sheer forces. (1996, 116)

On the other hand, this accumulation of force surprisingly comes with a pervasive mood of "deep helplessness and inability to stand upon anything in any way solid" (Patočka 2002, 6). Individuals come to find themselves "accumulated, calculated, utilized, and manipulated like any other state of energy" (Patočka 1996, 116). Modern technology, as well as modern "commercial and financial practices," writes Patočka, "led to the rise of an entirely new kind of rationalism, the only one we know today: a rationalism that wants to master things and is mastered by them (by the desire for gain)" (1996, 110). The project of technological domination of the world, which has resulted in such unprecedented wealth and power is itself dominated by the need for control: "European humanity and by now already humanity as such simply are no longer capable of physically surviving but for the mode of production that rests increasingly on science and technology (and, of course, increasingly devastates the global, planetary store of energy)..." (1996, 111–12). The more power or force society amasses the more helpless and insignificant life becomes and the more life becomes dependent on modern power and technology.

Patočka's diagnosis of the modern condition makes a claim about the ontological commitments of modern society as a whole. As opposed to the phenomenological, and totalizing, style of Patočka, Foucault offers a less sweeping but more focused analysis of the rationality embedded in institutions and institutionalized practices in order to show how these forms of rationality migrate, colonize, and intensify. Yet, while the range and tone of Patočka's analysis are very different from Foucault's, they are fundamentally complementary views. For Foucault the main danger of today is the extension, intensification, and multiplication of relationships of power and governmentality, which are especially effective because they function not repressively or negatively, but rather productively.³ Modern governmentality is not primarily repressive, but it is all the more effective for this reason. Government-the practice of conducting, guiding, and channeling behaviors (choices, even feelings, desires, thoughts)is effected through mechanisms that actually nurture, cultivate, enhance, and empower us as individuals.⁴ In other words, power subjects or subjectifies, it is subjectification (assujetissement)-it does not simply force us to submit, it constitutes us as subjects, as agents; it establishes very determinant, very definite forms of self-relationship and self-consciousness.5

In this situation, can the care of the self still speak to us? In a situation where we already know that all genuine solutions will come from scientific and technological progress, and from ever more free, expansive, and productive global markets, where power itself is maintained not repressively but through offering us self-improvement according to calculable standards of performance and success, it seems rather naïve to invoke something as arcane as the care of the self.

Though Foucault and Patočka describe a dire situation, they also see in it the possibility of a new phase in the care of the self. Let us return to Patočka to see how this can be the case. First of all, technological civilization is precisely the civilization which "makes possible more than any previous human constellation: a life without violence and with far-reaching equality of opportunity. Not in the sense that this goal would anywhere be actual, but humans have never before found the means of struggle with external misery, with lack and want, which this civilization offers" (Patočka 1996, 118). So, while modern technology is an ontological transformation of beings into forces, commodities, and objects of manipulation, this same technology is potentially freeing for that very reason. Moreover, Patočka reads the devastation of the two world wars fought in the first half of the twentieth century as the almost inevitable culmination of technological civilization-technology as conquest results in total war, a state in which even peace is simply another mode of conflict. But the result of this total war, and of the pervasive sense of helplessness that both feeds it and is fed by it, is the production of a new form solidarity: "the solidarity of the shaken" (Patočka 1996, 134). The shaken are those who feel and understand the danger and destructiveness inherent in the project of technological and economic accumulation of power and wealth they understand that conflict, exploitation, and devastation are not accidental, but rather intrinsic, to a civilization focused on mastery and consumption of power and wealth. The shaken are those who no longer accept the promise of salvation through economic and technological progress, the grand narrative behind so much of modernity—but they also refuse the fundamentalist and reactionary view that salvation requires rejecting progress and reverting to more traditional forms of life. Rather, this experience of the shaken draws attention to the fact that war and domination are really nothing other than a historical situation, a human project reflecting human desires and decisions and hence not a force of nature or destiny beyond us. Therefore, Patočka writes,

The solidarity of the shaken can say "no" to the measures of mobilization which make the state of war permanent. It will not offer positive programs but

will speak, like Socrates' *daimonion*, in warnings and prohibitions. It can and must create a spiritual authority, become a spiritual power that could drive the warring world to some restraint, rendering some acts and measures impossible. (1996, 135)

Is it possible to see this notion of the "shaken" operative in the work of Foucault and Derrida as well? Foucault's detailed and sometimes graphic accounts of societal exclusions and confinements of marginalized, criminalized, and pathologized "others" attempt to shed light on those who have been *shaken* by the forces of social integration constitutive of modern civilization. And his books have no doubt had the effect of "shaking" many readers out of complacency.⁶ For his part, Derrida frequently invokes the notions of a "shaking" or "trembling" that follows from the deconstructive surfacing of aporia in texts, concepts, or ways of life that seem to be sound or solid.⁷

If the meaning of modern society is found in the technological accumulation of power, then shaking our enthrallment to technology and power might free us for a renewal of the care of the self. This is because for Patočka, Foucault, and Derrida, philosophy and care of the self characteristically arise precisely through the shaking of pre-given meanings, ready-made interpretations of life.

This leads us into the second part of our inquiry. Given the danger of today, and given the specific opening it makes for care of the self: Do Foucault and Derrida succeed in problematizing care of the self in such a way that it might become a renewed task for us today? In order to answer this question, we need to sketch something of the history of care of the self as they tell it.

For Patočka the first manifestation of care of the self takes place when Socrates finds himself shaken by the failure of pre-given meaning in the Athenian *polis*:

Passing through the experience of the loss of meaning means that the meaning to which we might perhaps return will no longer be for us simply a fact given directly in its integrity; rather, it will be a meaning we have thought through, seeking reasons and accepting responsibility for it. As a result, meaning will never be simply given or won once and for all. It means that there emerges a new relation, a new mode of relating to what is meaningful; that meaning can arise only in an activity which stems from a searching lack of meaning, as the vanishing point of being problematic, as an indirect epiphany. If we are not mistaken, then this discovering of meaning in the seeking which flows from its absence, as a new project of life, is the meaning of Socrates's existence. (Patočka 1996, 60-1)

Socratic care of the self appears in the space left open by a loss of meaning, the shaking of the meanings established in the Athenian *polis*. Socrates—through his insight into the radical nature of human finitude—sees the "problematicity" of human life. Finitude means that we cannot have certainty about the ultimate meaning of our world and our life. Human life is always problematic (Patočka 1996, 75). Acknowledging and living with the problematicity of life is central to the care of the self, not just for Socrates but for Patočka, Foucault, and Derrida as well. For Patočka, "living in truth," what Foucault calls "true life," involves living with the problematicity of meaning (2011, 217–30). Perhaps this can also be seen in Derrida's notion of *living on (sur-vivre*) in the face of aporia, in the wake of deconstruction.

Like Patočka, Foucault thinks that Socratic life is defined by the fusion of the care of the self with the concern for truth. In The Government of the Self and Others and The Courage of the Truth, Foucault argues that Socratic and Platonic philosophy originate as a response to the crisis of democracy in Athens, the problematization of political discourse-parrhesia.8 Traditionally parrhesiafree, frank, courageous, and true discourse-was understood by the Greeks to be the privilege and duty of the best citizens to speak openly in the assembly.⁹ Only the "well-born" were able to say what needed to be heard, to have the care for the city and the courage to risk saying the truth which was painful to hear (2011, 33-5). But the traditional game of truth, the traditional mechanisms that determined who had the duty and the right to speak up in the assembly, progressively eroded—opening the floor more and more to any of the citizens. This process resulted in a critical discourse that argued politics was losing its connection to truth and tradition. Parrhesia-previously highly valued as an expression of freedom, courage, and truth-came to be associated with license, with the unrestricted liberty of anyone to say anything. Political speech, in this view, was guided by new aims and crafted with new techniques. First, speakers realized they could accrue power only if they ingratiated themselves to the assembly through flattery. Second, the influx of the Sophists made available a new techné for political speech: rhetoric. Using rhetoric, speakers could effectively flatter and win over the assembly. The aim and function of politics were taken over by the struggle for victory, power, reputation, and wealth. The courage to speak frank, unpleasant truths freely became intolerable to an assembly more and more accustomed to this kind of gratifying treatment. According to this critique, politics lost sight of its traditional and essential function: to take care of the *polis*, to give a space for truth to enter into and govern the polis. Socrates, recognizing that the assembly had essentially closed its ears to truth, initiated a new form of *parrhesia*. Socratic *parrhesia* was not directly a form of political discourse, but rather was integrated into the care of the self, the care for how one lived, and the relationship to the self. For Socrates and Plato the failure of politics was predicated on the failure of care of the self, of ethics. Without taking proper care of the self, citizens would not be able to listen to *parrhesia*—they would not be able to stand hearing the truth, they would not have the courage to risk speaking the truth.

Care of the self became fused with the practice of freedom and the concern for truth. Furthermore, care of the self was initiated as a response to the problem of power, as a resistance to technologies of government and domination-namely, the techniques of rhetoric employed in political discourse. Foucault's reading of the Apology in his final lecture course, The Courage of the Truth, provides an excellent account of the constitution of care of the self as a practice of freedom and a concern for truth—as the attempt to live a true life.¹⁰ Foucault begins his interpretation with a commentary on the opening lines of the Apology. Paraphrasing Socrates' words, Foucault writes: "It is my opponents who lie, my opponents who are skillful speakers, but they are such skillful speakers that they have almost succeeded in getting me to 'forget who I am'. Through them ... I have almost lost my memory of myself" (Foucault 2011, 74-5). The prosecutors lie, but through the use of rhetoric they are very persuasive. In fact, they speak in such a way that they almost made Socrates "forget" who he is. Conversely, Socrates claims that he will speak only what he knows to be true and he will do so without any rhetorical adornment, without employing any techniques designed to sway the jurors' views. Foucault notes: "If skillfulness in speech causes forgetfulness of self, the simplicity in speech, speech without affectation or embellishment, straightforwardly true speech, the speech of parrhesia therefore, will lead us to the truth of ourselves" (2011, 75). Rhetoric is a technology that obscures the relationship of the self to itself. It attempts to govern those who hear it by colonizing the relationship to the self. As a result, those who listen to rhetoric can become mesmerized, they can forget who they are—rhetoric aims, then, at self-forgetting and self-neglect. And it does so in order to sway one's views, choices, allegiances, commitments, and actions. The aim of this technique of speaking is to *make* the audience think something, to make them choose, to make them commit. Parrhesia on the other hand does not aim at colonizing the relationship to the self. Rather, it attempts to lead the self back to the truth of itself, to remember itself, to bring the self back to a care of itself. Socrates does this through a process of examination, which leads his interlocutor to question the condition of his own soul and the way he lives his

life. Socratic examination is a test or ordeal (*épreuve*), it stings, paralyzes, bites– but the discomfort it results in is a heightened form of self-consciousness and self-relationship. Socrates develops a way of living and speaking that is oriented toward the self, that attempts to remember who one is, that aims at strengthening the relationship to the self.

The mission of care of the self, inaugurated by Socrates, will become, according to Foucault, the essence of philosophy for the next several centuries. Foucault's lectures from 1982–84 provide extensive analysis of the many and varied forms, practices, relationships, and theories of care of the self developed and lived by ancient philosophers from Socrates right up to the first centuries CE. Through this whole long period, the care of the self is the foundation of philosophical life.

While they generally agree that ancient philosophy was essentially about care of the self, Foucault and Patočka part ways in their respective interpretations of the role Christianity plays in the genealogy of care of the self.¹¹ For Foucault, Christianity is distinctive primarily for the way in which it articulates and institutionalizes a radically new modality of governing individual lives and minds, what Foucault calls "pastoral power."12 Pastoral power represents for Foucault the prehistory of modern forms of positive, productive powergoverning individuals, conducting their behaviors and thoughts, rather than repressing them. Pastoral power produces new forms of self-knowing and the notion of an interior life which needs to be confessed and interpreted. It creates a new relationship to the self that unfolds within the context of an intensive relationship to a spiritual director, the pastor, who holds the keys to self-knowledge and personal salvation. This deep self, for Foucault, serves as an anchor for power, through practices of spiritual direction, confession, and penance. In the Greek and Hellenistic practice of care of the self, spiritual direction and submission to a spiritual director, or *parrhesiast*, was always done in the name of forming and strengthening the self, constituting the self as capable of self-care, self-government, and of living, acting, speaking, and governing. By contrast, in Christianity obedience becomes an endless task-not simply a temporary situation. According to Foucault, pastoral power takes care of the soul, but it does so in order that the individual can renounce his will and become permanently obedient.

For Patočka, on the other hand, and this is no doubt what attracts Derrida to his work, Christianity represents an intensification of the care of the self. Christianity represents a deeper, more powerful, and more liberating form of care than ancient philosophical, essentially Platonic, practices.¹³ Patočka sees Christianity as an event that definitively advances the effort to live freely, truly, and responsibly.

One might suspect that Derrida's deconstructive approach would represent a rejection of Patočka and Foucault's attempt to retrieve or renew the project of care of the self. This view would miss the point of Derrida's reflections in The Gift of Death where he provides an extended commentary on the fifth of Patočka's Heretical Essays. According to Patočka's narrative, which Derrida neither definitively accepts nor rejects, the general thrust of the history of Europe, understood as a history of the care of the self, is to establish the conditions for "responsible life." Derrida seems particularly drawn to Patočka's characterization of Christianity and its role in his history of care of the self. To understand the importance of Christianity in Patočka's narrative, it must be seen against the backdrop of the Platonic care of the self that it inherits but strives to overcome. According to Patočka, Plato develops Socratic care of the self into a philosophical theory and practice that will form the rational foundation of Greek political life and, as a result, constitute the heritage of Europe itself.¹⁴ Platonic care of the self involves a double movement by which, on the one hand, one liberates oneself by facing and overcoming the fear of death, and, on the other hand, one ascends toward clear knowledge of the form of the Good. Philosophy as such is nothing other than this care of the self. For Plato, at least in theory, what makes politics rational and justifiable is the task of caring for, nurturing, strengthening, and giving life to the self by securing a form of life that will free life from the struggle for mere survival. The *polis* would, in theory, be the place where knowledge of the Good could be realized and legislated. The polis then would be a way of living that liberates people both from serving preestablished meanings or *doxa*, the ruling order of the day; and from subjection to the appetites imposed on us by the fight for survival and gratification. Responsible life, life that takes care of itself, is a life in accordance with knowledge: responsible life is life that can give an account of *itself*, that acts based on knowledge of what is good—responsible life that acts on its own terms, the terms of the self freely understanding what is truly Good.

But does knowledge truly liberate us and make us responsible? Are we truly and fully responsible, truly and fully ourselves, if we act based on our knowledge of the Form of the Good, our knowledge of an intellectual object that is in a sense separate from us but also in-forms our choices and acts, determining and governing us. Derrida puts the problem this way:

To subordinate responsibility to the objectivity of knowledge, is obviously, in Patočka's view, to discount responsibility. . . . Saying that a responsible decision

must be taken on the basis of knowledge seems to define the condition of responsibility (one cannot make a responsible decision without science or conscience, without knowing what one is doing, for what reasons, in view of what and under what conditions), at the same time as it defines the condition of impossibility of this same responsibility (if decision-making is relegated to a knowledge that it is content to follow or to develop, then it is no more a responsible decision, it is the technical deployment of a theorem). (1995, 24)

To be truly free and responsible I cannot simply follow orders. In this case, it would be the Form that is authoritative and responsible, not me—I would be little more than a servant of the Form. Here is where Christianity, according to Patočka, makes a crucial advance in the care of the self. In Christianity, "Responsible life was itself presented as a gift from something which ultimately, though it has the character of the Good, has also the traits of the inaccessible and forever superior to humans—the traits of the *mysterium* that always has the final word. Christianity after all understands the Good differently from Plato—as a self-forgetting goodness and a self-denying (not orgiastic) love" (Patočka 1996, 106). Responsible life is not something that is given to me through accepting mortality and knowing the Good. Rather, it is a gift, and it arises not in relation to an object but with a person: "In the final analysis, the soul is not a relation to an object, however noble (like the Platonic Good) but rather to a Person who sees into the soul without being itself accessible to view" (Patočka 1996, 107).

This notion of responsible life as a gift, as a relationship to an infinite Other who lies right in the heart of me but who, nevertheless, remains hidden and inaccessible, unknowable to me, represents to Patočka an intensification of subjectivity—an intensification of the relation of the self to itself, insofar as that relation is already contingent upon, exposed and obligated to God as the Person whose gift puts me in the position of freedom, invites me into an overwhelming relation to truth.¹⁵ The key here is that the care of the self, as responsible life, is not lived as an objective and impersonal relation to an object or thing. Rather, we gain full access to the possibility of responsible life only in a personal relationship to a person. I am given the opportunity to become fully and genuinely true to myself as a person, not a thing, when I find myself in a personal relationship, in relation to a person. But the personal relationship to a person cannot be reduced to or expressed in the form of objectivity and knowledge. Persons are not objects that can be known. Persons as such remain essentially and forever inaccessible to knowledge. Being in a personal relationship, living responsibly in relation to a person requires an act of faith—a leap without objectively knowing the meaning

of my act. By constituting responsible life as gift and as a relationship to a person, Christian care of the soul offers, according to Patočka, the "greatest, unsurpassed but also un-thought-through human outreach that enabled humans to struggle against decadence" (1996, 108).¹⁶

It is precisely this point in Patočka's essay, more than any other, which speaks to Derrida. The care of the self—that life in which the self is freed, strengthened, given life—is ultimately a responsibility that comes as a *gift* from an *other* who cannot be known. I become a unique "I," a responsible self, only by being called into a relationship with the other. But it is also this turn that gives rise to a new aporia of responsibility. For Derrida, Patočka's essay leads to the idea of a responsible life that would arise as a gift, a call from the other, calling me to respond to the other as other, but doing so *without my being able to know* precisely what I am doing, why I am doing it, what it is the other really wants or needs me to do, or even in a sense, who I am insofar as I am fully given to myself only when called by the other. I only become fully free and responsible precisely what I realize that I must respond and decide *without any recourse to an objective formula or knowledge* that could assure me and everyone else that I am doing what I ought to do. For Derrida the intensification of subjectivity as responsible life amounts to an intensification of the aporia of responsibility:

On what condition is responsibility possible? On the condition that the Good no longer be a transcendental objective, a relation between objective things, but the relation to the other, a response to the other. . . . On the condition that goodness forget itself, that the movement be a movement of the gift that renounces itself, hence a movement of infinite love. . . . What gives me my singularity, namely, death and finitude, is what makes me unequal to the infinite goodness of the gift that is also the first appeal to responsibility. . . . One is never responsible enough because one is finite but also because responsibility requires two contradictory movements. It requires one to respond as oneself and as an irreplaceable singularity, to answer for what one does, says, gives; but it also requires that, being good and through goodness, one forget or efface the origin of what one gives. (1995, 50–1)

For Derrida this is a crucial point: the intimacy and intensity of the relationship to the self are heightened precisely to the degree one becomes open to aporia, to the possibility of the impossibility of my being, or my knowing, who I am. The aporia of responsibility functions as a test (*épreuve*) which one must undergo in order to penetrate into the relationship to oneself. However, the aporia is not something that is dissolved, and the relationship to the self is always marked by the trace of this test. Consequently, being responsible, responsible life, means acknowledging the impossibility of fully realizing itself, or even fully clarifying what that realization might look like or hope for. Does this leave us at an absolute impasse forcing us to abandon the care of the self and refuse the gift of responsible life? Or does the impossibility of being fully responsible itself call for another response?

Foucault and Derrida bring into focus some of the real challenges that this notion represents. For example, on the side of Foucault, is it really possible to conceive of philosophical practice today as care of the self-today when intellectual activity is constituted and evaluated in terms of scientific objectivity and detachment. Can we responsibly pursue a project defined by the aim of self-care—what Foucault at one point describes as the "effort to think differently," "to stray afield of oneself"? On the other hand, on the side of Derrida, is it reasonable to think of the self and responsibility in terms of the gift and of aporia? Would this not represent something terribly irresponsible and irrational? But if Patočka and Foucault are correct that the distinctive danger of today has to do with the extension and intensification of power, and power aims at increasing possession, mastery, and exploitation of beings-then perhaps the notions of gift, self as gift, relationship as gift and aporia, might be able to serve as elements of a new care of the self, a new solidarity of the shaken, or even the basis of a political ethos that would urge "some restraint, rendering some acts and measures impossible" (Patočka 1996, 135) and strive to go forward with the realization that even we, with all our knowledge and power, do not know who we are.

Notes

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- 2 Except when quoting directly from Patočka who uses the expression, care of the *soul*, I will use the terminology of Foucault and speak of the care of the *self*.
- 3 This notion is fundamental to the whole thrust of Foucault's work. It is evident as early as *The History of Madness* and only becomes more explicit and highly developed with his books and lectures through the 1970s. See, for example (Foucault 1995) and (Foucault 1990), especially Part 5.

- 4 See the excavation of the notions of "government" and "governmentality" in (Foucault 2007, 87–134). See also the discussion of the related notion of "conduct" pp. 191–226.
- 5 See the summary of these notions in (Foucault 2000, 326–48).
- 6 Again, this is central to all of Foucault's works, including his literary criticism, from *The History of Madness* through *Discipline and Punish*, right up to *The History of Sexuality*.
- 7 See (Derrida 1995, 53–5 and 71–2).
- 8 Foucault documents the problematization of *parrhesia* across a number of texts beginning with Euripides and including not only Plato but also many other writers from the period. The summary that follows is based on Foucault's extensive analysis in his lectures courses from 1982–4 (see Foucault 2010 and 2011).
- 9 See (Foucault 2011, 33–56).
- 10 What follows is a summary of Foucault's reading of the *Apology*, which appears in (Foucault 2011, 73–116).
- 11 Foucault's analysis of Christianity, it must be noted, takes places almost entirely before he discovers the ancient conception of care of the self. The possibility of a different reading of Christianity in relation to *parrhesia* and the care of the self only emerges in Foucault's final Collège de France lecture on March 28, 1984. Unfortunately, he never had the opportunity to develop that reading.
- 12 The notions of government and pastoral power are analyzed at length in Foucault's 1977–8 lecture course. See (Foucault 2007), especially pp. 115–226.
- 13 While Patočka thinks that Platonic care is essentially a matter of objective knowing, Foucault argues that Platonic knowledge was radically different from modern scientific notions of objectivity. Theory for Plato, and for the traditions that followed him, was itself a practice that brought about specific subjective transformations—it was not objective, rather it was a form of subjectivation. See (Foucault 2010, 209–58).
- 14 This claim is repeated throughout Patočka (1996 and 2002).
- 15 The Christian experience is based on "the realization of the misery of humans incapable of generating meaning themselves and of bestowing it on themselves—an element which the Christian posture shares with ancient skepticism though in a more radical form and without that resignation which characterizes skepticism. Christians coming face to face with the human poverty of meaning, absolute and global, do not give up but assert their faith more energetically, the more graphically that poverty is presented" (1996, 67).
- 16 Patočka claims, however, that while Christianity introduces this experience of the free self, "What a Person is, that really is not adequately thematized in the Christian perspective" (1996, 107). He suggests that what we need now, in our current distress, is a "demythologized Christianity" (Kohák 1989, 339). Derrida's analysis very explicitly moves in the direction of a "Christianity" somehow freed from onto-theology. See, for example (Derrida 1995, 66 and 68).

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The Tragic Sense of Life in Heidegger's Readings of *Antigone*

Scott M. Campbell

It is commonly thought that Sophocles' play *Antigone* presents an opposition between religion and the state. Two brothers, Eteocles and Polyneices, have taken sides against one other in civil war, and meeting each other in combat, each one kills the other. Their mutual destruction informs the plot. The primary character in the play is Antigone herself, who is the sister of both soldiers. The king, Creon, who is also the uncle of all three, decrees that Eteocles, who was defending the city against his brother, shall receive a full burial, while Polyneices, who took arms against the city, must lay unburied, his rotting corpse food for wild animals. As a citizen of the city, Antigone is subject to Creon and his laws, but she is loyal to both of her brothers, so she disobeys Creon's decree and pours sand over the body of Polyneices. After Creon orders the dust to be removed from the body, Antigone returns and, under cover from a storm, gives her brother full funeral rights, thus burying him for a second time. She believes that she is acting piously, in devotion to the gods, whose divine law demands respect for the dead, regardless of their political allegiances.

Caught between civic order and divine command, Antigone defies Creon's law. This leads, eventually, to her own suicide and to the suicides of her fiancée—Creon's own son, Haemon—and of Creon's wife, Eurydice, who kills herself because she is so distraught by the death of her son, but the play's ending validates divine law over civil law. Having first disregarded the prophecy and wise counsel of the blind Teiresias, Creon curses his own stubbornness and laments that he recognized his misjudgment too late to prevent the tragedy that ensued. In the conflict between religion and the state, the play seems to come out on the side of religion. Martin Heidegger offers two readings of *Antigone*, the second of which explicitly counters the commonly accepted view that the play is fundamentally about an opposition between religion and the state. For Heidegger, the play is actually a poem about the relation between the human being and Being itself. He closely analyzes the Greek text and discerns there a series of conflicts and oppositions, all of which are connected to Sophocles' claim, in the first choral ode, that the human being is the strangest (*deinotaton*) of all creatures. In the early reading, from the "Introduction to Metaphysics" in 1935, he draws out conflicts between knowledge (*techne*) and order (*dike*) and between language (*logos*) and Being (*physis*). In the later text, from "Hölderlin's Hymn 'The Ister" in 1942, he expounds upon two central oppositions, *pantoporos-aporos* and *hypsipolis-apolis*, also from the first choral ode, which he calls the counterturning within the essence of the human being.

These readings, taken together, open up a way of thinking about the meaning of tragedy in human life. The following analysis takes up both of Heidegger's readings in order to address these broader concerns. For people who do not find themselves in the same situation that Antigone finds herself in, this play, nonetheless, resonates. The key to that resonance is Antigone's sacrifice. She sees in her life an overpowering dilemma, which she cannot avoid. While others, such as her sister, Ismene, find that they do not have to act, Antigone is compelled to act, and so she takes that dilemma upon herself. Her decision to act reveals her profound humanity; it reveals who she *is*, but in doing so it also reveals the tragic sense of human life. Human life for Heidegger involves a fundamental conflict, of both belonging and not belonging, of being both homely and unhomely, of being caught not only between the state and religion but, more profoundly, between beings and Being. Antigone assumes responsibility for her humanity, and consequently she becomes tragic in doing so.

The strangest of creatures

In both of Heidegger's readings of *Antigone*, his focus is on the first choral ode. Heidegger interprets the first line of the ode as saying that nothing is stranger or more uncanny than the human being. He views the Greek word *deinon*, strange or uncanny, as the essential word, both in the choral ode and in the play as a whole. In the text from 1935, he distills two meanings of the Greek *deinon*: the first is "the overwhelming sway, which induces panicked fear" (Heidegger 2000, 160) and the second is the "one who needs to use

violence—and does not just have violence at his disposal but is violence doing" (Heidegger 2000, 161). Heidegger locates the human being between these two senses of *deinon*, and this explains why the human being is strange or uncanny. The human being is subject to this overwhelming sway and then uses power violently against it. This challenge draws the human being out of the familiar and ordinary and, thus, into the unhomely. Strangeness is not a quality or attribute of the human being, even an essential one, but characterizes the essence of human being itself. For this reason, human beings are fundamentally unhomely, not at home in their own essence.

In the choral ode, the strangeness of the human being is due to humans conquering the earth: crossing the sea, ploughing the soil, capturing and taming animals, and most importantly, using language. It is strange, according to the ode, that some animals, human beings, attempt to master and control nature as well as subdue other animals, submitting them to their own control. The particular strangeness of language is due to its apparent non-strangeness, its familiarity. Words belong so naturally to human beings and the use of language is so essential to the human being that language seems ordinary. So, too, does the development of language appear commonplace, when we think that human beings invented words to signify objects. Heidegger argues, however, that it makes no sense to say that humans invented that which makes them to be human. Language and, for that matter, thinking and building, are violent attempts to break into the overwhelming sway and bring it to containment. The word "sea," for example, in poetic speech is the violent containment of a being as the sea (Heidegger 2000, 167). It requires someone creative to break into the overpowering sway and bring it into order.

The notion of *techne* is particularly important in this regard. Heidegger does not translate *techne* as art, but rather as knowledge, a form of knowing. He shifts the focus of *techne* from making or production to the ability to set limits and boundaries to Being itself, confronting the overpowering and bringing Being into a work (Heidegger 2000, 169). This reading of *techne*, however, differs somewhat from what Clare Pearson Geiman claims in her reading of this text. Geiman correlates the shift from *techne* in 1935 to poetic speaking in 1942 with Heidegger's turn away from the violence of the early work and, thus, away from the violent politics of National Socialism. In doing so, however, she attributes the potential for violence to the notion of *techne* itself. She interprets what Heidegger says about *techne* in the 1935 interpretation from out of the context of his critique of scientific and mathematical modes of knowing. *Techne*, then, for Geiman, could not involve the production of an intellectual product, as it does in Aristotle and Aquinas, for example. In other words, there is no place for liberal arts, as opposed to mechanical or technological arts, in Geiman's reading of *techne*. Neither is it a creative response to the overwhelming sway of Being itself. She reads Heidegger as saying that *techne* is simply a mode of technological production used to subjugate and master nature (Geiman 2001, 170). The inevitable result of conceiving of knowing in terms of *techne* is, for Geiman, monstrous. She writes, "the potential for violence and totalitarian politics belongs inextricably to the attempt to conceive human knowing through the working of *techne*" (Geiman 2001, 162).

Heidegger says explicitly, however, in the 1935 text that with techne, "The work of art is work not primarily because it is worked, made, but because it puts Being to work in a being" (Heidegger 2000, 170). He does not read Sophocles as saying in the choral ode simply that the human being subjugates nature, forcing order upon it, but rather that "humanity is deinon, first, inasmuch as it remains exposed to this overwhelming sway" (Heidegger 2000, 160). In an attempt to draw a clear line of distinction between techne in 1935 and poetic speaking in 1942, Geiman overstates the productionist model of techne in Heidegger's early reading, minimizing the extent to which the human being, for Heidegger, is subject to this overpowering sway of Being and must, ultimately, shatter against it. As we will see, this is precisely what happens to Antigone herself. There is no doubt that there is a decidedly violent character to what Heidegger says about techne in 1935, but he explicitly says that he does not conceive of techne as related to "technical skill, tools, and materials" (Heidegger 2000, 171). Geiman misses what Heidegger sees as the essence of the tragedy, which is that Antigone takes upon herself the overpowering, knowing that this undertaking will fail. This notion of taking upon oneself the overpowering involves knowing, and hence techne, but it is also a response to the overpowering sway of Being. The tragedy of Antigone's life, and of human life, is that being human requires us to confront the overpowering and thus become caught up in this conflict.

In 1935, Heidegger identifies this confrontation in various ways. We see it in the relationship between *techne* and *dike*, where "*techne* breaks out against *dike*" (Heidegger 2000, 171), which Heidegger understands as the violent encounter between knowing and the overpowering order or fittingness. As many have noted, Heidegger does not translate *dike* as justice or norm because he sees *dike* as getting at something metaphysical. Normative or juridical justice derives from a metaphysical, overpowering order, structure, or fit. Human activity that confronts Being through the work of poetry, thought, building, and creating states (Heidegger 2000, 167) is a *techne* that is exposed to and runs up against the overpowering order of *dike*. It is not simply production, "it is not an application of faculties that the human being has, but is a disciplining and disposing of the violent forces by virtue of which beings disclose themselves as such" (Heidegger 2000, 167).

We also see this confrontation in the relationship between *logos* and *physis*. He claims that "Being-human, according to its historical, history-opening essence, is *logos*" (Heidegger 2000, 182). In the choral ode, Sophocles says that human beings are the strangest, in part, because of their use of language. Instead of the Aristotelian definition of the human being as a rational animal, which reads *anthropos* = *zoon logon echon*, Heidegger formulates the definition as follows: *physis* = *logos anthropos echon* (Heidegger 2000, 187) to show how the nature of Being itself (*physis*), which is the overpowering, requires the grounding of the human being by *logos*, language, which he takes to be a kind of original collecting and gathering, again, of violent forces. In this sense, language can be seen as a response to the overpowering sway of Being. Heidegger is not so much defining the human being but rather showing how the human being is subject to (defined by) Being itself.

In both cases of confrontation, either as *techne* or as *logos*, we are called upon by the overpowering to become human by responding to it. The tragedy of human life is that in assuming responsibility for our humanity, we expose ourselves to the overpowering as such.

The counterturning

In both of his interpretations, Heidegger discusses a pair of oppositions that appear in the first choral ode. These are *pantoporos-aporos* and *hypsipolis-apolis*, which are descriptions of the human being. These oppositions are paired together in the text of the choral ode. On a literary level, they reflect, I believe, the unity of opposing forces, or opposition of unities, evident throughout the play. We see that unity/opposition in the combat between Eteocles and Polyneices, who are joined together as brothers but opposed to each other in civil war. We also see it in the blurring of the line between life and death. Polyneices has died, and yet he is unburied and thus remains among the living. Toward the end of the play, Creon orders Antigone to be locked in an underground chamber, buried but still alive. Antigone finds herself caught up in these oppositional unities, which involve both belonging and not belonging. Heidegger interprets these oppositions as appellations for the *deinon*, the strange or uncanny (Heidegger 1996, 75). He translates the first pair of oppositions, *pantoporos-aporos*, as "venturing forth in all directions—without experience" and, alternatively, as "underway in every direction—without any way out." The second pair, *hypsipolis-apolis*, he translates as "towering high above the site-forfeiting the site" and as "exceeding the site-without site." He is still interested in the notion of the *deinon* in this later text, which he now calls the essential word of all Greek tragedy. He discerns three meanings of the *deinon*: the fearful, the powerful, and the inhabitual (Heidegger 1996, 67), but he translates the word as "uncanny," in the German *Unheimlich*, which accentuates the extent to which human beings are not at home in their own essence. Much of his analysis becomes a meditation on how the human being is unhomely, and these oppositions are central to that claim.

As the *pantoporos*, venturing out in all directions, the human being goes forth into the world, not as an adventurer, who is actually quite comfortable and at home in being not at home and in the wilderness (Heidegger 1996, 75), but rather as someone whose essence runs counter to itself. Heidegger writes, "what properly characterizes the unhomely is a counterturning that belongs intrinsically to its essence" (Heidegger 1996, 84). In being *pantoporos*, humans are also *aporos*, because the plans and projects that we undertake are always, ultimately, unfulfilling and cannot sustain us. One way to look at this is in terms of calculation and planning. It is fundamental to Greek tragedy that all human designs run up against a limit. The experience of tragedy reveals that limit, but the limit itself and what lies beyond that limit—what we could call fate, the overpowering, or most importantly for Heidegger, Being itself—are constantly forgotten.

The oppositional pair *hypsipolis-apolis* also reflects this human counter-essence, but on a political level. The word "political" derives from the Greek "*polis*," but that does not indicate that the Greek *polis* was political in the way that we understand what it means to be political today (Heidegger 1996, 80, 96). Aristotle says in the *Politics* that the human being is a political animal because humans are able to belong to the *polis*, but this only means that the human being is not to be identified exclusively with the political (Heidegger 1996, 83). Human beings are political animals because, as Aristotle says, they are fundamentally animals that have *logos*, rationality or language. Thus, the meaning of the *polis* or state derives from the essence of the human being, and not vice versa. The *polis* is the place or site where what is properly human can be accomplished, not in the modern "political" sense, but in a more essential sense. The choral ode then says that as *hypsipolis-apolis*, the human being is subject to both excess, towering high above the site, and downfall, being without a site

(Heidegger 1996, 86). Uncanniness is this double possibility intrinsic to human essence. The *polis* is the site where human beings might become homely, come into their essence, but within that site the human being may "tower into the heights of one's own essential space" or "plunge downward into its depths and be lost in that space" (Heidegger 1996, 87).

The task of the human being is to become homely, but as uncanny the human being is the most unhomely, and, as such, all human ventures lead to unfullfillment and, in their own essence, humans are subject to profound excess and downfall. Can human beings become homely? Richard Capobianco notes that in Heidegger's early reading from 1935, there is no suggestion that we can ever become homely, while the later reading does speak of this possibility. It is important to add to this Heidegger's conclusion in the later text that "What is worthy of poetizing in this work is nothing other than becoming homely in being unhomely" (Heidegger 1996, 121). It is the tragic essence of human beings that in their very Being, they are both at home and not at home in their own essence. Thus, the possibility of becoming homely that Capobianco points out nonetheless reaffirms the counterturning essence of the human being as both homely and unhomely.

In the beginning of the play, Antigone discusses with her sister Ismene her plan to bury their brother. Ismene cautions Antigone against it, giving her quite ordinary advice: never try to do that which is impossible to do (Heidegger 1996, 101). With Heidegger, we need to think about the nature of the impossible, because for Antigone this advice serves as the guiding line for her actions. What is the impossible for her? She buries Polyneices, so that is clearly possible. What is not possible for her is to avoid the dilemma she faces. Ismene, by contrast, does not face the dilemma. Even though she is, in a sense, in the same situation as her sister, Ismene does not think that sacrifice is warranted and so she is able to retreat from the impossible. Antigone is governed by the impossible, but only insofar as she takes the impossible upon herself. It is because of her profound humanity that she enters into the impossible—into the dilemma—and lets it guide her actions. The impossible does not prevent her from acting; it motivates her to act. This is why she suffers. In her response to Ismene, she says, "let me and my own ill-counselling suffer this terror," and the Greek for "suffer this terror" reads *pathein to deinon*, so in Heidegger's translation, Antigone is saying, let me "take up into my own essence the uncanny that here and now appears" (Heidegger 1996, 103). To suffer in this sense is active and passive, both enduring and taking upon oneself the *deinon*, which is the uncanny, the overpowering, the impossible.

Sacrifice and tragedy

It is puzzling that Heidegger does not discuss Antigone's action in terms of sacrifice. He talks about risk, but he does not speak of that risk as a sacrifice. In two texts that appear immediately after the first of his Antigone interpretations, as Dennis Schmidt has pointed out, Heidegger discusses the meaning of sacrifice. The "Origin of the Work of Art" mentions "essential sacrifice," and the "Postscript to 'What is Metaphysics?" connects the notion of sacrifice to freedom, gratitude, and thinking. Heidegger writes there that sacrifice is an essentially free action, which preserves "the dignity of Being" (Heidegger 1998, 237). It involves thinking, which is then also a thanking, that is, an expression of gratitude for the possibility of preserving truth and dignity, not of beings, but with respect to Being itself. The thinking that goes into sacrifice cannot be about beings because it does not pertain to calculation and planning, for "sacrifice tolerates no calculation" (Heidegger 1998, 237).

If Antigone were to weigh the relative benefits of her actions, it would clearly be best not to do them. Breaking Creon's law is not practical and for that matter, Creon's decree that a traitor to the city shall not be buried was neither unprecedented nor unreasonable. What resonates in this play is Antigone's sacrifice, and that sacrifice is a response to "something" beyond the register of calculation and planning. Sacrifice is conflictual because it is both a renunciation of one's belonging to something as well as an affirmation of the importance of that belonging. Faced with a dilemma that is, itself, embedded within the counterturning, oppositional structure of human nature, Antigone chooses to risk sacrificing herself for the sake of her family and the law of the dead. But more than that, through her sacrifice, she becomes who she is as a human being.

When William Richardson talks about Antigone's choice, he does not cast it in terms of sacrifice, but he confirms that Antigone becomes who she is through a response to something more than human. He writes,

The clarity and force of her choice came not from herself alone but from some Source that attunes all human beings as human beings. It follows not merely human ordinance. What determines her action here has been encountered nowhere before, yet has already appeared before all else without anyone being able to name a particular being from which it has sprung forth. It is to that which is unconcealed in this way that the essence of Antigone belongs. To embrace it as such was the essence of her risk. (Richardson 2011, 165) It is paradoxical that something more than human makes Antigone to be human. How are we to understand this? Antigone is willing to sacrifice her own life in order to dignify her fallen brother by burying him. In one sense, she and Ismene are in the same situation. But as mentioned above, only Antigone finds herself faced with a dilemma. Thus, she takes on that dilemma, and she does so because she is called, by "something," a "Source," that makes this demand upon her to assume responsibility for that dilemma. We normally think of a dilemma as a choice between two equally unacceptable possibilities. Antigone does face a dilemma, but only because she has first chosen to do so. We need to understand her sacrifice from within the context of those overpowering forces of respect, dignity, and family loyalty that motivate her actions. It is not any one of these that motivates her. There is, rather, a motivating ground, or source, which makes them meaningful to her life and thus makes her to be who she is.

In William McNeill's discussion of Antigone's choice, he views that original source in terms of time. He writes,

What determines Antigone's action is not only no mere human ordinance, but lies beyond the upper and lower gods, Zeus and Dike, even though it is both of the gods and "pervasively attunes human beings as human beings" (quoting GA 53, 144). The all determinative point of departure (*arche*) starting from which Antigone comes to be who she is has no simple origin, and is itself nothing determinate, and yet it prevails and even "lives" (*waltet, zei*): it is that from which the time of human life first arises and comes to be. And "this" is something that Antigone and the poet leave otherwise unnamed, but nevertheless point toward in these lines as the indeterminacy of that future that steadfastly belongs to being, and starting from which, in taking it upon herself (*pathein*), Antigone comes to be the one that she is. (McNeill 2000, 184)

Antigone becomes who she is but in her own time and according to the particulars of her own life. The question of Being, for Antigone, is simply a question about who she *is*, and she becomes who she is through a noble sacrificial act.

Consistent with Heidegger's claim in "Postscript to 'What is Metaphysics?" Antigone's sacrifice "preserves the dignity of Being." We might lament the situation in which Antigone finds herself. As Aristotle famously says, tragedy evokes pity and fear. We pity the misfortune of the characters in the play, and since we identify with those characters, their judgments, and their misjudgments, we fear that similar tragedies may befall us. As McNeill remarks, though, Heidegger views *Antigone* as "the greatest of [Sophocles'] tragedies" (McNeill 2000, 183) precisely because Antigone does take the *deinon* upon herself. Thus, in an important sense, the situation in which she finds herself is one that she has chosen for herself. In that choice, she preserves and shelters the dignity of who she is as a unique, individual woman. As Richardson writes, "Her facing up to this *deinon* is her supreme action as a singular human being" (Richardson 2011, 164). It would seem, then, Heidegger is right when he claims that the poem of *Antigone* is fundamentally about the relation between Being and the human being, as one extraordinary human being confronts the overpowering to become who she is, with all of the conflict, opposition, and counterturning that that entails. The tragic sense of life in Heidegger's readings of *Antigone* involves sacrifice, which is beyond the register of calculation and planning and preserves the dignity of Being itself.

As stated earlier, for Heidegger the play *Antigone* is a poem about the relation between the human being and Being itself. He discerns a series of conflicts and oppositions involved in Sophocles' claim that the human being is the strangest (*deinotaton*) of all creatures. These conflicts and oppositions demonstrate Heidegger's tragic sense of life, a matter of both belonging and not belonging, being caught between beings and Being. In particular, we see the tragic sense of life in the notion of sacrifice, which involves opposition because it is both a *renunciation* of one's belonging to something as well as an *affirmation* of the importance of that belonging.

Running through Heidegger's interpretations is a profound sense of the tragedy of human life. The first choral ode, which is the focus and guide for his analyses, does not discuss Antigone herself. It is a meditation on the nature of being human. But her dilemma is one that all human beings must face if they want to assume the responsibility for being human. That means taking upon oneself the impossible task of confronting the overpowering sway, and doing so as individuals to see how the overpowering sway presents itself to each person's unique and singular life. This confrontation can be understood in various ways. It can happen as the confrontation between knowledge and the overpowering order, techne and dike, when one tries to bring Being into a work. It can be seen, as well, in the confrontation between physis and logos, acknowledging the power of bringing Being into words. It can be seen in the counterturning of the human being and in Antigone's confrontation with the impossible. In all of these cases, the tragic sense of human life means discerning dilemmas in one's life, taking them up, and being willing to sacrifice oneself for the sake of them. The human being is tragic, but potentially noble. The dignity of being human comes from being called upon by Being itself to confront the overpowering, and then choosing to respond to that call, so that we may become who we are.

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Living the Pyrrhonian Way¹

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What to think

Skeptics, commonly so-called, are free-thinkers, unbelievers, and atheists. They debunk stories with "supernatural" or "magical" elements, but rarely question the current scientific consensus. Some distinguish the *content* of that consensus from the method, disclaiming any commitment to particular theories but endorsing "the scientific method" as the only source of "knowledge." Other self-styled Skeptics argue against anthropogenic global warming, the general theory of relativity, or the standard accounts of 9/11. To the outsider these Skeptics ("denialists") may seem astonishingly credulous: any story that casts doubt upon conventional wisdom is accepted; any evidence contradicting their own theory is discounted. Even the first group of Skeptics ("scienticists") are often deeply credulous of historical or philosophical myths: that people before Columbus thought the world was flat, that Huxley trounced Wilberforce, or that scientists are open-minded!²

Neither kind are *philosophical* skeptics, who instead propose that some beliefs perhaps are "probable" but none are certain. Some doubt even that we can assess objective probabilities: really, we know nothing; really, no beliefs are even likelier than others. We can never know that we know the truth. All we can do is express a passing affection for particular claims. Does this claim differ from the cynical assertion that the moon-landings never happened, because "human beings cannot walk upon the moon"? An Academic Skeptic would disparage a denialist who dogmatically denied moon-landings. Analogously, denying that we ever know the truth rests on an un-admitted dogmatism about the world and us. None of these "dogmatically skeptical" schools are my present topic. *Pyrrhonian* Skeptics were not scienticists, denialists, rationalists, or "mysterians." Their skepticism rested not in disbelief, but simply in not believing.

Or at any rate this was how ancient Pyrrhonian Skepticism developed. Its eponymous fourth-century founder, Pyrrho of Elis, may have had more positive reasons for considering all appearances and opinions worthless. Possibly he considered, like some Indian epistemologists,³ that appearances were all illusion, and that reality could only be approached by a rigorous "stripping away" of human nature (which he is said to have agreed was difficult). Maybe he thought it necessary to balance "every statement by its opposite if one is to approximate the truth" [italics mine] (Wiley 1966, 11–12). Or else he agreed with Stoic epistemologists that the wise man does not believe anything that might possibly be false, and thence inferred that we should not believe anything. He may also have shared Stoic ethics. On the one hand, "he would maintain that nothing is honourable or base, or just or unjust, and that likewise in all cases nothing exists in truth; and that convention and habit are the basis of everything men do" (Diogenes Laertius, Lives of the Philosophers 9.62: Long and Sedley 1987, vol.1, 13 (1A)).⁴ On the other, he was often paired with Aristo of Chios, a hardline Stoic persuaded that nothing mattered but virtue-that is, the power to endure whatever happens, without thinking it either good or bad. Cicero's comment has some force:

Since Aristo and Pyrrho thought that [life, health, pleasure, beauty, wealth, reputation, noble birth] were of no account at all, to the extent of saying that there was utterly no difference between the best of health and the gravest illness, arguments against them rightly stopped a long time ago. For the effect of their wish to make virtue on its own so all-embracing was to rob virtue of the capacity to select things. (Cicero, *On Ends* 2.43: Long and Sedley 1987, vol. 1, 19 (2G))

If virtue is a disposition to choose rightly, but there is nothing to choose between any outcome, can any choice be wrong?

But do we *need* to choose, if this means judging one option *better* than another? Pyrrho followed the appearances, and his impulses, without supposing that they were good or bad. This resembles a Buddhist strategy: "equanimity" rests in not identifying with transient feelings of pleasure or pain, not supposing that either are reliable indicators of what is good or bad, nor with any of the thoughts that cross our minds.⁵ The policy of Pyrrho's successors as "Pyrrhonian Skeptics" was simply to "go with the flow," without insisting that this was "right" or "good" or "epistemologically sounder." Nor did they make claims about an unknowable reality, not even that it was unknowable. Theirs was a strategy, not a doctrine.

Attending to what is apparent, we live in accordance with everyday observances, without holding opinions—for we are not able to be utterly inactive. These everyday observances seem to be fourfold, and to consist in guidance by nature, necessitation by feelings, handing down of laws and customs, and teaching of kinds of expertise. By nature's guidance we are naturally capable of perceiving and thinking. By the necessitation of feelings, hunger conducts us to food and thirst to drink. By the handing down of customs and laws, we accept, from an everyday point of view, that piety is good and impiety bad. By teaching of kinds of expertise we are not inactive in those which we accept. (Sextus Empiricus 1994, 9 (1.23–4))

Nor did they assert the Stoic epistemological rule that it is wrong ever to believe, or act on a belief, without adequate evidence⁶: that rule, consistently followed, makes life impossible! If I am justified in believing only when I have *incontrovertible* evidence, I cannot even do nothing. Even my clear perception that grass is green is controvertible—starting from the observation that "green" is a *secondary* quality, existing only in the interaction of grass, light, and human eyes. It is no more an objective truth that grass is green than that it is dark at night (owls do not find it so). The most we can manage is that grass *looks* green, to *us*. "For we shall not be able ourselves to decide between our own appearances and those of other animals, being ourselves part of the dispute and for that reason more in need of someone to decide than ourselves able to judge" (Sextus Empiricus 1994, 17 (1.59)).

Pyrrhonians do not conclude that I should reject my ordinary knowledgeclaims (that I am sitting at a computer, that London is the capital of the United Kingdom, that two plus two makes four, and tomorrow is another day). There are believable cases for those claims, just as there are believable—though more complex—cases for their opposites. So a Pyrrhonian balances these arguments and impressions against each other, and puts her trust in neither and the argument that there are no justifiable beliefs is also controvertible! The Pyrrhonian, in brief, seeks to behave in ordinary life as an academic philosopher behaves in seminars. Our task as philosophers, seeking to induct our students into the philosophical tradition, is to present opposing cases, not to persuade our students of any particular dogma—not even of dogmatic disbelief.⁷ Sometimes the seminar argument may be—temporarily—resolved: no one has anything else to say, at the moment, against some particular synthesis. But in *another* seminar the argument will continue. Even if we cannot ourselves think of an argument against some thesis, we may remember past occasions when the argument has seemed to be settled, only to be subverted by the dawn of a new idea (Sextus 1994, 12 (1.34)). Conversely, even if we cannot ourselves see any solution, this need not show that there *is* none. "We suspend judgement about external existing things, while the Cyrenaics [after Aristippus of Cyrene] *assert* that they have an inapprehensible nature" (Sextus 1994, 53 (1.215)).

Pyrrhonians offered this as a way to live.⁸ One response is that the Pyrrhonian walks downstairs, and does not jump through windows; eats bread and cheese, not worms; speaks some "mother tongue," and not an invented code. The Pyrrhonian must be a hypocrite, or else be cared for by her friends, lest she walk off cliffs or try to breathe water. But this argument is poor, even if we allow the question-begging conviction that the Pyrrhonian would not prosper if she did such things. When Hume asserted that "nature is always too strong for principle," and that this alone would save Pyrrhonians from the "total lethargy" their principles would require, he missed the point: far from refuting Pyrrhonism, he endorsed it (Hume 1975, 160: section 12.2)!9 Even if I did firmly believe that some mechanism would allow me to float down through the air (a parachute, an antigravity belt), I might find it difficult to leap off the roof. Even if I did firmly believe that worms were nutritious, I might gag at eating them. And even if I do not know how gravity or digestion works, I will follow impulse and custom. Pyrrhonians walk downstairs, eat bread and cheese, and chat to their colleagues in an easy tongue. They do not have to think these impulses reveal the truth (but neither do they deny it).¹⁰

[Pyrrho] did not want to make himself a stone or a stump. He wanted to make himself a living, discoursing, thinking man, depending on and making use of all those bodily and spiritual parts in the prescribed and proper way. The fantastic, imaginary and false privileges of governing, ordering, and establishing truth that man has usurped, he has renounced and abandoned in good faith. Indeed, there is no sect that is not constrained to allow its wise man to go along with a number of things neither understood, nor perceived, nor assented to, if he wants to live. (Montaigne 2003, 67)

Does acting like this amount to "believing"? If Pyrrhonians follow nature, feeling, custom, and the rules of art, what is it they *are not* doing? The very word, *peithesthai*, which we translate as "to believe," can signify this compliance. What else is believing than complying? If I cheerfully drink something, do I not *show* I believe it drinkable? But a nonrational animal, or a Pyrrhonian, does

not need to believe that it is *true* that it is drinkable, that it will do her good, that anything which contradicts that claim is false, and that anyone who acts or imagines otherwise is wrong.¹¹ Nor do they need to consider the implications of those imagined truths, or their larger context. Such observations as they make are contextual—and so immune to the arguments of Academic Skeptics (that if I really knew even that this is a computer I would also know that there are no mischievous aliens to deceive me on this point: not *knowing* the latter I do not *know* the former).¹² Further, whereas rationalists believe that "the truth is one, without a flaw" (Waddell 1952, 59, citing Boethius *Consolation of Philosophy*), Pyrrhonians do not insist: they do not need to synthesize their various hypotheses because they are not considered *truths*. And this too is not unusual, even among scientists: "in this respect physicists are like ordinary people. If they can't resolve a contradiction, and the contradiction is not pressing, they just disregard it and give their attention to those aspects of the theory (or theories) that are pleasantly consistent" (Malin 2001, 90).

Must not Pyrrhonians at least be admitting the truth of *phenomenalistic* beliefs, as Burnyeat argues?¹³ Grass *looks* green. Honey *tastes* sweet. I *seem* to be at my computer, and I *seem* to be writing in English. There are stories that subvert any "objective" implication of those beliefs. My experience is at least *compatible* with its being true that I am asleep and dreaming, perhaps in a "virtual reality."

What proof could you give if anyone should ask us, now, at the present moment, whether we are asleep and our thoughts are a dream, or whether we are awake and talking to each other in a waking condition?¹⁴

There is even a contemporary argument to the effect that it is actually very likely that my experience is only virtual (Bostrom 2003)! But even if it is, I can only act as the dream allows, and things still *look* and *feel* this way.

But even the *phenomenalistic* claim is controvertible. Pyrrhonians allowed that honey *tasted* sweet, without agreeing that it really was: in this they followed "the evident," while putting aside any claims about the "non-evident" (Kuzminski 2008, 71–112). The *seemings* they acknowledged may even have been public seemings, not merely private impressions: they were speaking of our shared human world. But is it certain that "sweet" identifies a real quality, or that I can reidentify that quality on separate occasions? Is it not enough that, perhaps, I lick my lips, utter appropriate noises ("yummy"), without there being any need for a single quality even in my own experience, let alone the imagined "objective" world? If there are no real essences (as some have argued), then there is no such thing as "sweetness," even subjectively. Do I need to suppose that "pain" identifies

a real, subjective property in order to exclaim, whimper, roll on the floor and shriek? Is it necessary to think that it is *true* that *pain* is what I am in, in order to resent it? Are such qualia *real*? Eliminative materialism is a respectable doctrine, even if one is at odds with ordinary experience and folk-psychology! So the Pyrrhonian can contest even the subjective, phenomenalistic assertion (Naess 1968, 16–17). In another context, of course, both Academic and Pyrrhonian Skeptics could offer arguments for the real existence of qualities.

What to do

Must Pyrrhonism weaken our morale? It takes a strong belief to step knowingly off a cliff, even with a rope, and even if there is a visible ledge a few feet down. It also takes a strong belief to defy or disobey tyrants. As long as the tyrant *could* be in the right, Pyrrhonians may find it easier not to disturb a status quo. Like other Hellenistic schools, their original aim is *ataraxia*, serenity, or equanimity: where others hope to achieve that state by securing a conclusion, the Pyrrhonian achieves it by surrendering that hope, and will thereafter follow impulse where it leads. And maybe that is, after all, enough even for rebellion. Sextus suggests that obedience to custom, unhampered by beliefs about how bad it is to suffer, will help us defy tyrants, or at least ignore them,¹⁵ without succumbing to hatred or conceit.

The profession of the Pyrrhonists is to waver, doubt and inquire, to be assured of nothing. . . . Now this foundation of their judgement, straight and inflexible, receiving all objects without application or consent, leads them to their *ataraxia*; which is a condition of life that is peaceful, composed, exempt from the agitations which we receive from the impression of the opinion and knowledge that we think we have of things. From this arises fear, avarice, envy, immoderate desires, ambition, pride, superstition, the love of novelty, rebellion, disobedience, obstinacy, and the majority of bodily ills. In this way, to be sure, they exempt themselves from jealousy for their discipline, for they debate in a very mild manner. They do not fear rebuttal in their arguments. (Montaigne 2003, 64–5)

An attack on their arguments and assumptions is not an attack on *them*, nor are they easily bribed or threatened.

Some critics have argued that this sort of life, while *possible*, is personally destructive. Impulsive people, responding to every movement of the psychic weather, are what Aristotle supposed the "further barbarians" to be (and the

deranged).¹⁶ They cannot be counted on to keep their promises, nor sustain a project longer than it takes the wind to change. Or do Pyrrhonians hold themselves to custom, at the expense of impulse, "heathens" rather than "savages"? How are they to balance these demands?

On the one hand, it seems that Pyrrhonians must be identified with their impulses or their tribal customs, with no reason to resist or to reform them. On the other, they must be detached from exactly those impulses and customs, even while they act them out. Whereas ordinary agents choose one thing over another (raspberries over strawberries; peace over war) as being *better* than the other, Pyrrhonians make no such claim. Confronted by the questionnaires and opinion polls endemic in our age and region, the Pyrrhonian is happy to count as a "Don't Know," and so is immune to demagogues.

But must this detachment not be constantly subverted? Some things *matter* to us in ways that are difficult to forget. These may not be the things most often mentioned. Bodily pain gets our attention, but we can moderate its effects by conceiving that this is only a rather unpleasant dream, from which one may soon awaken. At least it is not *certain* that pain is an evil (even if it feels that way).¹⁷ On other occasions these dreamy thoughts can be disciplined by a swift reminder of the recalcitrance of things!¹⁸ There is a thought and feeling familiar to depressives, that there is not any point getting up, or going out, or bothering to eat: *argument* is unlikely to dislodge depression, but Pyrrhonism sometimes may, by suggesting that this all-pervasive mood is not one's self, nor certainly veridical, or even allowing the possibility of a divine inspiration.¹⁹

"It is custom and example that persuade us, rather than any certain knowledge" (Descartes 1985, 119). Other possibilities *could* be true: maybe this is a virtual reality; maybe we are controlled by aliens; maybe there is a worldwide military-industrial complex financed by the Rothschilds. It would be hard to prove otherwise. Most of us are content to ignore these possibilities. We also ignore even the stories that we think *certainly* true: that the world is very big, and very old, and that each of us is mortal. If *we* can manage without acknowledging the truth, why might not Pyrrhonians?

Descartes' first maxim, before he satisfied himself that there were literally unquestionable dogmas, was "to obey the laws and customs of my country, holding constantly to the religion in which by God's grace I had been instructed from my childhood, and governing myself in all other matters according to the most moderate and least extreme opinions—the opinions commonly accepted in practice by the most sensible of those with whom I should have to live" (Descartes 1985, 123). In this age and region we are encouraged to believe that only "material facts" are known. But are there not *moral* truths that we are far less likely to abandon than even the best supported materialistic theories? Even the neo-Darwinian theory of evolution might conceivably be mistaken, but most of us cannot suppose that there might "really" be nothing wrong with torturing children, even though—at some risk to the purity of our imaginations—we can envisage the state of mind and character required to believe this. There are *possible* worlds where terrestrial life was planted, cultivated, and weeded by envoys of the Galactic Empire, but there are no *really* possible worlds where the rape and murder of children is correct. It is such *moral*—not legal—truths that best rebut Pyrrhonians. Homosexual acts were *criminal* in Rome, but not in Persia (Sextus Empiricus 1994, 38 (1.152)). But we cannot suppose that right and wrong (as distinct from "lawful" and "unlawful") depend on national or natural boundaries.

Can Pyrrhonists reply? When Pyrrho, it is said, grew enraged on his sister's behalf, it was not in obedience to an abstract doctrine (that one should defend one's female relatives), but following natural impulse, in immediate recognition of someone dear to him.²⁰ Similarly, Kuzminski suggests that "in the absence of rationalizing, soothing, or distracting dogmatic beliefs about what [was] going on [in a Roman arena], there would be revulsion and disgust" at the spectacle (2008, 106). Because the Pyrrhonian is not persuaded that "reason" is a superior faculty she is less likely to feel superior, and so more likely to be kind: Montaigne's *Apology* is at once a defence of Pyrrhonism and of sympathy for the nonhuman! Maybe *doctrines* are what subvert the immediate and honest response to iniquity?

What to be

In the absence of reasoned certainty, or even a reasoned claim to objective probability, what other goal could we have than to achieve and maintain serenity, in ourselves and in the society we seem to ourselves to inhabit (Sedley 1983)? Pyrrhonians could follow Plotinus's advice: "we should be spectators of murders, and all deaths, and takings and sacking of cities, as if they were on the stages of theatres" (Plotinus, *Ennead* III.2 [47].15, 44f: Armstrong 1967, 93). But we do not need to be entirely passive. "Whether it's reality or a dream, doing what's right is what matters. If it's reality, then for the sake of reality; if it's a dream, then for the purpose of winning friends for when we awaken" (Calderon 2004, 137). Shestov, though he made use of skeptical tropes in attacking rationalism, did

not make personal equanimity his goal.²¹ Nor do we need to be single-minded, even in the pursuit of peace. The gods of Greece included Dionysus, Aphrodite, Ares—all spirits of destruction. Pyrrhonians may need to admit the occasional force of those spirits, and balance them against their opposites. They will not simply expel them from their souls' citadel, and unlike Plato they will prefer to be "clever enough to be able to assume all kinds of forms."²²

John Keats commented on his friend Charles Dilke that he "was a man who cannot feel he has a personal identity unless he has made up his Mind about everything. The only means of strengthening one's intellect is to make up one's mind about nothing—to let the mind be a thoroughfare for all thoughts" (1958, 213). Only once we have surrendered our common claims to knowledge and to common sense can we be changed. This was Montaigne's proposal for the use of Skepticism: that it left us "stripped of human knowledge, and so much more likely to receive divine knowledge . . . a blank tablet prepared to take from God's finger such forms as it pleases Him to write on it. The more we turn back and commit ourselves to God and renounce ourselves, the more we are worth" (Montaigne 2003, 68).²³ All too often we prefer to keep to our old opinions even when the "evidence" on which they were once based is shown to be mistaken or irrelevant: we cannot bear to admit that we were ever wrong!²⁴ The solution is to disconnect. In the Buddhist tradition, so Kuzminski suggests, "our beliefs are called attachments" (2008, 139),²⁵ and the goal of Buddhist practice, as of Pyrrhonian, is to give them up. What follows after is another story.²⁶

Notes

- 1 An earlier version was read to a symposium on my own work at the University of Liverpool in September 2010: I am grateful to my auditors, especially Sam Clark, Daniel Hill, Michael McGhee, John Skorupski, and Panayiota Vassilopoulou.
- 2 See (Numbers 2009).
- 3 See (O'Flaherty 1984).
- 4 All references to ancient authors are noted with the relevant standard citation. Where I have quoted a particular translation I have also cited that. Thus references to Diogenes' *Lives*, Sextus Empiricus or Cicero indicate both the book and chapter of the ancient volumes, and a reliable anthology and commentary, for example that on the Hellenistic texts edited by Long and Sedley 1987.
- 5 See (Hanson and Mendius 2009, 109-18).
- 6 See Clifford 1901, vol. II, 163, after Cicero *Academica* 1.43: "nothing is more disgraceful than for assent and approval to outstrip knowledge and perception."

- 7 See Wittgenstein 1981, section 455: "The philosopher is not a citizen of any community of ideas (*Denkgemeinde*). That is what makes him into a philosopher."
- 8 See (Bett 1986; Maia Neto 1995).
- 9 See (Kuzminski 2008, 13-15).
- 10 See Sextus Empiricus 1994, 61 (1.230): Pyrrhonians "go along" with things, "not resisting but simply following without strong inclination or adherence (as a boy is said to go along with his chaperon)."
- 11 Pyrrho, according to Diogenes Laertius, *Lives of the Philosophers* 9.68, pointed to a pig's indifference to the threat of ship-wreck as a good example of serenity in action, and an explanation of his own failure to panic.
- 12 See (Lehrer 1971).
- 13 See (Burnyeat 1980). See also (Thorsrud 2009, 175-80).
- 14 Plato *Theaetetus* 157c–158e: cited in O'Flaherty 1984, 39. The unnoticed irony of this remark is that it occurs within a work of fiction: "Socrates" and "Theaetetus," even if they had "real-world counterparts," are dream figures. Burnyeat has argued that "Greek philosophy does not know the problem of proving in a general way the existence of an external world" (1982, 19). Perhaps so, but his argument depends on a confusion between a belief that *something* is the case, and a belief that there are bodies of a familiar sort. Even if we are dreaming, even if there is only me dreaming, there would be a fact of the matter distinct from my imagining it. It does not follow that I know what it is.
- 15 See Naess 1968, 65 after Sextus Empiricus's Against the Ethicists, pp. 160-7.
- 16 See Aristotle's Nicomachean Ethics, Book 7, 1149a10.
- 17 According to T. E. Lawrence, as portrayed in David Lynch's film *Lawrence of Arabia* (1962), "the trick [about enduring pain] is not minding that it hurts."
- 18 See O'Flaherty: "When life—*samsara*—becomes too full of suffering, or even too full of happiness, we tell ourselves, 'This must be a dream,' hoping in this way to transform the all-too-real into what we define as unreality. By contrast, we sometimes find ourselves caught up in a dream that we cannot get enough of, a dream so wonderful that, when we wake, we cry to dream again. Then we pull this moment closer to us, telling ourselves, 'This is real life; I am awake,' hoping in this way to turn the dream into what we define as reality" (1984, 301).
- 19 See al-Ghazali: "My disease grew worse and lasted almost two months, during which I fell prey to skepticism (*safaa*), though neither in theory nor in outward expression. At last, God the Almighty cured me of that disease and I recovered my health and mental equilibrium. The self-evident principles of reason again seemed acceptable; I trusted them and in them felt safe and certain. I reached this point not by well-ordered or methodical argument, but by means of a light God the Almighty cast into my breast, which light is the key to most knowledge" (2002, 67).
- 20 See Kuzminski 2008, 23, commenting on Diogenes Laertius, *Lives* 9.66. See also (Nussbaum 1994, 315).

- 21 See Maia Neto 1995, 97 citing Shestov's *All Things Are Possible*: "The summit of human existence, say the philosophers, is spiritual serenity, *aequanimitas*. But in that case the animals should be our ideal, for in the matter of imperturbability they leave nothing to be desired" (Shestov 1977, 54).
- 22 See Plato's *Republic* 3.398a; see also 10.608a.
- 23 See (Maia Neto 1995, 14–15).
- 24 See Keohane 2010: "In a series of studies in 2005 and 2006, researchers at the University of Michigan found that when misinformed people, particularly political partisans, were exposed to corrected facts in news stories, they rarely changed their minds. In fact, they often became even more strongly set in their beliefs." Thanks to Piers Stephens for the reference.
- 25 See also (Pruyser 1974, 248-55).
- 26 The question of the Buddhist influence on Pyrrho and Pyrrhonism is debated by Flintoff in "Pyrrho and India."

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Intuition as the Business of Philosophy: Wittgenstein and Philosophy's Turn to Life

Neil Turnbull

In the twentieth century, Western philosophy was a discipline in crisis. The emergence of positivism and pragmatism (in the Anglo-Sphere), as well as the drift toward a radical philosophical nihilism (in mainland Europe), had seemingly restricted Western philosophy to superficial modes of investigation, specifically to inquiries focused upon either the rigor and precision gleaned from conceptual analysis or the existential and political powers derived from subjective intuitions. As such, philosophy's historic connection to "the ideal of the real"that it had viewed as residing in a realm beyond that circumscribed by more "mundane ontologies"—appeared to have been severed, and as a consequence philosophy's sense of intellectual purpose was deemed to have been significantly diminished, especially when the philosopher was presented with the force of the radical ontological commitments of the theoretical sciences. As a consequence, the classical ideals of philosophy that aimed to put the intellect in touch with the world as real appeared now to be little more than an "irresponsible flight into a world of fading dreams" (Gadamer 1981, 139). Moreover, the irresistible rise of an everyday, "quotidian" culture now appeared to pose a new "democratic" threat to philosophy's positioning of itself above the fray of ordinary culture. New everyday worlds seemed to have created another, completely general, "context of relevance" that had little need of input from philosophers, especially in their engendering of a popular anti-Platonism that denied philosophy any significant cultural vantage point. It is this latter phenomenon that is perhaps the most important in relation to the attempt to understand the wider significance of the recent crisis of philosophy, as the everyday still continues to represent a threatening form of sophistry for the philosopher, even if the current ubiquity of the everyday suggests a potential new role for the Platonic philosopher as a

critic of the metaphysics of the empires of media-generated opinion that now increasingly render everyday life as intellectually inert.

In this regard, it is interesting that we can now see that the twentieth century was when philosophy began to question itself and to seek out another path for thought beyond that of "philosophical reason" (at least as it had been defined and practiced within the modern versions of the discipline). In fact the choice facing philosophy in the twentieth century was precisely spelled out by Henri Bergson. For Bergson "[e]ither there is no philosophy possible, and all knowledge of things is a practical knowledge aimed at the profit to be drawn from them, or else philosophy consists in placing oneself within the object itself by an effort of intuition" (Bergson 1913, 37). With respect to the latter, this often meant searching for a new opening to a more "authentic" version of philosophy beyond the logic of utility and calculation, one where traditional forms of philosophy were replaced by a new poeticized discourse that strove to capture what is presupposed by all forms of knowledge and truth claims. This was the essence of Heidegger's project and also that of Blanchot-both of whom attempted to refound philosophy upon the anti-subjective and anti-epistemological modes of truth contained in a certain experience of mystikos (see Hart 2004).¹ For others, however, it demanded something quite different: a search for a conception of philosophy entirely at home in the new "quotidianised" world, a worldly philosophy that allowed the new everyday worlds to emerge more fully and in a more "authentic form." This was the position, I want to suggest, taken by the later Wittgenstein, and it is a position that effectively redefines philosophy as an activity that aims to reconnect philosophical inquiry (and thought more generally) to its primary lived context-to the ordinary life that nourishes it, sustains it and in the end always provides it with "material" for its reflections.

The overall significance of the philosophical method espoused by the later Wittgenstein is the subject of this essay. In what follows, I will use his conception of philosophy in order to explore the viability of one particular response to this crisis—the thesis that philosophy must now immerse itself *within* the everyday, and be "functional and relevant" both within it and for it, if it is to survive in the leveling maelstrom of late modern experience. More specifically, as a response to the twentieth-century crisis of philosophy, I will claim that Wittgenstein allows for a refounding of thought on the terrain of everyday linguistic practices, but with a view to liberating it from its entanglement in linguistic rules (Wittgenstein 1953, 25). In so doing, I claim that Wittgenstein creates a new vantage point for thought that enables it to see through and beyond the intellectual chimeras cast by the deep social conventions (for him "grammatical rules") that guide ordinary

routines and actions.² By exposing the conventionality of everyday life through an analysis of language that reveals language as, necessarily, an "expression of life," Wittgenstein, I want to suggest, establishes that everyday life is always more than merely "the everyday"—as it is always and everywhere everyday life, "a hurly burly" of activities that could always be conventionalized (in language) differently ("life" is thus for him more than mere nature, as it connotes the full complexity of the human context, the complex of actions, experiences, and affects that is always a dynamic weave out of which the conceptually patterning and organizing powers of language emerge). By disclosing this life hidden beneath convention, Wittgenstein's philosophical task, I propose, is basically "emancipatory" as it aims to liberate everyday life—the life that is now dominant in all late modern societies-from the distortions produced by a wider linguistic environment that constantly threatens to undermine its vitality as well as its general capacity for practical action. We might say that Wittgenstein's general intellectual motivation is to counter a conception of the real as it has been articulated in modern philosophy, the real as "substantial thing," res extensa or res cogitians, with another idea of the real, one that is revealed through a close attention to the interweaving of language and everyday life, the real as the activity of life itself (a quasi-transcendent genus of which contemporary forms of everyday life are an immanent historical species). It is to remind those engaged in everyday life, a life that is now impregnated from all sides by colonizing intellectual discourses of various kinds, what it *actually* is beyond all attempts to define it in theory. As such, I claim that Wittgenstein's later philosophy is one that demands that every philosopher today develop a reflexive understanding of their own historical intellectual predicament, one that sustains a constant vigilance toward the potential distortions produced within ordinary language by traditionally sanctioned intellectual discourses (a conception of philosophy that, somewhat ironically in this context, he shares with Descartes).³ Overall, I want to suggest that Wittgenstein's claim that philosophy has to become relevant at the level of everyday life-to address what he terms our "real need"—is the only way to proceed philosophically given the current cultural dominance of la vie quotidienne.

Philosophy and the rise of the quotidian

For those of us old enough to have had the "benefit" of a "Marxist adolescence," the claim that philosophers ought to consider the nature of the relationship between philosophy and everyday life should come as no surprise at all. For within this tradition, especially the Gramscian tradition of "cultural Marxism," understanding this relationship was seen as the key to prising open a key problematic of contemporary capitalism-how to unleash the critical potential of everyday subjectivity in the context of capitalist social relations. For philosophers working within this tradition, everyday contexts are fundamentally "ambiguous spaces"; on the one hand, they are spaces of alienation and ennui, on the other they are realms that possess the latent philosophical potential for a systematic intellectual critique of these same conditions. In this way, for Gramsci, the primary task of the contemporary philosopher is to develop a critical awareness within everyday life of the (hegemonic) political forces that shape everyday consciousness, with a view to bringing about the latter's progressive development in a new popular philosophical sensibility. In fact, following Gramsci, we might claim that in the contemporary age of mass production/mass consumption, when all conceptual hierarchies seem to have been flattened and all ideational forms seemingly reduced to a matter of lifestyle, one is forced to acknowledge that the old Platonic conception of philosophy is now moribund and as a result, as Gramsci put it, "everyone is a philosopher"—or at least a potential one (Gramsci 1971, 330). For many contemporary (post-Marxist) philosophers, however, this conception of philosophy sounds overly romantic, especially given that there is now a general suspicion that any philosopher could in fact perform the role of consciousness-raiser (who, today, would listen to them in this regard?). Today, as the self-critical potential of everyday life is very much in abeyance, it can appear ridiculous to call oneself "a philosopher" (Lacou-Labarthe 1990, 1). Given widespread doubts about the possibility of developing a genuinely philosophical attitude within everyday life, philosophy, for many, can only exist as a "historical phenomenon," as a species of "the classical," nostalgically limping on but devoid of any real historical significance-or as Adorno famously claimed, "[p]hilosophy, which once seemed obsolete, lives on because the moment to realise it was missed" (Adorno, 1973, 3).

It is at this point that the later Wittgenstein makes his entrance and offers us an alternative.⁴ In his view, these critiques of philosophy are entirely apposite. Everyday thought, he accepts, cannot be transformed by means of traditional ways of doing philosophy—because everyday life is, at base, "perfectly in order as it is." However, this does not, as some have suggested, mean that everyday life is in no need of correction, because in another sense, in the context of twentieth-century modernity, it is perpetually at risk of losing itself in conceptions and definitions derived from orthodox forms of philosophy (but also from science and modern theoretical endeavors more generally). Therefore in his view, in order to retain a significance for philosophy today the philosopher must perform a different role than the one championed by Plato, one that accepts that the "metaphysical beyond," at least as traditionally conceived, must be replaced by another philosophical idea-in his case, of life as it can and should be lived (Wittgenstein's philosophy, we might say, is an attempt to lead thought toward an ethics, but without the help of metaphysics).⁵ I will not defend this claim here as I have already done this elsewhere.⁶ In this particular context, however, it is sufficient to point out that for the later Wittgenstein life is what is shown to us once we have won the philosophical battle against language, in showing that language is a phenomenon of life (and not one that is essentially a logical relation to objects that comprise a world). For the later Wittgenstein, *life is the world as it is*—"the world and life are one," as he said in The Tractatus (Wittgenstein 1922, 5.621)-but life's being "all that is the case" reveals itself to the philosopher only once we focus on the ordinary pragmatics of language, on what might be termed its ordinary vitalityits surrounding by a complex of actions, affects, and their reactions.

Thus for the later Wittgenstein philosophy cannot stand outside of human life, it must engage with it-for this is its subject matter and, ultimately, its audience as well. Moreover, for Wittgenstein this means that philosophy must reinvent itself as a kind of work—specifically, as a particular form of expertise that is capable of providing a "service" from the point of view of everyday life. But what service could philosophy provide in this regard? For Gramsci it can only be the provision of a critical political consciousness, but for Wittgenstein it is something more directly philosophical. More precisely, for the later Wittgenstein philosophy is not in the service of providing ideas or arguments (there are no arguments as such in the work of the later Wittgenstein) but rather *liberating* intuitions (hence his choice of the "extended aphorism" over the essay as the main literary device through which philosophy can best articulate itself). And with the later Wittgenstein one particular intuition stands out: the intuition of *life*, an intuition that is capable of "sustaining"—in the sense of providing a basic existential justification—everyday life as a space of assertion, thought and action (that is maintaining an idea of everyday life as life). It is important to point out at this point, however, that this claim amounts to a significant rejection of the intellectual mainstream as far as scholarly interpretations of the philosophy of the later-Wittgenstein is concerned. In this regard Anglo-American philosophy has generally viewed him as an advocate of a "philosophical anti-realism" that denies the ability of thought to access an "evident transcendent" reality (this conception essentially positions Wittgenstein as a kind of linguistic idealist).7 In

the continental tradition conceptions of Wittgenstein as a mystical, anti-positivist sophist have loomed large, and there have been attempts by Hadot to position Wittgenstein as a mystic,⁸ by Badiou to conceive of Wittgenstein as a sophist⁹ and by Lyotard to view Wittgenstein as an antimodernist philosopher of narrative and storying.¹⁰ Against these positions, however, I will suggest that none of them is adequate, because, Badiou notwithstanding, none recognizes that Wittgenstein's main problem is not some specific question or other but the nature of philosophy itself. Wittgenstein, I want to suggest, was in fact a quasi-vitalist philosopher, one whose pragmatism was merely a pretext for a new (business-like) attitude to philosophy, where the philosopher does the hard work of bringing the everyday back to an intuition of life in order to free it for meaningful activity. As an attempt to put an intuition of life to use within everyday contexts (an intuition that is located within language, but reveals at the same time language's limits) Wittgenstein's later philosophy is thus essentially a pragmatic intuitionism, and in this way his philosophy rejects as false the dilemma posed by Bergson above.

The anamnesis of the ordinary: Wittgenstein contra Bergson

The idea that philosophy should strive to attain an intuition of life, of its primordial weave, from within ordinary linguistic experience clearly suggests an affinity between Wittgenstein's philosophy and that of Bergson. Like Bergson, Wittgenstein's philosophy is based on a profound intuition of the primordial givenness of life, and this may suggest that Wittgenstein was a vitalist in the Bergsonian sense. There are some important differences that can be pointed out here, however. Specifically, with the philosophy of the later Wittgenstein such intuitions are not immediately available but are the product of a peculiar kind of work; more specifically a long business-like analytical focus on the way that ordinary language actually functions (in Bergson, it requires a kind of intellectual sympathy with objects). According to the later Wittgenstein, it is only by paying attention to the way that we use language-and not to its formal syntactic or semantic features—that we can discern the intimacy that exists between language and life in an awareness that language cannot exist where the world is lifeless. This suggests another important difference between these two philosophers. For Wittgenstein, the intuition of life is not metaphysical in the Bergsonian sense of the term because it provides us with a "revelation without depth," for in his view language is a "surface phenomenon" and life is only revealed through an analysis of linguistic activity (analysis merely being a rearranging of linguistic items in order to dispel intellectual perplexity). Wittgenstein's method, we might say, simply takes philosophy into life as it is lived, and thus back to what we all already knew because we are all, "always and already, in it." His philosophy thus amounts to an amamnesis of the ordinary-it is not an extraordinary inquiry outside and beyond "the habits of mind more useful to life" (Bergson 1913, 14) as it was for Bergson. For Bergson, true philosophy is an empiricism of the depths that takes us into fluidity and dynamism of lived experience. For the later Wittgenstein, however, it is what we might term "an empiricism of the surface," an empiricism where the primordial datum is the "experience of language," where "nothing is hidden" and "everything lies open to view" (Wittgenstein 1953, 126). Of course this experience itself is not readily available as it requires looking at languageas well as at ourselves-differently, as primarily active speakers and hearers, and not, say, as observers or measurers.¹¹ Another contrast with Bergson also announces itself here. In bringing thought back to its everyday contexts, and back to an intuition of the vitality that supports them, Wittgenstein exposes those philosophies that attempt to problematize such contexts as essentially debilitating fantasies. To put this in Bergsonian terms, for Wittgenstein philosophy must be understood as a kind of "fabulation."¹² Philosophy, in his view, is a fabulation that claims for itself an essential connection to a non-fabulated realm but in a way that never actually escapes from fabulation. In fact Wittgenstein's entire philosophical project is to redefine the limits of fabulation-to show how fabulation only makes sense from within parameters set by the quotidian conventions of making sense (so in this way, contra Bergson, Wittgenstein was not hostile to religious forms of fabulation, as these, in his view, clearly perform a useful function within everyday life). Overall, the later Wittgenstein's philosophy, we might say, is therefore an inverted Bergsonianism that attempts to synthesise pragmatism and vitalism in a way that aims to transform everyday life "from within." But how is the philosopher to achieve this? What attitudes and dispositions are required here?

The business of philosophy and the vitalist metaphysics of the everyday

One of the key questions that must be addressed to Wittgenstein's later work is the question "who, exactly is being addressed there?" More specifically, who is Wittgenstein's audience—other philosophers, perhaps, or himself? The latter can seem plausible, as The Philosophical Investigations often reads like a philosopher arguing with himself. In the canonical literature, however, it is assumed to be the former, because there Wittgenstein is viewed as a philosopher who undermines all attempts by philosophers wanting to disrupt the practices of everyday life. In this vein, it has been widely viewed that Wittgenstein's philosophical method prescribes that, as philosophers, we must always expose the philosophical question to the withering power of a philosophical logic of the ordinary word. A close attention to the texts, however, reveals that the later Wittgenstein's general mode of address seems to be much less academicist than this (note the almost total lack of a scholarly apparatus in Wittgenstein's work). Its audience, in fact, is an imaginary "everyone." In fact, the collective terms "we," "our," "everyone" typically prefix Wittgenstein's philosophical reflections (as can be seen in his famous claim that "everyone who has not been calloused by doing philosophy" (my emphasis) (Wittgenstein 1953, 348) should recognize that there is something profoundly misconceived about philosophical problems.13 Thus we need to recognize that Wittgenstein's motivation to philosophize was always more practical and more Tolstoyan (i.e. universal but also concerned fundamentally with the ordinary, with the folk) and thus, in a way, basically ethical. More specifically, in his case the purpose of philosophy is to alleviate a very particular kind of suffering, the general sense of confusion and loss of focused intellectual orientation caused by the rapid expansion of the realm of the pseudo-intellectual question. It is here that we need to call in Wittgenstein's Schopenhauerean heritage, which was so important to the development of The Tractatus, and note that for Wittgenstein, like Schopenhauer, the purpose of philosophy is essentially to break the link between (mis)representation and suffering and, in this way, ultimately to find an alternative way of doing philosophy that gives philosophy a new dignity and purpose, where "it is no longer tormented by questions that bring itself in question" (Wittgenstein 1953, 133). In this way, Wittgenstein's overall aim is not only to provide a new therapeutic for those suffering from theory-generated intellectual perplexities and confusions in everyday contexts (as he himself recognizes) but also to forge a new connection between the philosopher and life, one where the philosopher no longer acts as the Platonic overseer but as someone who, in immersing himself within the vagaries of everyday life, finds a role for philosophy as an activity that, in bringing the lived basis of language back into view, allows the feeling of life to return to those lost in shadows cast by our linguistic conventions.

As a consequence, it is important to position the later Wittgenstein somewhere between the everyday and the metaphysical, to the extent that we might

usefully refer to him as a metaphysician of the quotidian. As such, Wittgenstein's conception of philosophy carries with it an important idea of what it means to be a philosopher in today's everyday world. For him, the job of the philosopher is not merely to describe the way that language is actually used (Wittgenstein was no "ordinary language philosopher") but rather to uncover "the rope that ties the ship to the wharf," the lived and living contexts that ensure that any symbolism functions as a language (and not merely a system of "dead signs"). These overlapping fibers are the metaphor for the weave of life, and for him in revealing this connection we reveal the imperative that thought concern itself with life. Wittgenstein is clearly offering us a strong conception of philosophy here, albeit one significantly revised given the power of the currents of the quotidian experiences that dominate life today. Philosophy cannot "stand outside" beyond the everyday—there is simply nowhere else for the contemporary philosopher to stand. In fact, as already suggested, philosophy, for the later Wittgenstein, must illuminate everyday life from within the darkness of our entanglement of linguistic conventions—and in this way it can only be conceived as an attentive and industrious activity, a constant battle against the distorting effects of language (in a way, for the later Wittgenstein, the aim of the philosopher is to ensure that everyday life stays connected to life in the context of a modernity that always threatens "separation" in this regard, separation that, as Heidegger pointed out "darkens the world").

Wittgenstein and the escape from the tyranny of the idea

It is interesting by way of conclusion to compare Wittgenstein's conception of philosophy with that of the self-proclaimed contemporary Platonist Alain Badiou.¹⁴ For Badiou, in a radical anti-Gramscian move, the end of philosophy has, somewhat paradoxically, actually given rise to a new *ubiquity of philosophy*, but only as health and entertainment products, not as a universal "philosophical sensibility" in the strict sense (Badiou 2011, 68). Now everyone, in his view, is a philosopher, but only in a way that has rendered philosophy essentially safe and servile (popular equals "in the service of capital" in his account of this issue). Against this, he defends a conception of philosophy that is both "risky" and "experimental" with respect to extant values and mores and, in true Socratic manner, a mode of philosophy willing to question and to argue against the legitimacy of historical truths in the name of the eternal and the infinite (that he equates with the mathematical).¹⁵ In this vein Badiou has recently examined the philosophical legacy of the later Wittgenstein—viewing his philosophy as a classic late-modern restatement of a form of sophistry that attempts to bypass philosophy in the name of an ordinary pragmatics of language, a philosophy that has ceased to question but only describes, and thus upholds, in a conservative way, the basic transcendental structures of the world as it currently exists.¹⁶ For Badiou, however, philosophy today requires a political vanguard to articulate, interpret, and defend the eternal truths and through these the possibility of other worlds. For him, this requires the collective effort of a cadre of intellectuals who effectively function like the priesthood of a church. With Gramsci, philosophy collapses into the social sciences, but with Badiou it collapses into a politicized theology.

Wittgenstein, however, offers us a third way, one that in retaining a connection between philosophy and a particular kind of practical wisdom remains within the orbit of philosophy as classically conceived. Wittgenstein was thus no sophist and, when viewed from the vantage points of everyday life, in many ways achieves what Badiou's philosophy seems blind to-an account of the real that is readily understandable by everyone, life as it is lived.¹⁷ In Badiou, we might say, thought remains at the level of the idea, and as such, it can never affect anything other than other ideas. It is, in the end, entangled in the very conventionality, the linguistic conventions of the academic, from which Wittgenstein's philosophy allows philosophy to escape. Wittgenstein's philosophy is thus founded on a truer universal, the Tolstoyan universal of ordinary living (and in this sense his philosophy is Platonism democratized as vitalism). Thus for the later Wittgenstein, the true philosopher of today can no longer be an intellectual in any straightforward way, he can only be a craft-worker; a skilled laborer in language who maintains its vitality through an analytical practice that renders any symbolism meaningless, unless it is possible to trace its connections back to a life that is shared by all.

Notes

- 1 See Hart (2004).
- 2 These conventions, as they become embedded, present themselves as "truths"—fixed ideas and forms that purport to accurately reflect the real. If there is a single unifying idea underlying all of Wittgenstein's philosophical endeavors, it is that the real cannot be conventionalized as facticities reflected in our language.

- 3 More specifically, after Wittgenstein, it is clear that philosophy today must begin from a series of reflections on the interconnections between philosophical knowledge and its "this-worldly" conditions, and show how the former can allow for a more realistic articulation of the latter (to the extent that, once this is achieved, it can seem that the need for philosophy disappears).
- 4 The broad outlines of the later Wittgenstein's philosophy are now well known, and his key terms of art "language games," forms of life, meaning as rule-governed and conventional, philosophy as the bewitchment of the intelligence by means of language are now part of the conceptual canon of Western intellectual life.
- 5 For the later Wittgenstein, there is nothing mysterious or esoteric about "life." It is perfectly visible to everyone, if we are taught to see through a deadening and life-draining conception of language.
- 6 See Turnbull 2008 and 2012. A givenness that takes the subject beyond its confinement within the false prisons of linguistic conventions, into a condition of true realism—one where the subject is liberated from language as an everyday agent.
- 7 See (Dummett 1978).
- 8 See (Hadot 2010).
- 9 See (Badiou 2012).
- 10 See (Lyotard 1979).
- 11 This is why, in an important sense, for the later Wittgenstein philosophical problems can only be answered by a change of perspective, a change that may well require a change in the way that people live. Again, there is a reflexive loop back into life here.
- 12 According to Bergson, fabulation involves the attribution of intentional realities to worldly events in order to cope with trauma—especially the trauma that ensues from awareness of finitude, of the inevitability of death.
- 13 Of course this is the precise opposite of the Gramscian conception in that for Wittgenstein, everyone is aware that philosophy cannot do what it has historically aimed to do vis-à-vis everyday life.
- 14 We might say that the later Wittgenstein's philosophy is a vitalist Platonism, as with him an idea of life functions in exactly the same way as the eternal good does in Plato. We might even say, with Wittgenstein, the cave is language that can only be escaped via "the light of life." It is an activity that illumines everyday life by mobilizing an intuition of life to dispel the metaphysical shadows and showing us that Plato's cave was a "false prison," an illusion created out of our own linguistic conventions.
- 15 See (Badiou 2005) and (Badiou 2011, 73-82).
- 16 See (Badiou 2012).
- 17 We might say that Badiou's philosophy has disavowed the everyday only for it to return in his desire to produce manifestos that no one (unlike those of Marx,

who well understood that profound intertwining of language and life), apart from professional philosophers, will readily understand. Wittgenstein, we might say, in producing an album of short aphoristic philosophical reflections, realizes that only the aphorism, rather than the tract, will allow philosophy to engage at the everyday level.

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On Life and Desire: Kant, Lewontin, and Girard

Paul W. Bruno

In a footnote in the Critique of Judgment Kant references a rather enigmatic definition of life that he had given in the Critique of Practical Reason. He writes, "... life is defined (narrowly) as 'the ability of a being to act according to laws of the power of desire" (Kant 1987, 276).¹ The self-described narrowness of his definition undoubtedly stems from its focus on human life,² but it invites a host of questions. For instance, if human life is characterized by desire, is it at all related to animal life, or plant life for that matter? What is the relationship between life and desire? My fundamental concern in this essay is the link between life and desire. The essay will be broken into three distinct parts, and the pursuit of the connection between life and desire will range from philosophy to biology to literature. The goal is to weave together these three parts using the ideas of life and desire as they are discussed by three different thinkers: philosopher Immanuel Kant, evolutionary biologist Richard Lewontin, and literary critic³ Rene Girard. Given these disparate disciplines, this is an essay in the traditional sense of attempt or try. A brief consideration of Kant's critical project is required at the outset. My claim here is that Kant's defining life in terms of desire is a profound insight, but one that is also hampered by the very terms of his investigation.

For Kant, law is the product of reason, and strictly speaking reason does not have an experiential correlate.⁴ Thus, in keeping with Kant's critical project the "laws of the power of desire" are formal, a priori. But it is precisely desire, a faculty with higher (rational) and lower (sensible) powers in Kant's language that mediates between reason and experience. The dynamic is not dissimilar to the one sketched by Socrates in Plato's *Symposium*.⁵ The higher and lower, rational and sensible, poverty and plenty, mortality and immortality, these poles as stipulated by Kant in the first two instances and Plato in the second two, provide the frame of reference for desire. Thus, we see a sense of life emerge that relies on a relationship between two poles.

We know that Kant labels his critical project "Copernican." But, how should we understand this Copernican turn, or to use Norman Kemp Smith's phrase, "Copernican analogy"? It is Smith's contention that the analogy is frequently misunderstood and that a proper understanding of it requires an examination of Copernicus' own writing, specifically his observations regarding motion. As is the case with any analogy, some parallels are fitting and others are not. While I think that Smith's analysis is correct, ultimately I want to look at Copernicus from a different angle. He writes,

All apprehended change of place is due to movement either of the observed object or of the observer, or to the difference in movements that are occurring simultaneously in both. For if the observed object and the observer are moving in the same direction with equal velocity, no motion can be detected. Now it is from the earth that we visually apprehend the revolution of the heavens. If, then, any movement is ascribed to the earth, that motion will generate the appearance of itself in all things which are external to it, though as occurring in the opposite direction, as if everything were passing across the earth. (De Revol., i., v.)⁶

Each of these kinds of motion described by Copernicus is binary, which is to say Copernicus describes the relationship between two "objects"—"no motion can be detected" by "the observed object" or by "the observer." We might characterize the first kind of motion described by Copernicus as an objectivist apprehension of the universe—the observed object (the heavens) moves, the observer (earth) is stationary. To continue in this vein, we might call the second kind of motion an idealist or subjectivist or even romantic apprehension of the world-the observer moves, the observed object is stationary, thus the source of motion lies with the observer. The third kind of motion ought to give us pause. The relationship recognizes both the observed object and the observer moving but at different rates. Thus, some combination of objectivist and subjectivist/idealist perspectives is at play. Perhaps Kant's characterization of his own work as a "critical idealism" approaches an apt description of this third kind of motion.⁷ With this phrase Kant makes clear that he is not interested in a strictly idealist worldview, but no matter the label, the constraints of Kant's project are worth recognizing here. A consideration of the above quoted passage from Copernicus may help us to apprehend the parameters of Kant's critical project.

The third kind of motion is predicated on the two poles moving at different rates. If the two objects are moving at the same rate, then "no motion can be detected" by "the observed object" or "the observer." An illustrative example here would be two stationary people on a moving merry-go-round with the stipulation that an objectless, monochromatic background surrounds the merry-go-round. Neither person can apprehend a change of place in the other because they are moving at the same rate. In the binary terms suggested, this makes perfect sense. But, as readers we recognize a kind of bracketing taking place with this third dynamic. We grasp that motion can indeed be detected, just not by the two people on the merry-go-round. An observer of the two objects (and who is Copernicus but a third party describing motion and who are we but a third party imagining Copernicus' description?) apprehends motion. Thus, if we break from the binary terms of the description, motion can be observed. We recognize that there is a triangular relationship implied, but not fully thematized by Copernicus or addressed by Kant.

Smith explains Kant's Copernican analogy as a hypothesis seeking "a subjective explanation of apparently objective motions" (Smith 1913, 550). As Smith points out, Kant "is concerned more with the positive than with the negative consequences of their common hypothesis." Using Copernicus' language, Kant is concerned with "the observer" and in keeping with the analogy, he investigates the observer's relationship with the observed. Thus, Kant's approach is based on a binary relationship.

For Kant, law is independent of experience and thus is independent of relationships with others. While desire is central to life, Kant maintains that desire originates in the subject and moreover, is independent of others. In Kantian terms, the "laws of the power of desire" are formal, and laws are content*less*. Otfried Höffe writes,

The law, Kant says, is supposed to make the association of persons possible, prior to all experience. "Person" is not a general anthropological notion here but instead a specific legal concept. It denotes a legally competent subject, who can be the cause of his actions and is free in this sense. Law has to do with the outward freedom to do as one pleases without being at the mercy of others, and not with inner or moral freedom in the sense of the independence of will from instincts, desires and passions. (Höffe 1994, 171)

It is instructive that Höffe denies the anthropological significance to this Kantian "person," stressing instead the legal subject's "outward freedom." Outwardly there remains a legal subject, the agent of action who stands before the law as a legal entity. One's will—"a faculty of choosing only that which reason, independently of inclination, recognizes as being necessary, i.e., as good" (Kant 2005, 907)⁸—is

on trial in the court of law. To use Höffe's distinction, there remains then a person in an anthropological sense, one who lives a life in association with other people and who is informed by instinct, desire, and passion.⁹ It is the anthropological constitution of person that interests me here. As stated before, Kant's Copernican turn ultimately sets the parameters for his investigation, and thus he investigates desire in terms of a "faculty."¹⁰

Smith is correct in his analysis of the Copernican analogy in Kant. The fruits of Kant's critical project are unassailable—"a subjective explanation of apparently objective motions" has yielded one of the greatest philosophical legacies. Furthermore, it is irrefutable that Kant's thought permeates contemporary philosophy and, in many bastardized forms, modern popular discourse too. While Kant's approach was profitable, we must also recognize that by definition it limited Kant.

I stated earlier that in Copernicus' description of motion there appeared a way to think of motion that involved a third party. I want to go on to consider if there is a way to think about life that involves a trifold relationship, and then conclude with a discussion of desire in the same triangular way.

The evolutionary biologist Richard Lewontin begins *The Triple Helix* by recognizing that "the entire body of modern science rests on Descartes' metaphor of the world as a machine" (Lewontin 2000, 3). This observation is not meant as a dismissal of modern science, but rather points out that if we do not remain cognizant of this thoroughgoing metaphor, "we miss the aspects of the system that do not fit the metaphorical approximation" (Lewontin 2000, 4).

It is surely the case that we live at a time when metaphors of genetic determinism abound. The language of "blueprint" or "code" or "program" guides our apprehension of biology, genetics, and biotechnology, and the notion that a specific genetic outcome controls the development of an organism dominates popular discourse. This is a more pronounced version of the more traditionally articulated "nature versus nurture" dichotomy precisely because of the modern discoveries of the human genome, DNA, etc. Lewontin writes, "The metaphor of unfolding is then complete from the level of molecules to the level of the whole organism . . . The development of an individual is explained in standard biology as an unfolding of a sequence of events already set by a genetic program" (Lewontin 2000, 11). This model of individual organism unfolding conceives of the time range of minimal environmental conditions required for the individual organism to unfold is present. The simile Lewontin employs for this second role attributed to the environment is one of old-fashioned film

development: ". . . just as correct chemical baths are required for development of a film but do not alter the shape of the final image" (Lewontin 2000, 12–13). Lewontin emphatically calls this conception of organism and environment interaction "bad biology." "There exists, and has existed for a long time," writes Lewontin,

a large body of evidence that demonstrates that the ontogeny of an organism is the consequence of a unique interaction between the genes it carries, the temporal sequence of external environments through which it passes during its life, and random events of molecular interactions within individual cells. It is these interactions that must be incorporated into any proper account of how an organism is formed. (Lewontin 2000, 17–18)

Thus, Lewontin points out the inadequacies of binary or dualistic thinking in biology. He goes on to illustrate the impossibility of genetic determinism using a host of examples.¹¹ Taking just one example, Lewontin examines the fruit fly Drosophilia melanogaster. As is the case with insects, the fruit fly has sensory bristles that detect its movement through the air. The sensors, the result of the grouping of three different cells, are located under the left and right wing of the fruit fly and have the same genes. Yet, there is a fluctuating asymmetry in the number of bristles produced under the left and right wing in each fruit fly. This is the case even though the average number of bristles produced on each side of the fly is identical. Unless one were to take the absurd position that the environment was different under the left and right wing (the insect itself is but two millimeters in length and one millimeter in width), one could not account for this difference based on the developmental environment. Lewontin concludes that "developmental noise"—"a consequence of random events within cells at the level of molecular interactions"—is responsible for the difference in the number of bristles produced under each wing (Lewontin 2000, 33-6). Lewontin shows that conceiving of genetic code as the controlling mechanism of an organism is fraught with misconceptions. Moreover, just as our conception of genetic code is distorted, so too is our conception of the environment.

Lewontin examines the commonly held belief that organisms are "fit" for the environment in which they live. He writes, ". . . the 'fitness' of organisms for their environmental circumstances formed the agenda for Darwin in creating a satisfactory theory of evolution" (Lewontin 2000, 41). In order for Darwin to conceive evolution in terms of "adaptation," he had to first "take a revolutionary step in thinking about organism and environment. Previously there had been

no clear demarcation between internal processes and external ones."¹² Lewontin explains:

Darwin created a dramatic rupture in this intellectual tradition by alienating the inside from the outside: by making an absolute separation between the internal processes that generate the organism and the external processes, the environment, in which the organism must operate. (Lewontin 2000, 42)

While there is a range of topics, historical and otherwise, to be considered here, I want to focus on the implications for the way in which we conceive of the relationship between organism and environment. We typically talk as if the environment were something we human beings live in, a sort of complex terrarium within which we live along with minerals, plants, and other animals. However, Lewontin points out that an organism is never distinct from or separate from its environment. Just the same, the environment is never exclusive of organisms. Indeed the environment is a living organism comprised of living organisms evolving as biological activity continues, multiplies, desists, and plays out.13 Lewontin writes, "The external conditions that constrain the evolution of modern organisms were constructed by their ancestors" (Lewontin 2000, 66). We get a glimpse of this with the following example: "As insects adapt to insecticides by becoming more resistant, they induce the farmer to increase the frequency of spraying and to change the chemical. Thus, they construct their own hostile environment" (Lewontin 2000, 67). So a host of interconnected, dynamic relationships are continually (re)constituting the environment.

As I stated earlier, Lewontin recognizes from the first that the metaphor of the machine (as first articulated by Descartes) saturates modern science. He then recognizes the moment in evolutionary biology when Darwin took the historical step of separating internal and external processes. Using a quotation from Alexander Rosenblueth and Norbert Weiner, Lewontin explicitly warns that "[t]he price of metaphor is eternal vigilance."¹⁴ Just as vigilance is required with metaphor, it is required of our awareness of momentous historical shifts like the one undertaken by Darwin. This vigilance is not a precursor to rejection—Darwin's ability to conceive of a separation of internal and external processes is a *sine qua non* of evolutionary theory—but to an awareness of what can be lost in these historical shifts. Unless one adheres to some myth of absolute progress or exhaustive scientific knowledge, then the call for vigilance is simply stating something so obvious that we miss it. Indeed, Lewontin suggests at the conclusion of his book that "[t]here is nothing in . . . this book that is not well

known to all biologists" (Lewontin 2000, 129), but one understands this remark as necessary because so many easily overlook it.

The metaphor of the machine conditions scientific discourse, and as such, it conditions the study of life (biology). What is more, the language of the machine leads to common (mis)conceptions of the relationship among gene, organism, and environment. These conceptions are characterized by a kind of dualism, one that elides the role of randomness, the third vertex together with organism and environment that constitutes life. *The Triple Helix* is a call for us *not* to forget the third vertex constituting biology—the elusive, ungraspable "random events of molecular interactions within individual cells" to repeat Lewontin's phrase.

In what remains of this essay, I would like to return to where I started, which is to say, I would like to return to Kant's promising link between life and desire. But a return to this link must now take into account the foregoing analysis which has shown that we have a truncated understanding of life. We saw that Kant confines his critical investigation to the relationship between the apprehending subject and the moving object. While he provocatively pairs life and desire, his Copernican turn limits him to a definition of life that is, in the last analysis, binary. While Copernicus' description of motion suggests that motion might be apprehended in a third way, Kant's project ignores this in favor of a critique that seeks "a subjective explanation of apparently objective motions." Kant's pursuit of laws, as Höffe notes, leads to the conception of the person that is narrowly conceived as a "legally competent subject," one characterized by an "outward freedom to do as one pleases without being at the mercy of others." This leads us to another Cartesian metaphor, that of the cogito. If Descartes' metaphor of the machine saturates modern science, so too does Descartes' cogito saturate modern philosophical conceptions of the person. It might not be a mistake to recognize a relationship between Descartes' seventeenth-century separation of res extensa and res cogito and Darwin's nineteenth-century separation of inner and outer processes. Both make important differentiations that lead to fruitful modes of investigation, but our vigilance is required.¹⁵

If, as has been suggested, life is inadequately conceived when confined to dualities and binary relationships, how might we conceive of it? Inner and outer. Subject and object. Organism and environment. Idealist and realist. These dualisms (and others) are everywhere in play and indeed they are divisions that have borne profound fruit. However, they also limit our apprehension of life. What our analysis of Copernicus' description of motion and Lewontin's discussion of the biological relationship among gene, organism, and environment has suggested is that we must think beyond the binary to a three-fold relationship. But, what might that look like? And how might life and desire help us in this pursuit?

Since science and philosophy are laced with the dualities that I have discussed, it may come as no surprise that they are of little help uncovering the triangular dimension of life.¹⁶ Indeed, it was Rene Girard's study of literature that impelled his "discovery" of triangular desire. Novels¹⁷ disclosed triangular desire to Girard. Contrary to the romantic "lie" that desire emerges spontaneously in the subject, Girard saw in the texts of Cervantes, Flaubert, Stendhal, and Dostoevsky among others,¹⁸ that desire is always mediated through an other, a model, a mediator. An object is not desired for its inherent desirability-iPhones are not inherently more desirable than their equivalent produced by Samsung or AT&T or whomever-and neither is it desired spontaneously by each iPhone buyer.¹⁹ Our acquisitiveness surfaces through models. Although his recognition began with an examination of literary texts, Girard pursues his hypothesis regarding mimetic desire to the process of hominization itself. Girard writes that "animals possess in common with human beings [acquisitive mimesis]" (Girard 1987, 89), and therefore the difference between animal and human is grounded in what is common to both.²⁰ Indeed, Girard asserts that mimetic desire is prior to cognition. Human culture is predicated on mimesis. Girard writes, "If human beings suddenly ceased imitating, all forms of culture would vanish" (Girard 1987, 7).²¹ The idea of mimetic desire conflicts with our conceit that we are the ones responsible for our own desires.²² Girard also insists that the acquisitive dimension of desire is conflictual. Put more strongly, mutual appropriation has an inescapably violent dimension to it, something philosophy, starting with Plato, neglects. This violent dimension is pre-cognitive, but it sets up a profound human task-again, one that animals share-which is the task of avoiding conflict. Thus, the "fundamental rule" facing humanity (and animals) for Girard is "preventing conflict" (Girard 1987, 8).

Girard's study of mythology and anthropology leads him to posit a mechanism—one that "is at once visible and invisible" (Girard 1987, 130)—that checks violence. He calls this the scapegoat or victimage mechanism, and it is exemplified in foundational myths throughout the world. What is important here is that the scapegoat mechanism acts as a means to stop some sort of crisis, a plague, a conflict, or some "mimetic frenzy," and it does so through collective violence—all against one. A sacrifice takes place, the crisis stops, and the victim is paradoxically divinized through his or her death, since the "victim is held responsible for the renewed calm in the community" (Girard 1987, 27). Reflecting

on this dynamic, Andrew McKenna concludes: "In the beginning, before the beginning of man, was violence, which has no origin" (McKenna 1992, 47). This lack of origin is the lack of an object from which the violence emanates. The violence is not *in* a person or object. Jean-Pierre Dupuy puts it this way:

The phrase "At the beginning the Triangle already was," should not be misconstrued. The triangular structure of human desire is not an origin, and the vertices of the triangle—the subject, the mediator, and the object—are not pre-existing entities. It is only through their transactions that they mutually shape one another, giving the false impression that they were fully constituted from the start. (Dupuy 2004, 277)

The convenience of separating inner and outer, subject and object, realist and idealist is that we are able to concentrate on one or the other, to dissect them as it were, but these abstractions leave us with a dilemma, namely: How do we put them back together again? Moreover, the tendency with such dualities is to privilege one side over the other side. In biology we miss life (*bios*) when we reduce an organism to rote genetic unfolding just as we miss life when we privilege an environmental determinism or when we separate out environment and organism. We do not *live* in a genetic world, just as we do not live *in* an environment.

Kant's marvelous Copernican turn investigates "the conditions of the possibility" of reason, of practical reason, and of judgment, but with respect to morality and the will, we end up with (merely) a juridical subject, to use Höffe's image. While it is surely important that we have a subject responsible for his or her actions before the law, we must more fundamentally recognize that human life is always with others and our life with others is constitutive. Desire underlies the cogito or the juridical subject. Girard sees this primordial conflict as a desire for being. He writes, "... [the subject] desires *being*, something he himself lacks and which some other person seems to possess ..." (Girard 1977, 146).

My concern in this essay is with Kant's linking life and desire.²³ However, we articulated a suspicion about binary or dualistic thinking with respect to life in both philosophy and modern biology, and furthermore, recognized an invitation to think of life in threes. Girard provides an opening to complete the circle back to life and desire through thinking mimetically. It would be too convenient and pat to state that the "randomness" that Lewontin recognizes as constitutive for biology is analogous to the role of "violence" in Girard's thought. Strictly speaking, violence and randomness are not identical, but there is a resonance between the two,²⁴ one that McKenna adumbrates when he writes,

Three, not two, is the original figure of repetition for the same reason that it is the ultimate figure of infinity, and of circularity, of eternal return, of *Wiederholungszwang*, the compulsion to repeat: because there is no object for a subject, as there is no nature for a culture, prior to another subject which designates it as an object of desire and that subject in turn is only constituted by the other subject's desire, and so infinitely, undecidably. For the origin of desire is undecidable, being ever only, or "always already," the copy, the repetition of another desire. (McKenna 1992, 65)

Kant sought "a subjective explanation of apparently objective motions," to repeat Smith's phrase, and his project was a response to Copernicus' observations about the limits of explaining motion in strictly objective terms. This snapshot—one thinker responds to or copies a model or rival—repeats itself throughout history in varying forms whether in scientific or philosophic explanation. Seeking to explain life *in* a genetic map or *in* an organism or *in* the environment leaves life constrained by its terms, but if we use McKenna's terms by way of Girard, with desire, with triangular desire, three is the figure of infinity.

Notes

- 1 This quotation is taken from a footnote in §73 of the Critique of Judgment.
- 2 In *Logic*, when enumerating the questions that define the field of philosophy Kant's fourth and final question asks, "What is man?" (Kant 1974, 29).
- 3 It is difficult to categorize Girard as a thinker. His roots are in literary criticism, but he ranges into anthropology, philosophy, theology, and more.
- 4 See Lewis White Beck. A Commentary on Kant's Critique of Practical Reason, p. 38.
- 5 See Plato's Symposium, esp. 203e-204b. See also Engstrom 2009, esp. Ch. 2.
- 6 As quoted in (Smith 1913, 550).
- 7 Kant calls his philosophical approach "critical idealism," yet even this does not seem to capture the interrelationship in play here. See Kant, *Prolegomena to any Future Metaphysics* (Remark III).
- 8 See margin number 412–13 in James W. Ellington's translation of the Grounding.
- 9 Höffe also recognizes that "[o]nly from experience can one know what one desires . . ." (Höffe 1994, 157).
- 10 Recall Nietzsche's ironical take on the frenzy Kant inspired after he "discovered a new faculty in man": "The honeymoon of German philosophy arrived. All the young theologians of the Tübingen seminary went into the bushes—all looking for faculties" (Nietzsche 1989, 17–18). See Part 1, paragraph 11.

- 11 The examples range from tropical rain forest vines, cloned *Achillea millefolium* plants grown at different elevations, fruit flies, corn, and language acquisition among Dinkas and Pygmies. See chapter 1, "Gene and Organism."
- 12 Lewontin notes, "There was, in the pre-modern view of nature, no clear separation of living and dead, animate and inanimate" (Lewontin 2000, 42).
- 13 Perhaps a useful metaphor (though not one without some of the problems Lewontin discusses) for conceiving this dynamic is one used by Hans Jonas. He writes that "metabolism can well serve as the defining property of life: all living things have it, no nonliving thing has it. What it denotes is this: to exist by way of exchanging matter with the environment, transiently incorporate it, use it, excrete it again. The German *Stoffwechsel* expresses it nicely" (Jonas 1996, 88–9).
- 14 As quoted in (Lewontin 2000, 4). See A. Rosenblueth and N. Weiner (1951), "Purposeful and non-purposeful Behavior" in *Philosophy of Science* 18.
- 15 There is no shortage of philosophers who have sought to challenge the traces of Cartesian subjectivity that permeate modern Western thought. Nietzsche, Kierkegaard, Heidegger, Merleau-Ponty, Gadamer, Voegelin, Derrida, Foucault, to name but a few.
- 16 I regard Lewontin as a scientific voice challenging the prevailing voices in modern science.
- 17 For Milan Kundera it would be fitting that Girard finds the novel so fruitful for the study of life. In *The Art of the Novel* he writes, "The novel has accompanied man uninterruptedly and faithfully since the beginning of the Modern Era. It was then that the 'passion to know,' which Husserl considered the essence of European spirituality, seized the novel and led it to scrutinize man's concrete life and protect it against 'the forgetting of being'; to hold 'the life world' under a permanent light" (Kundera 1988, 5).
- 18 See (Girard 1965).
- 19 Girard writes, "The romantic *vaniteux* [i.e., he who convinces himself that he is 'thoroughly original'] always wants to convince himself that his desire is written into the nature of things, or which amounts to the same thing, that it is the emanation of a serene subjectivity, the creation *ex nihilo* of a quasi-divine ego. Desire is no longer rooted in the object perhaps, but it is rooted in the subject; it is certainly not rooted in the Other. The objective and subjective fallacies are one and the same; both originate in the image which we all have of our own desires. Subjectivisms and objectivisms, romanticisms and realisms, individualisms and scientisms, idealisms and positivisms appear to be in opposition but are secretly in agreement to conceal the presence of the mediator" (Girard 1965, 15–16). This is worth reflecting on when considering Kant's Copernican turn and his significant influence on Romanticism, and here I am thinking of Coleridge.
- 20 For a detailed discussion on hominization see (Girard 1987), especially Book I, Ch. 3, "The Process of Hominization."

- 21 It is certainly the case that Girard would share Nietzsche's suspicion regarding the role "faculties" play in the history of philosophy. To speak of a faculty of desire would be folly for Girard. See note 10 above.
- 22 Girard writes, "... the seminal failure of these philosophers to encompass the entire range of imitative behavior cannot be unrelated to the dearest of all our illusions, the intimate conviction that our desires are really our own, that they are truly original and spontaneous. Far from combating such an illusion, Freud flattered it enormously when he wrote that the relationship of a person to his desires is really the same as his relationship to his mother" (Girard 1978, ix).
- 23 For an analysis of desire in strictly Kantian terms see (Engstrom 2009).
- 24 See (Girard 1977), esp. Ch. 1.

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The Wisdom of Emotions

Jason J. Howard

Emotions are essential to sentient existence, yet once we move beyond the most obvious reason for their necessity, that of biological self-preservation, it becomes difficult to say with precision what kind of contribution emotions make to a worthwhile life. Are emotions largely distractions to the contemplative life? Are they something we should try to avoid, or at least tolerate as a necessary consequence of our own corporeality? Do emotions compromise our moral autonomy? Work on emotion across the fields of psychology, biology, and philosophy has come a long way in recent decades in painting a very different picture of emotion than the one with which most of us are familiar. Rather than seeing emotion as disruptive and chaotic, the echo of blind libidinal urges of our animal past, a spirit of consensus has emerged across a wide range of perspectives which sees emotion as integrative, stabilizing, developmentally indispensable, and necessary for a healthy human existence; and this consensus persists despite the fact that there remains considerable debate on what exactly constitutes an emotion.¹

My goal in this essay is to lay out both "why" we have emotions and "how" they organize our lives. By examining some of the recent work in this area from a range of perspectives, not only philosophical (phenomenological and Anglo-American), but also psychological, I hope to distill what the cumulative evidence suggests is the most likely function of emotion for human beings. With this in place I conclude my account by inquiring into the kind of wisdom that emotions bring to human existence and how this wisdom contains, even if only in rudimentary form, something like a philosophy of life. If my analysis is correct, we are best to see emotions as types of judgments that encapsulate not only what we individually value most, but also delineate what we need to flourish as a species. Sartre explained in his *Sketch for a Theory of the Emotions* that in undergoing an emotion "consciousness is captured by its own belief" in the world, which is why basically all emotions have this one element in common—"they evoke the appearance of the same world" as our affective states: our feeling of joy sees the world as joyful, of fear as fearful, of cruelty as cruel (Sartre 1962, 80–1). Everyone is familiar with this fact, which speaks to the way emotions not only permeate our lives, accentuating the ways we engage the world, but also "perpetuate" themselves, taking on a momentum of their own. Because we are upset with our lover, our mind wanders to all those other times we have been upset with our lover, one negative experience building on another, and we work ourselves up until we are really pissed off—memories feed our anger while our anger feeds our memories. This example could be extended to countless others, but what it demonstrates is the interrelationship between belief and emotional affection.

To take another example from Robert Solomon: I go into the parking lot in search of my new car when I notice that it is gone—stolen! My first reaction is surprise quickly followed by anger. I start frantically looking around, helpless and frustrated. My friend questions me and I respond dismissively, "Of course I know where I parked my car!" A few moments later, after my monologue of obscenities, I realize that I was looking in the wrong spot and that my car had not been stolen; I simply forgot where I parked it. I may feel foolish and a bit embarrassed momentarily, but it is also true that it would be irrational for me to continue feeling angry about my car being stolen, since it was not stolen, and that if I continued feeling angry about it my friend would be justified in thinking that something was amiss; that, in fact, I must be angry about something else, since it makes no sense for me to continue to be angry about something that never actually happened (Solomon 1993, 125–32).²

What this second example brings out in a way that was absent from the first is that emotions and beliefs do not simply relate to one another. What we believe both conditions and is conditioned by how we feel. Furthermore, the interaction between beliefs and emotions also hinges in a very important way on what is reasonable and unreasonable about beliefs and actions and how these beliefs map onto states of affairs in the world. It is precisely this cognitive interrelationship, with all its ramifications, that makes explaining human emotion such a difficult undertaking because it largely disqualifies any straightforward reductionist account, whether it be of the behaviorist staple or some other variety. What seems undeniable is that, in the words of Sartre, emotion is a particular way of being conscious; it is a "specific manner of apprehending the world" (Sartre 1962, 57).

Echoing Sartre's point, one thing that psychological research has made abundantly clear in recent decades in relation to the physiological causes of emotion is that physiology directly contributes very little to helping us understand either the great variety of human emotions or what distinguishes one human emotion from another. To take but one example, the research of Stanley Schachter and Jerome Singer demonstrates that the variety of emotions and moods is by no means matched by an equal variety of visceral patterns. In fact, repeated testing has confirmed that "the same state of physiological arousal could be named 'joy' or 'fury' or 'jealousy' or any of a great diversity of emotional labels," whose differentiation is dependent more on cognitive appraisals of one's situation than anything else (Schachter and Singer 1984, 174 and 183). Likewise, we have complicated relationships with our emotions. We often hide them from others (I'm not upset), feign them (but I really do love you!) and even deny them of ourselves (I'm not ashamed—what do I have to be ashamed of?), all of which would be hard to grasp were emotions primarily physiological stimuli. In the words of Robert Solomon:

Such complex and common mistakes would be difficult to understand if they were simply misinterpretations of various feelings or complexes of feelings. One is rarely mistaken about his having a headache, or a toothache, about a feeling of queasiness or nausea, the dullness that comes from a hangover, or the giddiness that follows the inhalation of hashish. (Solomon 1993, 101)

However, it is one thing to say that physiological states of arousal will clarify little about emotion, and quite another to say that emotions are completely conceptual constructs, wholly intentional products of consciousness. One of the most persuasive reasons to doubt that emotions are shaped exclusively by cognitive processes is the impressive body of research surrounding what are commonly called "basic emotions." Carroll Izard, a leading researcher in the psychology of emotions, defines basic emotions as those that "involve internal bodily activity and the capacity for expressive behavior that derive from evolutionarily adapted neurological systems that emerge early in ontogeny," and so do not depend on higher-order cognitive judgments, yet have a "unique feeling component" (Izard 2007, 262). Although a definitive list of what emotions should be regarded as "basic" is still open to contention, typical candidates for inclusion are anger, fear, and sadness. Most researchers in this area agree that these basic emotions are universal, unlearned, automatic responses that play different but crucial roles in regulating and motivating infant behavior. If this is true, then it is unlikely the cognitive approach can be the sole factor in explaining emotion.

Although pin-pointing the function of emotion has met with some consensus, actually explaining emotions has turned out to be trickier than was traditionally imagined. Being neither simply physiological nor conceptual, forming neither one simple class nor one uniform expression, emotions continue to elude easy classification. As I see it, it is the very irreducibility of emotion, the difficulty we have of isolating any sole condition or cause, that provides a clue to the manifold functions emotions play in human life and the meaningfulness they engender. Interestingly enough, this complexity is even at work in the case of biologically basic emotions. Leading researchers working on the problem of basic emotion in humans, such as James Averill, Paul Maclean, and Carroll Izard, agree that those primitive emotions that are wholly biologically determined form a small range of emotional responses that are rather quickly incorporated into more complicated emotional schemes that rely on higher-order cognitive processes.³ As Carroll Izard explains, "the influence of basic emotions is strongest in infancy and decreases rapidly with maturation, socialization, cognitive development and social learning" (Izard 2007, 264). As a result, most theorists agree that basic emotions "are few in number, relatively infrequent, short in duration" and are quickly incorporated into higher-order "emotion-schemes" (Izard 2007, 265).

What this research demonstrates is that even when we see emotion in terms of an immediate biological/physiological affect, say in the case of basic emotions like fear, something we share with all other animals, when it comes to humans such raw feelings are quickly incorporated into higher-order interpretive/ symbolic schemes. In the words of James Averill, "there is no invariant core to emotional behavior which remains untouched by socio-cultural influences," and the insistence that there is stems more from prejudice toward emotion than informed analysis (Averill 1980, 57). And so it seems fair to say that whatever emotions are, they generally develop in their sophistication in reciprocal interaction with other capacities, such as language, cognition, imagination, and socialization, both multiplying and anchoring our needs through interaction with others. Though only an analogy, we can think of emotions like the roots of a tree: the more we mature the more expansive and multifarious our root system becomes, tying us to others and to ourselves in manifold ways and dimensions.

It is commonly recognized by many in the field of philosophy of emotion that emotions play an indispensible role in the development of cognition, serving, in the words of Ronald de Sousa, as "determinate patterns of salience among objects of attention, lines of inquiry and inferential strategies" which make awareness and rational judgment specific and concrete (De Sousa 1980a, 137). This definition is echoed by numerous philosophers, such as Amélie Rorty, who defines them as "prepropositional but intentional habits of salience, organization and interpretation" akin to "magnetized dispositions" (Rorty 1980a, 104) and Roger Scruton, who explains, just as there is a "knowing what to do," so there is a "knowing what to feel" (Scruton 1980, 522) and this is not something we consciously decide but something we are "gifted with" as members of a common culture (Scruton 1980, 530). In anchoring attention and motivation, emotion actualizes cognition and becomes something like the vehicle for many of our evaluations. Because emotions are often "rash" or "urgent judgments" about the world and our place in it, it should come as no surprise if they miss their mark from time to time and lead us astray (Solomon 1980, 264). Consequently, perhaps the best way to conceive of the truthfulness of emotion is in terms of their "appropriateness" to a given occasion/belief.⁴ Certain emotions motivate us in one way rather than another, and the type of motivation they instill enables us to comport ourselves to what the situation requires.

Even though philosophers have abandoned the prejudice that emotions are essentially destructive, or at least disruptive, of cognition, Martha Nussbaum complains that most philosophers working on emotion continue to see it in a rather circumscribed way.⁵ As a consequence, emotions are still viewed along the lines of simple affective states that may be internally differentiated according to an increasingly complex cognitive architecture, but the narrative component of emotions continues to be overlooked. For Nussbaum, it is crucial to appreciate the narrative component of emotion, which can better account for the versatility, variability, and malleability of emotion at the level of individual agency. In stating emotions have a "narrative" component I mean that emotions fill themselves out, as it were, in coordination with our personal experience of the world, coloring our engagements to differing degrees from early infancy to old age. The narrative qua cognitive approach draws our attention to the fact that emotions are situational, enacting schemes of interpretation whose boundaries of significance are always shifting. What this means is that the same emotion, say envy, can arise in response to a wide variety of different pressures depending on a person's past experience, and situation. For my part, I concur with this narrative qua cognitive approach, and I believe it offers us a very helpful way of narrowing down the "how" and "why" of emotion, and so brings into relief the potential "wisdom" of our affective life.6

Following Nussbaum, we can say that emotions are "appraisals or value judgments" which not only underscore how we evaluate things, but delineate, however vaguely, what we require in order to flourish both as human beings and as specific individuals, making salient those external objects that shape our goals (Nussbaum 2001, 4). As a result, emotions are far from blind responses to the world but disclose what we value most. Appealing to Aristotle, Nussbaum argues that emotions are essentially "eudaimonistic" in character and reveal a person's particular view on the world, their goals and projects (Nussbaum 2001, 41). Under this proposal, the most important function of emotion is to disclose what we value, reminding us in the most visceral way possible of what we cherish and what we dread. What is more, far from registering simply primitive needs, emotions are indispensible in the discrimination of all higher goods, such as friendship, love, and justice. Seen from this perspective, emotion is a kind of existential compass, which brings into relief the way the world appeals to us as social beings.

This obviously does not mean people cannot be mistaken about their emotions, that we would never mistake jealousy for love, apathy for patience, if we simply paid enough attention to how we feel. Yet on a deeper level, people only misinterpret their emotions, utilizing all those various psychological defense mechanisms we have become so familiar with since Freud, because so much is at stake in how we feel. Emotions are, as Nussbaum puts it, "eudaimonistic judgments," for if there is no personal investment of value present, there is no emotion (Nussbaum 2001, 55). Moreover, this approach can better explain the varying "differences of intensity" indicative of emotion. Since emotions disclose not only what I value but also how much I value it, it should come as no surprise that certain things that upset me will not upset you. Anger, grief, compassion, love, jealousy, we experience these emotions "proportional to" their respective intentional objects, to wit, proportional to the object or circumstance that elicits our emotion. In the words of Nussbaum, "Emotions contain an ineliminable reference to me, to the fact that it is my scheme of goals and projects. They see the world from my point of view" (Nussbaum 2001, 52). This is why I grieve over the death of my own daughter differently than I do that of my neighbor down the road. To care about something, whether an idea or some state of affairs, and to care about someone, whether as a colleague, spouse, or neighbor, is to value this entity in a particular kind of way; it is to have one's concerns eased or exacerbated in the presence of such entities. However, we should not take Nussbaum to mean emotions only reveal things that we have consciously invested with positive significance-hating someone is also a way of instilling one particular being with a degree of significance at the exclusion of others. Rather, her position is that emotions disclose the way we prioritize what matters to us, and not that we always value what we should.

The psychologist Richard Lazarus, an important influence on Nussbaum's account, defines emotions as "cognitive appraisals" that serve as "subjective evaluations" that disclose an agent's perspective on things (Nussbaum 2001, 108).7 Stated otherwise, they are "urgent transactions" that "embody a high degree of focused attention on the world" (Nussbaum 2001, 108). As a consequence, Lazarus argues that, for the astute observer, there is no other concept in psychology that can be as revealing about what an individual values, and how this individual contends with her or his environment, as emotion (Nussbaum 2001, 108). What is more, this approach is true not only as it applies to human beings, but for the whole of the animal kingdom. Understood along these lines, emotions are the primary adaptive vehicles of corporal beings, for it is their urgency and responsiveness that enable an animal to find its way in the environment. And so even in the case of other animals, emotions register the way the environment impinges on a creature, measuring and gauging success, and are rather far removed from simple stimulus/response mechanisms-food present so attack.

Outside of captivity, it is doubtful whether food is ever just food or a mate is ever just a mate, since these objects are always embedded in larger environments that carry their own attendant risks and dangers, and so must be approached with caution. Given the indispensible role that emotions play in realizing sentient existence, it would not be an exaggeration to call emotion the grammar of life. Summarizing Lazarus's work in this area, Nussbaum writes:

A taxonomy of emotions is thus a taxonomy of a creature's goals, in relation to environmental events and temporal location. Taken as a group, a creature's emotions summarize the way it conceives of its very identity in the world, its sense of what selfhood is and what is central to selfhood. (Nussbaum 2001, 107)

Hans Jonas defends a similar position in his impressive book *The Phenomenon* of *Life* where he attempts to rearticulate Aristotle's perspective on animality from a phenomenological perspective. Jonas argues that "motility," the capacity for movement or locomotion, and desire have an "insoluble connection," for with movement there arises "the interposition of *distance* between urge and attainment, i.e., in the possibility of a distant goal" (Jonas 2001, 101). In order for a creature to even recognize something outside its immediate physical grasp as a goal, say a gazelle in the distant plains as food, and keep the intensity of this goal alive, "so as to carry the motion over the necessary span of effort and time" desire is required (Jonas 2001, 101). And so instead of seeing desire as an urge requiring immediate satiation, it is actually desire that makes deferred

fulfillment possible. It is desire that brings duration into experience, infusing patience with instinct in order to make possible an actual relationship between a creature and its environment. Quoting Jonas:

Without the tension of distance and the deferment of desire necessitated by it there would be no occasion for desire or emotion generally. The great secret of animal life lies precisely in the gap which it is able to maintain between immediate concern and mediate satisfaction, i.e., in the loss of immediacy corresponding to the gain in scope. (Jonas 2001, 102)

Building off this fundamental insight, we can assert that the more future oriented and complicated a creature's goals, the more sophisticated its emotions will need to be in order to bridge the ever-increasing gap between its needs and their possible fulfillment. To exist as an animal is to have those essential needs required of life perpetually at a distance, for there is no guarantee that what is needed will always be available. There is no desire without risk, no satiation without potential frustration and anxiety.

It is desire that makes animal life an existence of mediation rather than an immediate organic functioning. To be an animal is already to live at a remove from one's environment, which is just another way of saying that animal life is a mediated life, it is a life in which the environment is either threatening or inviting, but never indifferent. In the words of Jonas, "Animal being is thus essentially passionate being" (Jonas 2001, 106). Armed with this fundamental insight, that emotions embody the way sentient creatures mediate their existence, we are now ready to take up the question of what kind of wisdom emotion provides to human existence.

Our emotions have grown in step with all our other cognitive powers, be it language, imagination, or moral sentiment, just as the appropriateness of distinct emotions has changed in light of the normative pressure of socialization. It is a mistake to assume that the achievement of this cultural evolution is won only with the painful repression of animal instincts, as Freud puts it in *Civilization and its Discontents*, or the slow taming of the will into submission, as Nietzsche states. On the contrary, there is no reason why culture cannot also serve as the liberation and expansion of emotive life.

Emotions mediate our experience of the world in very sophisticated ways, expanding our motives and interests, and with this, the way we engage reality. This complexity is most evident in the fact that we as individuals can participate in our emotional life. We can learn about our emotions from experience, alter our interests, imagine alternatives, and even change our habits, all of which expand our prospects for happiness and some modicum of fulfillment. Nor do our emotions simply thrive in the present, but they suffuse our memories and impregnate the future. Seen in this way, emotion is what continually propels us beyond ourselves, and thus is the form of an elemental transcendence. And it is precisely because human emotion is a form of transcending that we can speak of the wisdom of emotion.

Emotions transform us; this is an indisputable fact. Yet many of us continue to see this transformation in largely negative terms. Even when emotion is seen as something positive, say in feelings of profound love, it is regarded as something that overpowers us, as an external force, something in tension with our own agency and sense of autonomy. Much of my account has tried to remedy the traditional view of emotion that sees it as essentially animalistic, impulsive, narcissistic, and irrational. In taking this route I admit that I have downplayed much of the destructiveness of emotion, its extreme psychological pathos. I readily admit the potential destructiveness of emotions; what I adamantly deny is that emotions are destructive by design, or that they have no power of discernment.

Aristotle famously states that our capacity to control our emotions, which is the preserve of moral virtue, arises "neither by nature nor contrary to nature," but that we are adapted by nature to receive this capacity and it is perfected through habit (Aristotle 1984, 1103a). The perspective advanced here is very much a confirmation of this fundamental insight, yet it is also true that Aristotle did not believe that emotions *per se* had much wisdom to them beyond their ability to be molded. It is in response to this last point that I will conclude my discussion.

A common conception of wisdom is that it need not be, and often is not, explicit as a distinct type of knowledge claim, yet nevertheless can be efficacious. The wisdom of our emotions is of this sort. First, our emotions compel us beyond the confines of our own ego, and in doing so demonstrate solipsism for what it is, an intellectual fantasy. We are implicated in the lives of others and the world to such an extent that we simply cannot recognize what is worth caring about or striving for without other people. Our own emotions simply will not allow it.

Second, at a more personal level, emotions enable us to experience our own individuality, they are the texture of personhood; our sense of self-esteem, shame, pride, guilt, none of these would be possible without emotion. Related to this, it is our emotional attachments that allow people to be appreciated in their own uniqueness. Regardless of what traits we might admire or love about someone, whatever history we may have with them is infused with the reality of finitude—that one day these people too shall die. Is it not our emotions, more than anything else, that enable us to be so finely tuned to the temporality of things? And is it

not through the lens of emotion that we experience the irreplaceable character of people and relationships?

Third, our emotions always reveal something important about us and what we value. Although we can be, and often are, mistaken about our emotions, the intensity, directedness, and overall character of what we are feeling can still be an indispensible aid in helping us pinpoint what troubles us. Indeed, without the wisdom of emotion to help us on occasion, it is difficult to see how we could distinguish a self-rationalization from a genuine justification. And so emotion is almost always an indication of some motive or purpose, an expression of some specific state of mind or commitment.

Finally, we can ask why, if there is so much wisdom to be found in emotion, does this wisdom continue to be so under acknowledged? Why is it we have so much trouble seeing our emotions as the moorings for a philosophy of life? This is a difficult question to answer, and I offer only a few closing remarks. My sense is that we are aware of much of the good emotion does us, yet at an intellectual level we still cling to the false ideology that we are somehow victims of our emotions. We assume the passivity so characteristic of affective life, the elemental experience we all share of being controlled by our emotions, is the defining reality of our passionate nature. Although it certainly appears this way from the perspective of the agent undergoing an emotion, our affections live well beyond these brief episodic expressions to encompass our attitudes and history. As stated in different ways throughout this essay, and by different people, emotions are the accumulated judgments of our deepest existential commitments. To see the gamut of affective life as something that happens to us as opposed to something we participate in is to miss the wisdom of embodiment.

Given the arguments advanced here that highlight the flexibility, educability, and discernment of emotions, it stands to reason there is much we can do to live more productively and in attunement with our emotions, and that living "in accordance with the mean" may even be considerably easier than Aristotle had originally supposed (Aristotle, 1107a). In order to see how realizable this route actually is, however, we would first have to acknowledge the wisdom of emotion. My account is an attempt to introduce you to the plausibility of this position.

Notes

1 For an overview of the major positions on the emotion debate consult *What is Emotion: Classical Readings in Philosophical Psychology*, especially the introduction by Calhoun and Solomon, 3–40. For a more recent overview see (Deigh 2008).

- 2 Solomon uses the example more than once but see especially the section on "Emotions as Judgments," 125–32.
- 3 See (Averill 1980; Maclean 1980; Izard 2007).
- 4 See (De Sousa 1980b; Thalberg 1984).
- 5 See Nussbaum's Upheavals of Thought: The Intelligence of Emotions.
- 6 It is worth noting that G. W. F Hegel's account of emotion, what he calls "practical-feeling," which he developed in book three of his *Encyclopedia of Subjective Spirit*, anticipates many of the most important distinctions discussed in this essay. For an account of Hegel's revolutionary take on emotions see my essay "The Spirit of Emotions."
- 7 As quoted in Nussbaum 2001, 108. See Lazarus's Emotion and Adaptation.

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History in the Service of Life: Nietzsche's *Genealogy*

Allison M. Merrick

We need history, certainly . . . for the sake of life and action, not so as to turn comfortably away from life and action . . . We want to serve history only to the extent that history serves life . . .¹

(Nietzsche "On the Uses and Disadvantages of History for Life")

Undoubtedly, one of the central exegetical issues for the student of Nietzsche is how we are to understand his assertion that history, or historiography, must be in the service of life. For instance, are we to understand Nietzsche's attack on the teleology of the secular progressive conception of history, a mode of historiography he claims is inimical to life and action, as philosophical or therapeutic in form?² Is Nietzsche's work complete when we realize that we are suffering from a "consuming fever of historiography? (Nietzsche 1997, 60). The central ambition of this essay is to offer some preliminary answers to questions such as these by teasing out the methodological ramifications of Nietzsche's rather gnomic pronouncement, in the hopes that such an analysis may shed further light on Nietzsche's contribution to the tradition of life-philosophy.³

The first part of this essay aims to shape the boundary within which the claim that we need history in the service of life transverses by presenting an inimical account of historiography: history in the service of the ascetic ideal. The second part explores the philosophical function of the correct practice of history that is in the service of life, as evidenced most strikingly in Nietzsche's *On the Genealogy of Morals*. I conclude by suggesting that the therapeutic ambition of Nietzsche's project takes shape when we appreciate the philosophical import and methodological shape of Nietzsche's historiography.

Historiography in the service of the ascetic ideal

The third essay of On the Genealogy of Morals, as Nietzsche informs us in Ecce Homo, seeks to offer an "answer to the question whence the ascetic ideal . . . derives its tremendous *power* although it is the *harmful* ideal *par excellence* . . . " (Nietzsche 1969, 312). To tease out the meaning of the ascetic ideal it may be useful to note it is one thing to engage in ascetic procedures, modes of self-sacrifice, or self-denial, and quite another to be fettered by the ascetic ideal (Ridley 1998a, 59). The ascetic ideal represents the "idealization of asceticism as a way of life that is committed to treating living, existence itself, as an ascetic procedure whereby the end to which this procedure is directed is necessarily not immanent to existence (as with ascetic practices) but transcends it" (Owen 2007, 114). In other words, one may engage in a set of ascetic practices and for instance restrict one's food and drink without, at the same time, positing the meaning or the purpose of the practice as a systematic retreat from this world. The ascetic ideal severs the immanent value of human existence and posits a transcendent value as the goal or ultimate meaning of human existence (Ridley 1998a, 59). And, it is the interpretation of the meaning of human existence offered by the ascetic ideal which Nietzsche locates as the "only meaning offered thus far" (Nietzsche 1967, 162).

The ascetic ideal derives its tremendous power by providing a solution to the problem of the meaninglessness of human suffering. The explanation of suffering it offers, Nietzsche contends, is "... so universal that all the other interests of human existence seem, when compared with it, petty and narrow . . ." namely, it posits this "life counts as a bridge to that other mode of existence" (Nietzsche 1969, 117). According to the interpretation offered by the ascetic ideal the meaning of human existence is to be found in "all those aspirations to the beyond" (Nietzsche 1969, 95), which find expression in commitments such as the belief in "the unconditional will to truth . . . [which] is the faith in a *metaphysical* value, the absolute value of truth . . ." (Nietzsche 1969, 151). In retaining this expression of the ascetic ideal for a moment, Nietzsche tells us: "The truthful man, in the audacious sense presupposed by science, thereby affirms another world than that of life, nature, and history; and insofar as he affirms this 'other world,' does this not mean to deny its antithesis, this world, our world?" (Nietzsche 1969, 152). Life, accordingly, is juxtaposed "(along with what pertains to it: 'nature,' 'world,' the whole sphere of becoming and transitoriness) with a quite different mode of existence which it opposes." And, through such a comparison "life," as well as the corollary concepts,

"nature," and "world," are treated as "a wrong road" or "as a mistake" (Nietzsche 1969, 117). Through the ascetic ideal, Nietzsche argues, "suffering was *interpreted*; the tremendous void seemed to have been filled; the door was closed to any kind of suicidal nihilism" (Nietzsche 1969, 162). Thus, the ascetic ideal provides an answer to the problem of unexplained suffering, to turn human existence, as such, into an ascetic practice. This move wards off the threat of suicidal nihilism by providing human existence with a transcendent goal. In providing an account of the ultimate meaning of human suffering and in offering a particular explanation of the meaning of human existence the ascetic ideal "slander[s] the world" in its devaluation of "this world, *our* world" (Nietzsche 1969, 95).

It is Nietzsche's contention in *On the Genealogy of Morals*, at least, that modern historiography does not stand nearly as opposed to the ascetic ideal as it appears. Modern historiography, Nietzsche claims, does not represent an alternative to the ascetic ideal but rather is beholden to the ultimate meaning of human existence afforded by the ideal. I shall, in what follows, attempt to substantiate Nietzsche's claim that modern historiography fosters and perpetuates the ascetic ideal by exploring the work of Nietzsche's two self-described antipodes: Paul Rée and Ernest Renan.⁴

Nietzsche contends that Rée's work, The Origin of the Moral Sensations, typifies a "perverse species of genealogical hypothesis," which harbors "that power of attraction which everything contrary, everything antipodal possesses" (Nietzsche 1969, 17). Nietzsche finds Rée's formulation of the origins of morality both historically inaccurate and psychologically untenable (Nietzsche 1969, 24-8). With respect to the latter, Nietzsche's critique may be glossed as follows: Rée contends the social utility of the concept of "good" has been forgotten. Yet, for Nietzsche, such utility would have been confirmed by "experience at all times" (Nietzsche 1969, 27). Hence such utility instead of being forgotten would be "impressed on the consciousness more and more clearly" (Nietzsche 1969, 27). To illuminate the former charge Nietzsche argues that Rée's hypothesis "regarding the origin of the value judgment 'good" (namely the concept good originates in those in whom "goodness," understood as unegoistic or altruistic actions, is shown), is historically untenable (Nietzsche 1969, 24-8). An accurate account of the origins of the concept "good" suggests that the concept originates in "the good' themselves, that is to say, the noble, powerful, high-stationed . . ." (Nietzsche 1969, 28). This lends itself readily to the corollary methodological point, one that is Nietzsche's "major point of historical method:" "the cause of the origin of a thing" and the present purposes to which a concept is employed "lie worlds apart" (Nietzsche 1969, 77). Hence, by virtue of his methodologically

misguided and therefore historically inaccurate account of the origins of morality, Rée's account of the history of morality is tethered to the ascetic ideal.

David Owen offers the following rather tidy assessment of the manner in which Rée's mode of historiography is in the service of the ascetic ideal:

... even the "English genealogists" (i.e. Paul Rée), who represent the latest and most honest form of history in the service of the ascetic ideal, entirely obscure the event in question in virtue of their (mis)understanding of the origins of morality. (Owen 2007, 142)

Rée commits the methodological error of suggesting that the present purpose to which a concept is made to serve may shed light upon the origins of that particular concept. Rée obscures the historical event, the slave revolt in morals, and hence conceals the actual history of morality. Accordingly, in obscuring the event in question, Rée's historiography is in the service of the ascetic ideal. It is this same kind of error which irreparably entangles Renan's historiography with the ascetic ideal. Nietzsche finds Renan's account both "psychologically thoughtless" and methodologically misguided.

Amidst a discussion concerning the meaning of ascetic ideals, in the third essay of *On the Genealogy of Morals*, Nietzsche writes that Renan's work represents a profound corruption in historiography (Nietzsche 1969, 157). In a moment of great polemical incisiveness, even by Nietzsche's rather high standards, he thunders:

I know of nothing that excites such disgust as this kind of "objective" armchair scholar, this kind of scented voluptuary of history, half person, half satyr, perfume by Renan, who betrays immediately with high falsetto of his applause what he lacks, *where* he lacks it . . . (Nietzsche 1969, 158)

Nietzsche critiques Renan's procedural commitment to "objective" historiography and, I shall argue, to his psychologically implausible and methodologically flawed account of Jesus.

In the Preface of his *Life of Jesus* Renan indeed claims, "I have written my book with the cold candor of a historian, with the single aim of discovering the finest and most exact shades of truth . . . History, like chemistry or geology, is a science . . ." (Renan 1888, v). Despite such a methodological proclamation Renan, as is well documented, took stylistic allowances such that his account of the life of Jesus is perfumed with sentimentality.⁵ Gary Shapiro writes,

Renan . . . repressed religion. His later works, no matter how positivistic their official ideology, disclosed a return to the repressed. He allowed his readers to

believe themselves scientific and even a bit skeptical, while still allowing them to indulge in religious sentiments.... (Shapiro 1982, 215)

Consider the following rather lengthy pronouncement as one such representative example of Shapiro's critique:

Whatever transformations dogma may undergo, Jesus will still be the author of pure sentiment in religion. The Sermon on the Mount will not be superseded. We will even say that facts are of small moment here; biography is of secondary interest; the idea in such a matter is everything. . . . No discovery, no system will prevent us from attaching ourselves, as religious men, to the grand intellectual and moral line, at whose head shines rightly or wrongly the name of Jesus. In this sense we are Christians, even though separated at nearly every point from the Christian tradition which has preceded us. (Renan 1864, 353)

Renan concedes Christian dogma may undergo vast changes. Nevertheless, "as religious men" we are beholden to the grand intellectual and moral line (Renan 1864, 353). Hence, insofar as we value "the name of Jesus," not necessarily the facts or the biographical minutiae, we "are Christians" (Renan 1864, 353). However, the account Renan offers of Jesus, Nietzsche claims, rests upon "an execrable psychological frivolity—Monsieur Renan, that buffoon in *psychologicis*, has appropriated for his explanation of the type Jesus the two *most* inapplicable concepts possible in this case: the concept of the genius and the concept of the hero" (Nietzsche 1990, 153). In considering the latter concept first, Nietzsche claims, the hero is one who seeks out and confronts resistance, whereas Jesus is one who, according to Nietzsche, possesses an "incapacity for resistance," as evidenced in the "profoundest saying of the Gospel, 'resist not evil!" (Nietzsche 1990, 153). Nietzsche claims that the concept of "genius," "a worse misunderstanding" than the concept of hero, is inappropriate because it is historically misguided insofar as "our whole concept . . . has no meaning whatever in the world Jesus lived in" (Nietzsche 1990, 153).

Accordingly, Nietzsche charges Renan with reading the needs of the present back onto his account of Jesus. Hence, for Nietzsche, Renan's formulation does not account for the manner in which "the type of the redeemer has been preserved to us only in a very distorted form" (Nietzsche 1990, 154). In touching on a point of great methodological import Nietzsche continues:

That this distortion should have occurred is in itself very probable: there are several reasons why such a type could not remain pure, whole, free of assertions. The milieu in which this strange figure moved must have left its mark upon him, as must even more the history, the *fate* of the first Christian community: from this the type was retrospectively enriched with traits which become comprehensible only in reference with warfare and the aims of propaganda. (Nietzsche 1990, 154)

This methodological error is precisely the charge Nietzsche brings against Rée, namely claiming present purposes shed evidential light upon the origins of the concept. Coquetry of the sort exemplified in the work of Renan is tantamount, Nietzsche claims, to "lascivious historical eunuchism" (Nietzsche 1969, 158). Undoubtedly, the metaphor of the eunuch is revealing. Renan produces a sterile form of historiography due to both the psychological thoughtlessness of his rendering of the Jesus type as well as the methodological error of failing to recognize "the type was retrospectively enriched with traits" such that one must investigate the many systems of purposes to which the type was made to serve, rather than attempting to uncover an unadulterated type (Nietzsche 1990, 154).

In light of the foregoing, we can begin to see why Nietzsche informs us history written in the service of the ascetic ideal "... offends my taste; also my patience:... such a sight arouses my ire, such 'spectators' dispose me against the 'spectacle' more than the spectacle itself (the spectacle of history, you understand) . . ." (Nietzsche 1969, 158). The scare-quotes Nietzsche places around the concepts "spectators" and "spectacle" are instructive. First, the concept of the "spectators," when understood in a derogatory sense, captures Nietzsche's other choice labels for the authors of this mode of historiography: the "cowardly contemplatives" or the "objective' armchair scholars," those historians who "wrap themselves in wisdom and look 'objective" (Nietzsche 1969, 158). The concept denotes the particularly insidious feigned demeanor of the passive observer. Second, the "spectacle," the picture of history such authors present, is an unseemly one: they, in other words, make a "spectacle" of historiography in presenting an account that is "by nature unhistorical:" it is both psychologically questionable and historically mistaken (Nietzsche 1969, 25). The contours of historiography in the service of the ascetic ideal can be generalized along the following lines: (1) "the actual history of morality," the "so well hidden land of morality-of morality that has actually existed, actually been lived" is further concealed by (2) a "spectacle" of historical insight and understanding (Nietzsche 1969, 21). These two points are evidenced, for instance, in Renan's continued flirtation with the ascetic ideal and in Rée's lack of "historical spirit" which results in an account of the history of morality that is "by nature unhistorical" (Nietzsche 1969, 25). Such "spectacles" of historical appreciation and understanding serve

to (3) seduce their audiences into a life-denying system of purposes. Nietzsche's critique exposes Rée and Renan as thinkers subjugated by the ascetic ideal and as practitioners of historiography who serve a system of purposes inimical to life.

Yet, as Nietzsche makes clear in *On the Genealogy of Morals*, these sorts of methodologically misguided investigations should not ill dispose us toward the spectacle of history itself. So, in contrast to historiography written in the service of the ascetic ideal, Nietzsche presents an account of historiography in the service of life. A form of historiography, in other words, which seeks to destabilize our commitment to a particular system of purposes, namely the slave mode of moral reasoning. It is in this way, as I shall argue in the following section, we should view Nietzsche's thoughts on history in the service of life.

Historiography in the service of life

An adequate account of what it means for historiography to be in the service of life needs to involve the following dimensions of Nietzsche's thought. It should tease out the methodological component of his philosophical project and illustrate the strategic elements of what he labels in Human, All Too Human, "historical philosophy" (Nietzsche 1983, 12) in order to reveal the currently obscured "actual history of morality" (Nietzsche 1969, 21). This feature, following David Owen's analysis, involves two methodological constraints: "first of being true to the object of enquiry (i.e. the history of 'morality'); secondly, that of being true to the purpose of the enquiry (i.e. the re-evaluation of morality)" (Owen 2007, 143).⁶ In what follows, I will focus upon Nietzsche's meditation on the value of history before turning to address the manner in which a cogent account of history written in the service of life should render intelligible the manner in which that history has the potential to serve therapeutic ends, which may include freeing us from our commitments to particularly pernicious systems of purposes. To put the point another way, a satisfactory account should chart the manner in which such a history can enjoin us to embark upon a reevaluation of our evaluative frameworks. To lend credence to this particular aspect of historiography in the service of life, I want to isolate a representative example of historiography from Nietzsche's On the Genealogy of Morals in order to make clear both the philosophic and therapeutic dimensions of Nietzsche's thought.

As is well known, Nietzsche in his meditation on the uses and disadvantages of history presents three modes of historiography: monumental history, antiquarian history, and critical history. Each of which serves a decisively distinct function and each may be employed in the service of life. Put briefly, monumental historiography highlights exemplary achievements to demonstrate that greatness "was in any event once *possible* and may thus be possible again" (Nietzsche 1997, 73). Antiquarian history encourages one to preserve and revere an aspect of the past by tending to it with a particular kind of piety, while critical history serves to mitigate the totalitarian effects of the other modes of historiography by providing the critical apparatus to view entrenched narratives scrupulously. In accordance with the tripartite purposes of historiography that serves life-negating forces. In terms of further demarcating this distinction, Nietzsche claims:

These are the services history is capable of performing for life; every man and every nation requires, in accordance with its goals, energies and needs, a certain kind of knowledge of the past, now in the form of monumental, now of antiquarian, now of critical history; but it does not require it as a host of pure thinkers who only look on at life, of knowledge-thirsty individuals whom knowledge alone will satisfy and to whom the accumulation of knowledge is itself the goal, but always and only for ends of life and thus also under the domination and supreme direction of these ends. (Nietzsche 1997, 77)

Historiography in the service of life, Nietzsche writes, must be animated and directed by a set of purposes. Historiography operating under the epistemological demand of pure knowledge itself, not ostensibly bound by a system of purposes, is inimical to life. The epistemological objective of pure knowledge of the past is itself motivated by purposes, such as the desire for clarity or breadth of historical understanding or for certainty, though such purposes are ostensibly denied.7 To tease out this point we may do well to reconsider Renan who seemed to claim his historiography was guided by pure objectivity and, so understood, "knowledge is itself the goal" of the inquiry (Nietzsche 1997, 77). Yet, if Nietzsche's analysis is correct, Renan's supposed "objective historiography" is motivated by and in the service of another set of purposes, namely the ascetic ideal. History in the service of life, by contrast, avoids this error by acknowledging the purposes for which it operates, methodologically bound by the need for a particular kind of knowledge of the past, where the kind of knowledge, Nietzsche suggests, is "evoked by hunger, [and] regulated by the extent of its need" (Nietzsche 1997, 77). History, so written, is constrained by procedural restrictions and, as such, maps the purposes of the investigation onto the object of inquiry. History ceases

to serve life when a mode of historiography is employed to serve purposes to which it is ill suited.

In light of the foregoing, I shall suggest that Nietzsche's *On the Genealogy of Morals* may be viewed as a representative example of historiography in the service of life. Consider the first essay in which Nietzsche, operating within the critical mode of historiography, seeks to break up the dominant mode of moral reasoning, the slave morality. In other words, in the essay on "Good and Evil," 'Good and Bad," as David Owen puts the point:

... by presenting "morality" as slave morality, as a counter-movement to, and re-evaluation of, noble morality, [Nietzsche] immediately and dramatically problematizes the presumption of his audience that "morality" is the only possible ethical perspective in making viable another mode of ethical reasoning and rhetorically situating the reader within the struggle between them, while also indicating that the enterprise of re-evaluation to which he enjoins his readers is not a novel phenomenon. (Owen 2007, 131–2)

That is, in the first essay, Nietzsche seeks to break up a piece of the past by demonstrating that the picture of morality we assume is universally binding and a-historic, the slave mode of morality, is the product of a reevaluation of another mode of moral reasoning, noble morality. By offering this formed picture of the history of morality, Nietzsche seeks to dissolve the hold that the slave mode of morality has upon us, as he attempts to point out reevaluations of our moral frameworks are indeed possible. Or, to put the point schematically: (1) Nietzsche takes as his object of inquiry the "actual history of morality" in order to bring to light the slave revolt in morality (Nietzsche 1969, 21). In attempting to reveal "something that required two thousand years to achieve victory ... [given that] ... all *protracted* things are hard to see, to see whole . . . [the slave revolt in morals] however, is what has happened" (Nietzsche 1969, 34). Nietzsche, at the same time, discloses (2) the purposes of the investigation: to deliver us from our commitment to the victorious mode of evaluation, the slave mode of moral reasoning. Here in the first essay, historiography in the service of life is on display.

If this reading of the first essay is persuasive, then it readily lends itself to the consolation afforded by the critical mode of historiography elucidated by Nietzsche in his meditation on the value of history: "knowing [that] this first nature was once a second nature and that every victorious second nature will become a first" (Nietzsche 1997, 77). When placed in the context of the first essay of *On the Genealogy of Morals*, the first nature is, of course, the slave form

of moral reasoning, the now victorious mode of evaluation. Yet, as Nietzsche attempts to stress in On the Genealogy of Morals, this first nature was once a second nature, and it can be understood as a response to the noble mode of evaluation. The salient point here, as Nietzsche puts it, in an often-cited section of Beyond Good and Evil, is: "Morality in Europe today is herd animal morality in other words, as we understand it, merely one type of human morality beside which, before which, and after which other types, above all higher moralities, are, or ought to be, possible" (Nietzsche 1987, 115). If Nietzsche's account of the victory of one mode of evaluation over another is sufficiently persuasive, then the conceptual space is opened for yet another reevaluation of our evaluative frameworks. Commenting on the critical mode of history in the second of the Untimely Mediations, Nietzsche makes clear: "The best we can do is to confront our inherited and hereditary nature with our knowledge, and through a new, stern discipline combat our inborn heritage and implant in ourselves a new habit, a new instinct, a second nature, so that our first nature withers away" (Nietzsche 1997, 76). Historiography in the service of life, as evidenced in On the Genealogy of Morals, at least, is precisely this sort of undertaking insofar as it maps the object of inquiry, the actual history of morality, onto the purpose, that of addressing our real needs, such as, for instance, "deflating our prejudices and freeing us from the snares of metaphysics" (Ridley 1998b, 235). Hence, Nietzsche attempts to enjoin us to take up the arduous task of reevaluation, such that we can, perhaps, begin to implant "a new habit, a new instinct, a second nature" (Nietzsche 1997, 76).

Conclusion

At the opening of this essay, I suggested Nietzsche's thoughts on history in the service of life might aid us in unpacking both the philosophic and therapeutic dimensions of his project. A word, in the hopes of adding further clarity to this point, as well as a consideration broaching the vexed question concerning the manner in which Nietzsche's idea—that history is valuable only insofar as it serves life—relates to the tradition of life-philosophy, are certainly in order. The philosophical dimensions of Nietzsche's project are evidenced in the methodological restrictions he places on historiography, in the strategic manner in which he accounts for the origins of morality, and in the way in which he problematizes our commitment to a particularly pernicious mode of moral reasoning. The therapeutic aspects are contained in the emancipatory potential

such accounts may harbor. If Nietzsche's account of the history of morality is sufficiently persuasive, then it has the potential to produce the therapeutic effects of exposing and breaking down our allegiances to particularly pernicious modes of framing ourselves.

Nietzsche begins his meditation on the value of history with the following quotation from Goethe: "In any case, I hate everything that merely instructs me without augmenting or directly invigorating my behavior" (Nietzsche 1997, 59). Accordingly, historiography in the hands of Nietzsche should, at least, have the potential to strengthen our resolve, to remind us, in other words, "why instruction without invigoration, why knowledge not attended to by action, why history as a costly superfluity and luxury, must be . . . hated by us-hated because we still lack even the things we need and the superfluous is the enemy of the necessary" (Nietzsche 1997, 59). History in the service of the ascetic ideal is one such example of instruction without invigoration. History in the service of life is bound by methodological restrictions, and, accordingly, can be seen to serve life only if the purposes, the "things we need" from the inquiry, are accurately mapped onto the objects of the inquiry (Nietzsche 1997, 59). If the tradition of life-philosophy can quite generally be understood as a rigorous examination of the manner in which we make sense of ourselves in "this world, our world," then Nietzsche's contribution, at least in the second of his Untimely Meditations, to this philosophical tradition is transparent: history, or historiography, is valuable only insofar as it is in the service of life, only insofar as it attends to our real needs, and only insofar as it may directly augment and invigorate our activity.

Notes

- 1 Copyright ©1997 Cambridge University Press. Reprinted with the permission of Cambridge University Press.
- 2 For instance, the therapeutic dimension of Nietzsche's thought is emphasized in the following works: Danto (1994), Hutter (2006), and Ure (2008).
- 3 For instance Thomas Hart identifies this impetus as singularly crucial: "[Nietzsche's] philosophy, above all else, is a philosophy of life and living" (2009, 117).
- 4 Nietzsche reveals Ernest Renan as his antipode in §48 of *Beyond Good and Evil*, whereas Nietzsche informs us, in the Preface of the *Genealogy*, Paul Rée's *The Origin of the Moral Sensations*, has "that power of attraction which everything contrary, everything antipodal possesses . . ." (1969, 17).
- 5 See, for example, Schweitzer (1998).

- 6 Owen adds a third restriction, namely: "that of being expressively adequate to its rhetorical task of persuasion" (2007, 143).
- 7 This point is a result of Nietzsche's "perspectivism," which finds its most cogent articulation in the third essay of the *Genealogy* (*GM* III 12). For an excellent discussion of this particular issue see: Ridley (2000).

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Index

action 13, 38, 47, 54, 57, 58, 62n. 21, 79-80, 123, 126-7, 132, 148, 177, 192-4, 213, 215, 225, 231, 238, 249, 251, 259 adaptation 8, 38, 55, 61n. 14, 227 maladaptation 59 Adorno, T. 18, 20, 22, 154n. 5, 214 aesthetic 88, 124-7, 129-31, 133-4 aging xvii, 50 agon xix, 41, 123, 127-8, 131, 132, 134, 136n. 17 antagonistic 12 al-Ghazali 206n. 19 Amaringo, P. 44n. 1 Amazon 31-2 amor fati 43 Angier, N. 40 animal rights movement 41 Aphrodite 205 Apollonian 35 Arendt, H. xviii, xxiii, 79-82 Ares 205 Aristippus of Cyrene see Cyrenaics Aristo of Chios 198 Aristotle 25, 67-8, 79, 118, 126, 132, 135n. 4, 154n. 4, 187-8, 190, 193, 202, 206n. 16, 242-3, 245-6 Aryan 150-1, 153 ascetic ideal xxiii, 249, 250-5, 256, 259 asceticism 250 ataraxia 202 atom 37-8, 42, 73, 74, 95 atomism 72 Auschwitz 154n. 5 auto-affection 141-3, 146 autonomy xiii, xx, 70, 87, 141, 157-9, 161, 163-4, 237, 245 autopoietic 39,68 Averill, J. 240, 247n. 3 ayahuasca 31

Barton, J. 40 beauty 126-7, 131, 161-2, 165, 166n. 5, 198 being alive 39 benevolence 9-11, 134 Bergson, H. xiii, xiv, xvii, xix, 20, 22, 25, 47-64, 109, 145, 154n. 7, 212, 216-17, 221n. 12 biologism 19 biotechnology xiii, xvii, 85, 94, 157, 165, 226 body, the xvi, xviii, 8, 17, 27-8, 33-5, 39, 41, 47, 49-51, 55, 59, 61n. 10, 71, 141, 160, 162 Boethius 201 Bohr, N. xvii, 69 Boltzmann, L. 72 Bordo, S. 158, 161-3, 166nn. 4-5 Bostrom, N. 201 Brown, W. 129 Buddhist xxi, 198, 205, 207n. 26 Burnyeat, M. 201, 206nn. 13-14 Calderon de la Barca, P. 204 Calhoun, C. 246n. 1 capitalism xix, 134, 136n. 16, 144, 148-50, 214 Capra, F. 39 care xx, 19, 23, 28, 114-15, 116, 118, 164-5, 171-84, 200, 242 Cartesian mechanism 51 Cashinahua 146-50 cause 32, 37-8, 42, 50-2, 55, 60, 61n. 14, 68, 81, 87, 97, 225, 240, 251 center of force 37-8, 40, 42 Cervantes 230 Christianity xx, 24, 41-2, 114, 133, 137n. 18, 172, 178-81, 183nn. 11, 15-16, 253-4 chronological order 52, 83 Cicero 198, 205nn. 4, 6

Clifford, W. K. 205n. 6 cognitive ethology 40 Columbus, C. 197 commitment 10-11, 124, 134n. 2, 173, 177, 211, 246, 250, 255 commonalities 7,9 community xii, xv, 71-2, 76, 124, 130, 151, 206n. 7, 230, 254 complexity 24, 32, 34, 56, 87, 89, 96, 103, 104, 213, 240, 244 computer virus 102 conatus 19, 23, 25 conflict x, xx-xxi, 20, 35, 110, 130, 174, 185, 186, 188, 192, 194, 230-1 connectedness 3, 4, 5, 10 consciousness xvi, 4-5, 6, 9, 10, 13, 15, 16, 22, 23, 37, 53-6, 60, 62n. 18, 69, 96, 214, 238-9 self-consciousness 4, 25, 173, 178 consequentialism 79-80 context xiii, xiv, xv-xvii, xxiii, 3-4, 6-7, 13, 21, 23, 25, 27, 72, 74-6, 162-3, 178, 211-14, 216-19 contextual givenness 4, 5, 27 contradictions 69 controllability 95, 103 converging technologies xviii Coolen, M. 96 Copernican analogy 224-6 Copernicus/Copernican 224-6, 229, 231-2, 233n. 19 creation xiii, 20, 50-4, 56-7, 60, 60n. 4, 61n. 7, 63n. 34, 90, 98, 127, 134, 233n. 19 creationism 89 re-creation 9 crystals 74 culture xix, 11-12, 26, 31-2, 41, 43, 70, 99, 111, 123, 125-7, 132-4, 161, 211, 230, 232, 241, 244 cybernetics 8, 84, 87, 109, 114, 116–17 Cyrenaics 200 Darwin, C./Darwinism 19, 20, 26, 36, 39-40, 53, 62nn. 16-17, 74, 89, 109, 204, 227-9 database ontology 98 death 26, 41, 83, 86, 128, 160, 164, 172, 179, 181, 189, 204, 221n. 12, 230

Deigh, J. 246n. 1

deinon 186-91, 193-4 Deleuze, G. 56, 142, 148, 154nn. 2, 13 democracy xv, xix, 123-39, 176, 211 denialism 161, 197-8 Dennett, D. 96 Derrida, J. xvii, xx, 69, 146, 148, 171-84, 233n. 15 Descartes, R. xvii, 47, 69-70, 81, 83-4, 87, 141, 143, 172, 203, 213, 226, 228-9 Descombes, V. 154n. 8 design 83, 85-7, 89, 90, 97, 102, 129-32, 157, 190, 245 argument from 88-9 intelligent 89 desire xxii, 8, 34, 84, 164, 166n. 1, 172-4, 202, 223-32, 232n. 9, 233nn. 19, 21-3, 243 - 4de Sousa, R. 240, 247n. 4 dike 186, 188-9, 193-4 Dilke, C. 205 Dilthey, W. xiii-xvi, 3-14, 20-2, 25-8, 47, 109 Diogenes Laertius 198, 205n. 4, 206nn. 11, 20 Dionysian 35 Dionysus 35, 131, 205 DNA xiii, 40, 71, 74, 85-6, 93, 98-9, 102, 103, 109, 112, 113, 226 printer 102 Dombrowsky, D. 128, 134n. 1, 135n. 7 Dostoevsky, F. 230 Dupuy, J.-P. 231 Dworkin, R. M. 105 dynein 40 economics 42 education 89, 127, 131, 133-4, 135n. 5, 159 élan vital 47, 55 see also vital impetus embroyonic development 50, 63n. 31 Emmeche, C. 106n. 11 emotions xv, xxii, 60, 63n. 34, 131-2, 237-46, 246n. 1, 247nn. 2, 5-7 and animals 243-4 basic 239-40 as elements of transcendence 245 as eudaimonistic 242 and moral virtue 245-6 narrativity of 241

phenomenological perspectives on 238, 243 - 4physiology of 239-40 enhancement xx, 157-9, 163-5, 166n. 1 Enlightenment 112, 129, 133 entropy 39, 68, 72 environment viii, xv, xvi, xxii, 3, 18, 72, 100, 102, 104, 213, 226-32, 233n. 13, 243 - 4environmental 61n. 14, 84, 99, 102, 104-5, 226-7, 231 epoche 69, 142 eris/envy 131-2 ETC Group 85, 101-2 eternal recurrence 33, 42-3, 154n. 8 ethics xviii, xxiii, 7, 8-12, 17, 25, 41, 60n. 2, 79-80, 124, 126, 131, 135n. 4, 157, 177, 198, 215 ethics (of the future) 80 eugenics xv, xx, 157-8, 163-5, 166n. 1 Euripides 131, 183n. 8 everyday life 94, 212-15, 217-20, 221nn. 13 - 14evolution viii, xvii, xxii, 26, 33, 39-40, 47-64, 82, 96, 98, 105, 109, 116, 125, 204, 223, 227-8, 239 extinction 32, 41, 44 eye xvii, 33, 52-3, 61n. 14, 127, 141, 146, 162, 166n. 5, 199 factical life xvi, 15-16, 21-3, 24-6 federal reserve note 42 Flaubert, G. 230 Flintoff, E. 207n. 26 formative ethics 11 Foucault, M. xx, 111-12, 114-16, 118-19, 135n. 7, 157, 160, 171-84, 233 biopolitics xx, 157-9, 161, 163-5 biopower vii, 111, 158-65, 166n. 3 care of the self xx, 114-16, 118, 171 - 84ontology of ourselves 112, 114, 119 practices of the self 114-16, 159-60, 162, 178 freedom 19, 23, 37, 114, 125, 129-30, 134n. 2, 144, 147, 150-1, 158, 160, 165, 171-2, 176-7, 180, 192, 225, 229 Freud, S. 234n. 22, 242, 244

Galactic Empire 204 García Márquez, G. xvii, 67, 69, 71, 75-6 genre xix, 48, 67, 143-4, 148-53, 154n. 4 gift xx, 18, 67, 83, 171-2, 180-2, 241 Girard, R. viii, xxii, 223, 230-2, 232n. 3, 233-4nn. 17-22, 24 Gödel, K. xvii, 69, 117 "God is dead" 41, 44 golem 85 Goodpaster, K. 39-40 Greek(s) xiii, xv, xx, 15, 24, 35, 68, 84, 114, 124, 126, 131-3, 136n. 13, 172, 176, 178-9, 186, 190-1, 206n. 14 Guattari, F. 148, 154n. 13 Hadot, P. 115, 216 Hall, M. 40, 44 Hanson, R. 205n. 5 Hayles, N. K. 44n. 3 healing 32, 38, 43, 164 health(y) xxi-ii, 128, 131, 135n. 9, 157, 159, 161, 198, 206n. 19, 219, 237 Heidegger, M. xvi, xviii, xx-xxi, 15-29, 43, 83-4, 90, 110-11, 116-19, 185-95, 212, 219, 233 fundamental ontology 110 Seingeschichte (history-of-being) 119 Heraclitean flux 40 hermeneutics xvi, 3-4, 15-16, 20-2, 24-8, 69, 128, 134 Hesiod 132 heterogeneity 143-5, 149-52, 154n. 5 historical xiii, xv-xvi, xviii, xxii-iii, 3, 7-8, 11-13, 20-5, 27-8, 70, 112, 117-19, 131, 135n. 5, 151, 160, 162, 172, 174, 189, 197, 213-14, 219, 221n. 13, 228 prehistoric 70 historicism 16 history xv, xxiii, 3, 6, 13, 26-8, 51-2, 57, 93, 113, 118, 132-3, 135n. 5, 141, 144, 147-9, 151, 153, 175, 179, 232, 234n. 21, 245-6, 249-60 antiquarian 256 critical 256-8 monumental 255-6 prehistory 178 Höffe, O. 225-6, 229, 231, 232n. 9

Homo cyberneticus 116

Hume, D. 9, 10, 88, 200 Husserl, E. xvi-vii, 15-17, 24-7, 69, 233n. 17 Huxley, T. H. 197 hypsipolis-apolis 186, 189-90 identity 128, 134, 135n. 9, 143-4, 146-8, 150-4, 205, 243 immanence 16, 21-3, 143 Information Age 110-11, 113-14, 116-18 informationistic biotechnologies xviii, 94-5, 101-5 information theory xvii, 72, 74-6, 112, 114 inorganic 37-9, 49, 51, 98, 113 interaction xxi, 36, 44nn. 1, 3, 95-6, 199, 227, 229, 238, 240 internal principle 51 Izard, C. 239-40, 247n. 3 James, W. 20 Jonas, H. xviii, xxii, 79-80, 233n. 13, 243 - 4justice 12, 15, 126, 135, 188, 242 Kant, I. xv-xvi, xxii-xxiii, 3-5, 7, 10-13, 27, 33, 58, 68, 80, 87-8, 114-15, 118, 141, 144, 151, 223-6, 229, 231-2, 232nn. 2, 7, 10, 233n. 19, 234n. 23 Kauffman, S. 39, 68 Kaufmann, W. 26, 136n. 14 Keats, J. 205 Keller, E. F. 113 Keohane, J. 207n. 24 Kierkegaard, S. 18, 233n. 15 Kuhn, T. 74 Kundera, M. 233n. 17 Kuzminski, A. 201, 204-5, 206nn. 9, 20 Lamarck 52-3 language vii, xvi, 16, 20-8, 36, 42, 59, 61n. 11, 69, 72, 125, 154n. 4, 162, 164, 186-90, 213-20, 220n. 2, 221nn. 4-6, 14, 17, 240, 244 Latour, B. 104, 106n. 15 law 3, 10, 37, 82, 95, 114, 130, 134n. 2, 141, 160, 163–4, 185, 192, 223, 225–6, 231 Lawrence, T. E. 206n. 17 Lazarus, R. 243, 247n. 7 Levinas, I. xvi, 15-21, 25, 28

Lewontin, R. xxii, 132, 223, 226-9, 233nn. 12-14 liberal eugenics xx, 157-8, 163-5 liberalism xv, xvii, 70-2, 123-4, 128, 134, 134n. 2, 136n. 12, 164 lightning 38–9 literature xxiv, 144-5, 153, 218, 223, 230 Locke, J. 129-30, 134n. 2, 136n. 12 logos xiii, 22, 24-5, 186, 189-90, 194 Long, A. A. 198, 205 Löw, Rabi 85 Luna, L. 44n. 1 Lyotard, J.-F. xix, 143-4, 146-53, 154nn. 3-6, 9-11 McFadden, J. 68 machines xxiii, 36, 40, 61n. 14, 68, 75, 83-4, 96, 112, 114, 117, 226, 228-9 natural v. artificial 87-90 McKenna, A. 231-2 Maclean, P. 240, 247n. 3 Maia Neto, J. R. 206n. 8, 207nn. 21, 23 maladaptation see adaptation Malin, S. 201 Margulis, L. 68 Maturana, H. 39 mechanism, mechanistic xx, 36-42, 49-52, 56, 87, 111, 113, 173, 176, 227, 230, 243 see also Cartesian mechanism Mendius, R. 205n. 5 Merchant, C. 41 metaphysical xvii, 7, 11, 18, 33, 38, 41, 44n. 3, 47-8, 55-7, 59, 62n. 23, 70, 80-4, 117-18, 135n. 4, 172, 188, 215-16, 218, 221n. 14, 250 metaphysics xiv, xvii, xviii, 33, 36, 38-9, 47-8, 56-60, 60n. 3, 63n. 28, 33, 70, 72, 80-4, 87, 90, 116-17, 172, 212, 215, 217, 258 microtubules 40 militarization of biology 102 mimetic viii, 89, 230-1 modernity 12, 17, 84, 111, 131, 133, 157, 160, 172, 174, 214, 219 modern philosophy xxii, 23, 124, 129, 213, 229 molecular biology 83, 93, 95, 102, 109, 113 molecular vitalism 40 money 32, 42-4, 101, 149

monster of energy xvi, 31, 36, 42 Montaigne, M. de 200, 202, 204-5 moral xiii, xxi, 9-12, 47-8, 60, 63n. 34, 79, 81, 114, 124, 129-30, 141, 158-9, 204, 225, 237, 244-5, 252-3, 255, 257-8 moralists 115 morality 11-12, 231, 251-2, 254-5, 257-9 motion 36-7, 224-6, 229, 232, 243 mysterians 198 natural artificiality 105 naturalism xvi, 16-20 naturalizing (life and the mind) 83 Nazi 150-1 NBIC convergence xvii, xviii, 80, 82-3, 89 neo-Darwinian/neo-Darwinism 39, 53, 109,204 neo-Kantian/neo-Kantianism 15-16, 24, 27 neo-Nietzschean 111 Nietzsche, F. xiii, xiv, xvi, xix, xxiii, 18, 28, 31-44, 47, 109, 123-34, 134n. 1, 135nn. 4-5, 7, 136n. 10, 136-7nn. 13-19, 232n. 10, 233n. 15, 234n. 21, 244, 249-59, 259nn. 2-4, 260n. 7 normalization 158-64 Nussbaum, M. xxii, 134n. 1, 206n. 20, 241-3, 247nn. 5, 7 Nutt, D. 44n. 1 objectivity 70, 124, 131-3, 179-80, 182, 183n. 13, 256 O'Flaherty, W. D. 205n. 3, 206nn. 14, 18 ontologically subjective 42 organic 8, 13, 39, 50-2 life 37, 48, 59, 61n. 7 matter 61n. 14, 113 memory 50 phenomena 51, 61n. 12, 63n. 29 orthogenesis 53, 62n. 16 other xx, 6-11, 16, 19, 21-3, 25, 28, 34-5, 50, 68, 70-2, 75, 84, 124, 127, 136n. 12, 142-3, 147, 150, 152-3, 159, 165, 171-2, 175, 180-1, 225-6, 229-32, 233n. 19, 239-40, 242, 245 parrhesia 115, 176-8, 183nn. 8, 11 Patočka, J. xx, 171-82, 182n. 2, 183nn. 13-16

perspectivism 37, 128, 260n. 7 pessimism 33, 126, 133, 135n. 4

phenomenology/phenomenological xv-xvi, xix, 15-17, 19, 21, 23-4, 67, 69, 110, 142-3, 145, 154n. 6, 173, 237, 243 physis 15, 16, 20, 186, 189, 194 Pietak, A. 40 plants 26, 32, 35, 38, 40-1, 44n. 1, 62n. 2, 99-100, 102, 228, 233n. 11 Plato xiv, xvi, 33, 41-2, 58, 76, 115, 118, 124-6, 135n. 4, 141-3, 172, 176-80, 183n. 8, 13, 205, 206n. 14, 211, 214-15, 218-20, 221n. 14, 223, 230 Plessner, H. 105 Plotinus viii, 204 pluralism xix, 125, 127-34, 136nn. 15-17 polis 124, 131, 134, 143, 172, 175-6, 179, 190, 191 politics xiv, xix, 123-7, 129, 131-4, 135n. 7, 176-7, 179, 187-8, 190 postmodernism 143-4, 148, 154nn. 3, 7 postulates, of analyzability 95 of lawfulness 95 of manipulability 98, 104 of programmability 96-7 of synthesizability 95-6, 103 power xiii, xvii, xx, 9, 15, 19, 35, 37, 40, 55, 62n. 21, 84, 95, 110-11, 114-16, 126, 128-30, 144, 149-52, 157, 159-60, 163-4, 166n. 3, 172-8, 182, 183n. 12, 187, 194, 198, 211, 213, 218-19, 223, 244, 250-1, 259n. 4 powerless, -ness xix, 142, 145-6, 152 practices 3, 22, 24-5, 114, 116, 125, 159, 160, 162, 173, 178, 212, 218, 250 property 68, 86, 202, 233n. 13 private 130, 134 Pruyser, P. 207n. 25 Pyrrho of Elis 198, 206n. 11 rationalism 24, 173, 204 Rawls, J. 71 re-creation see creation reduction (rétrécissement) 57 Rée, P. 251-2, 254-5, 259n. 4 reflexive awareness 4-6 reflexive experience 5-11, 13n. 1 relativism 132 Renan, E. xxiii, 251-6, 259n. 4

representation 5-6, 8, 33-4, 42, 54, 58, 62n. 19 responsibility xx-xxi, 21, 23, 41, 80, 128, 171-2, 175, 179-82, 186, 189, 193-4 ressentiment 131, 134 Rickert, H. 25-6 Ricoeur, P. 111-12 Ridley, M. 71, 250, 258, 260n. 7 Rimbaud, A. 142, 154n. 2 risk xiii, xviii, 16, 23, 38, 89, 102-5, 176-7, 192, 204, 214, 219, 243-4 Rorty, A. 240-1 Rosenblueth, A. 228, 233n. 14 sacrifice xxi, 35, 186, 191-4, 230, 250 Sagan, C. 71 Sagan, D. 68 Sartre, J.-P. xxii, 238-9 Schachter, S. 239 Schleiermacher, F. 28 Schopenhauer, A. xvi, 9, 33-6, 39, 45, 218 Schrödinger, E. 73–4, 113 Schutte, O. 43 scientism 233n. 19 Scruton, R. 241 Searle, J. 42, 44, 46 Sedley, D. 198, 204-5 self xix-xx, 5-6, 10, 16-17, 19-28, 36, 57, 68, 70, 114–16, 118, 128, 141, 143, 145, 153-4, 159, 161, 171-82, 183nn. 11, 16, 203, 243 self-consciousness see consciousness self-denial 250 self-organization xiii, 40, 68, 86-9, 96, 98 self-reference xvii, 68-70 self-reflection 10, 12-13, 23 Sextus Empiricus 199-200, 202, 204, 205n. 4, 206nn. 10, 15 shaman 31-2, 38, 44n. 1 Singer, J. 239 Skeptics 197-210 Academic 197, 201-2 Pyrrhonian xxi, 198, 202 Smith, N. K. 224-6, 232, 232n. 6 Socrates 41, 131, 133, 136nn. 13-14, 175-8, 206n. 14, 223 solidarity 9-12, 56, 128, 174, 182 Solomon, R. xxii, 238–9, 241, 246nn. 1–2 Sophocles xx, 185-6, 188-9, 193-4 statistic 73, 75, 96

Stendhal 230 Stephens, P. 207n. 24 Stoics 114, 198-9 story 75-6, 147, 153 subject/subjectivity xxiii, 5-6, 16-17, 23, 27-8, 33, 37-8, 40-2, 53-4, 62n. 19, 70, 80-1, 84, 111, 114-19, 143, 145, 147-8, 159-60, 173, 180-1, 183n. 13, 214, 224-6, 229-32, 233nn. 15, 19, 243 synthetic biology xviii, 84-6, 94, 97-101, 104 - 5Taylor, P. 40 techne xiii, 88, 176, 186-9, 194 technology xiii, xv, xx, 17, 44n. 7, 80-1, 83-4, 99, 101, 112, 157-8, 164-5, 172-4, 177 bio- xiii, xvii, 85, 94, 157, 165, 226 computer 94, 101 gray 100 green 99-101 information xvii, 94, 98, 110-11 nano xvii, 85-6, 97, 104, 110 teleology 51-3, 68, 87, 249 temporalization 142, 145, 149, 152, 154n. 1 temporal order 52 Thalberg, I. 247n. 4 "thing" 34, 36-8, 44 "thing-in-itself" 33 tragedy xv, xxi, 185-6, 188-90, 193-4 transcendental reflection 7, 10, 12-13 Tree of Life 42 truth 25, 52-3, 67, 70, 73, 116-19, 159, 171-2, 176-7, 180, 192, 197-201, 203-4, 212, 219-20, 220n. 2, 241, 250, 252 Tupper, K. 44n. 1 Übermensch xvi, 43 uncanny 102, 186-7, 189-91 uncertainty xviii, 23, 79, 103, 105 Varela, F. 39 Venter, J. C. 85, 97, 101-2, 105n. 4 verum factum 81-2, 89 Vico, G. 81, 89 violence xvi, xx, 16, 18, 19-20, 25, 144, 151-2, 174, 187-8, 230-1

virtual 97, 201, 203
virtuality 53–7, 62nn. 19, 22
vital impetus xvii, 47, 51, 53–7, 62n. 19 see also *élan vital*vitalism 26, 40, 48, 51, 217, 220
vital organization 54, 59
vital principle 48, 51, 61nn. 9–10, 150
voice xix, 23, 141–2, 152, 172
war 19, 72, 117, 129, 132, 136n. 11, 151, 174, 185, 189, 203, 254
Weiner, N. 228, 233n. 14
Wilberforce, S. 197
Wiley, M. L. 198

- will xvi, 5–9, 13, 15, 22–3, 25, 33–9, 43, 48, 53, 62n. 18, 67, 84, 126, 128–9, 163, 178, 193–4, 225, 231, 244, 250
 Williams, L. 43
 will to power xvi, 19, 31, 33, 35–8, 40–2
- Wittgenstein, L. xxii, 72, 154n. 4, 206n. 7, 212–20, 220n. 2, 221nn. 3–5, 11, 13–14, 222
- xDNA 98
- Young, E. 44n. 2
- Zarathustra 32-3, 35, 43