

other humans, either wholly separating us as purely individual or autonomous beings, or placing us as actually a single being divided by illusions of separate existence from a unified totality. Religious thought exemplifies human attempts to find answers to questions that underlie our other inquiries. There is no experiment we could perform that would tell us whether or not we are in the belly of a devil. People's aspiration to understand the knowledge and reality of the world lead them to popular forms of philosophy.

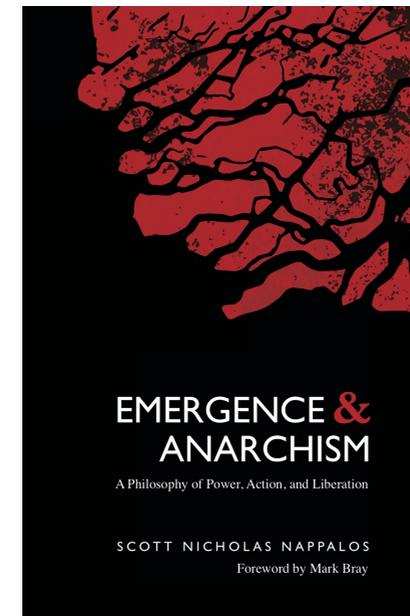
Another example of inherent philosophizing is politics itself. While much of politics falls in the normative domain, people come to form political beliefs based on a latticework of more basic philosophical positions. The debate about abortion makes this explicit. Though religion dominates the discussion, it's worth noting that some atheists also reject abortion, and many religious people do not see abortion as murder. The basic disagreement centers on a philosophical position of what constitutes life, which is wholly distinct from scientific notions. One way to look at the debate is that there is no fact of the matter of when life starts in the sense that people care about; there are only debates about the basic conceptions of life, its value, and the meaning of our actions. Under the political issue lies questions about causality, our agency, the nature of life, and morality. These persist because they are questions that concern us, but which no amount of empirical data or experiments could help us solve. Because of our values, abortion pushes philosophical questions about life and our actions onto us. It throws us into philosophy unknowingly. The structure of our minds and world makes us face questions like these that are can't be approached without philosophy.

With this in mind, we can say that all people engage in philosophy, though not necessarily overtly. Everyone has philosophical ideas, assumptions, and theories to explain the world. Sometimes this is manifested in religious beliefs, folk wisdom, and unconscious reasoning. At other times people put forward overt theories, though generally not as philosophy per se. In the abortion

Emergence and Anarchism

A Philosophy of Power, Action, and Liberation

Scott Nicholas Nappalos



2019

science can be itself a philosophical position). The science of the mind is about explaining the data of its functioning. A robust neuroscience would be able to explain the chemistry and biology of our bodies, and through some elaborate explanation, the mental states, behaviors, and so on that humans have. Science is (roughly) about explaining data based on theories that can be reproduced through experimentation and predictions. The theory tells you how things function, and how they ought to behave given the model. There is a missing component though—neuroscience cannot tell us what a mind itself is. Science is neutral to how we understand what the mind is, except through its functioning. This is because science is about prediction over time, but not all elements of what something is will affect what it does. If the mind is purely matter or if it is ideas in God's mind, it will behave the same from the perspective of science. Questions about the nature of things like the mind are one element of descriptive philosophy.

Consider how we attain knowledge of the nature of the mind. Whatever the mind is, whatever the account of its behavior and laws, questions abound as to how we would come to know any of this. Science provides accounts of the world as we happen to know it, but that doesn't answer any evaluation of whether or not that process gives us knowledge, the underlying reality of our knowledge, or indeed what we are or reality is. These are philosophical issues. In general, descriptive philosophy deals with how we come to know things and the essence or being of things. Though it is less obvious than with normative questions, descriptive philosophy is an inherent component of our thought as well. Religion is an evident domain where human philosophizing becomes apparent.

Religions change, which causes philosophical explanations to shift. Some religions placed humanity within a false reality, in the belly of hell awaiting our awakening to a hidden reality. Other religious thought placed deities as the ultimate source of all knowledge, and instructed people to seek out truth through prayer and introspection alone. Religions disagreed over our connection with

If we step back, we can discern two broad kinds of philosophical issues: descriptive and normative. Normative issues are issues of evaluations (or norms), most commonly morals and ethics, but not exclusively. Issues such as beauty, good taste, and even the rationality of judgments are forms of value judgments. It's important to note that there is no science that could explain such problems. Science might tell us what value judgments we actually make based on the universe and our biology, but there is no science that can tell us we ought to make those judgments or not. The universe is ambivalent to those facts; we are the only ones who care. Normative questions concern what ought to be, rather than what is. Normative questions reside almost exclusively in the domain of philosophical thought.

Normative judgments, evaluations, questions, reasoning, and action guided by such are widespread and evident in our lives. This is because it is fundamentally human to have to contemplate our actions, their effect, and those of others who can decide what to do or not to do. Likewise, these judgments are contested. One generation may not even contemplate abortion as relevant to moral thinking, yet the next might be willing to kill over it. The prominent debates over how people make economic choices is an example of a philosophical normative issue; what decisions one ought to make, what purchases are rational, and so on all embody a philosophical worldview and latent value assumptions that are contested on all sides today. Though few discuss these issues *as philosophy* it is a debate that touches nearly all of us through the media, advertising, and education. This is the first way in which philosophy is inevitable. Because we are creatures that must evaluate actions, we are inherently tied to philosophy.

Descriptive philosophy deals with questions that try to capture elements of our world. There is more overlap here with science than with normative matters. For instance, someday neuroscience may demonstrate how the mind and body are one and the same. People can argue that different ways (and in fact the belief that

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our knowledge, evaluations, ultimate nature or being, and methodologies underlying fundamental problems. Immanuel Kant delineates the terrain well showing the wonder that philosophy can inspire in us as agents approaching a world empowered and required to inquire and intervene:

Two things fill the mind with ever new and increasing admiration and awe, the more often and steadily we reflect upon them: the starry heavens above me and the moral law within me. I do not seek or conjecture either of them as if they were veiled obscurities or extravagances beyond the horizon of my vision; I see them before me and connect them immediately with the consciousness of my existence. The first starts at the place that I occupy in the external world of the senses, and extends the connection in which I stand into the limitless magnitude of worlds upon worlds, systems upon systems, as well as into the boundless times of their periodic motion, their beginning and continuation. The second begins with my invisible self, my personality, and displays to me a world that has true infinity, but which can only be detected through the understanding, and with which ... I know myself to be in not, as in the first case, merely contingent, but universal and necessary connection. The first perspective of a countless multitude of worlds as it were annihilates my importance as an animal creature, which must give the matter out of which it has grown back to the planet (a mere speck in the cosmos) after it has been (one knows not how) furnished with life-force for a short time.³

³ Immanuel Kant, *Practical Philosophy*, trans. and ed. Mary J. Gregor (New York: Cambridge University Press, 1999).

Philosophy is not only a tool, but is also an *inherent* part of human life and thought.

Philosophy has no opt-out option therefore. Our mental lives are built upon philosophy and all people engage in philosophical thinking, though not necessarily as a conscious effort. It is through finding answers to other questions that philosophy rises to the surface, and when our ability to find answers in our daily lives breaks down, the underlying philosophical elements become more obvious. This is to say that there are inherent philosophical elements to all human thought.

What is philosophy then? Attempting to define philosophy is a minefield, and if done seriously, would require an entire book. Bertrand Russell underlines the trouble defining philosophy:

We may note one peculiar feature of philosophy. If someone asks the question what is mathematics, we can give him a dictionary definition, let us say the science of number, for the sake of argument. As far as it goes this is an uncontroversial statement... Definitions may be given in this way of any field where a body of definite knowledge exists. But philosophy cannot be so defined. Any definition is controversial and already embodies a philosophic attitude. The only way to find out what philosophy is, is to do philosophy.²

A core component of doing philosophy is looking at the underlying assumptions, structures, and values of various problems or fields of thought. There are philosophical questions for physics, sociology, art, literature, religion, the mind, space, time, and so on. Philosophy is not about topics, texts, or subjects, but rather it is a type of approach and types of questions. Traditionally the approach of philosophy is primarily aimed at exploring elements of

² Bertrand, Russell “Wisdom of the West a Historical Survey of Western Philosophy in Its Social and Political Setting” (Garden City, NY: Doubleday, 1959), 7.

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importance for example of Negri and Hardt's *Empire* exemplified that.¹ Its influence was grossly disproportionate to its actual content, and in retrospect can be viewed as capturing the uncertainty of the time at which people began rising up against neoliberalism while leftist dogmas one by one crumbled. With the World Trade Organization protests coming on its heels, *Empire* was in the right place at the right time. Often bizarre and strained attempts to apply such thinkers to concrete work speaks to the poverty of and hunger for these ideas. There is a push and pull between anti-intellectualism on the one hand, and then a poverty of theory that speaks to the moments and positions people who are struggling find themselves in without roadmaps or mentors. The gap between theory and practice is more literal than figurative.

While it is true that very few, even among hardcore political activists, look to such philosophical work, the impact of it should not be underestimated. Theory and philosophy matter in part because some people think they do. Only a tiny fraction of people engaged in Marxist struggles actually read Marx himself, but the influence of Marx and his works was massive. This is because key actors always come back to philosophy to help make sense of experiences. While the influence of theory is diffused through innumerable factors, the fact remains that philosophy is a place where important elements return to frequently and especially so in moments of change.

Philosophy does not derive its importance from the simple fact that influential (however we understand that) people use it and take it seriously. If that were the end of the story, we might simply take note of it and submit that faith in philosophy to greater scrutiny. Just because some people believe in philosophy does not ensure that it's useful, worthwhile, or fruitful. There is something deeper going on in the ebb and flow of philosophy within society.

¹ Michael Hardt and Antonio Negri, *Empire* (Cambridge, MA: Harvard University Press, 2001).

which unfortunately is often characterized by feuding men at elite institutions who view their role more as gladiators for hire in an arena than as engaged citizens. These sentiments are particularly true for liberatory political thought, which draws from sometimes justified suspicions of professional intellectuals as well as from a desire to move to action without the mediation of the baggage of previous historical debates, obsessions with canonical texts, and intellectual hierarchies stacked against the exploited and oppressed.

At the same time battles are being waged over different traditions philosophers, canons, and what role previous philosophies will play in understanding the victories and tragedies of political struggle. The intellectual crises of traditional left movements with the fall of the USSR (combined with a twin threat of an insurgent and rising global anarchism eclipsing the Marxism and socialism of previous generations) have created a vacuum of philosophical space. Lineage, tradition, foundations, and starting points are being rewritten and re-evaluated.

The work of French and Italian revolutionaries brought them to Spinoza as they sought to work out perceived shortcomings they encountered in applying Marxism and Marx's Hegelianism to their experiences in Paris in 1968 and Italy's struggles throughout the 60s and 70s. Many Maoists and Marxist-Leninists of today look to the work of Alain Badiou to provide a philosophical foundation for understanding the limitations of the official authoritarian Marxist-Leninist state experiences of the 20th century and paths forward while still retaining the legacy of such movements. Anarchist and libertarian thinkers likewise have sought philosophical tools for elaborating their conceptions apart from the dialectics, Hegelianism, and most of all the domination of Marxism and liberalism within liberatory thought in recent decades.

From the perspective of liberation, philosophy is live territory perhaps now more so than in recent memory. Foucault, Badiou, Althusser, Negri, and Butler are examples of recent thinkers who have had influence on a wide array of relevant political issues. The

Epigraph

“Happiness does not mean the attainment of a certain level of personal or collective existence. It is rather the consciousness of marching toward a welldefined goal to which one aspires and that one creates in part through one's own will. To develop the continents, the seas, and rearrange and regulate the environment in order to promote each individual plant, animal, and human life; to become fully conscious of our human solidarity, forming one body with the planet itself; and to take a sweeping view of our origins, our present, our immediate goal, and our distant ideal—this is what progress means.” –Elisée Reclus, 1905¹

¹ Elisée Reclus, *Anarchy, Geography, and Modernity*, trans. and ed. John Clark and Camille Martin (Oakland: PM Press, 2013), 233. Taken from the last chapter, “Progress,” of his magnum opus, *Man and the Earth* (1905).

Foreword

Mark Bray

Science and socialism. For most of us this pairing brings to mind the “scientific socialism” of Marx and Engels that undergirded the ascension of “historical materialism” to the forefront of socialist thought into the twentieth century. Certainly “historical materialism” grew out of the burgeoning *social* sciences, but the school of 19th and early 20th century socialist thought that most privileged the *natural* sciences may have been anarchism.

Many anarchists of the era considered their doctrine to be the social embodiment of the ‘truths’ of the natural world revealed through scientific inquiry. ‘Nature’ was endowed with a redemptive transcendence manifested through Darwinian and (especially) Spencerian understandings of evolution. In that vein, the turn of the century Catalan anarchist Joan Montseny, aka Federico Urales—father of Federica Montseny, argued that “in the world there exists a law that is perfectly harmonious and perfectly just: the law of evolution.”¹ Likewise, the Russian anarchist geographer and scientist Pyotr Kropotkin grounded his exposition of mutual aid, one of the most lasting and influential anarchist concepts, in his studies not only of history but of the importance of cooperation in the natural world. He even went so far as to argue that anarchism ought to be considered one of the “departments”

¹ Álvaro Girón Sierra, *En la mesa con Darwin: evolución y revolución en el movimiento libertario en España (1869–1914)* (Madrid: Consejo Superior de Investigaciones Científicas, 2005), 66.

in that kind of activity are going back to the basics and picking up whatever tools they’re aware of.

Part of the struggle for a more just society is our understanding, conception, and analysis of our reality and struggles. We don’t just reproduce ideas that we find, but we also invent new concepts, create new ways of thinking about changing reality, and propose ways of thinking to help us change the world. We make and reform methodologies, analyses, and concepts. That is, we build theory. The framework we use to build theories is called metatheory, or the tools used to construct theory out of. It is the basic unit or vocabulary of political work—the bricks and mortar of a building, the basic conceptions that allow us to have thoughts. It gives us a language to describe our political language or thoughts with.

At this moment in history however, philosophy is an embattled territory. Science’s expanding grasp of the universe has brought within reach many things that once only philosophers considered within the grasp of raw empirical inquiry. Today it’s miraculous to look at the endurance of Aristotle’s physics within Western thought. A millennia passed before new ways of explaining physics beyond the framework laid out in Aristotle’s theories. Today imagining any scientific theory, let alone one created by a philosopher, lasting a generation would be unusual let alone centuries. Out of philosophy the sciences and disciplines were constructed and the expansion of knowledge brought about by scientific inquiry has led to rapid change in theorizing. Subsequently, philosophy has shrunk and changed, and where its borders lie seem harder to pick out than ever before—borders that are rapidly shifting and contested.

Strong anti-intellectual currents, at least in US society, make philosophy seem to many the purest form of erudite elitism and abstraction for abstraction’s sake. Purged of its empirical elements, philosophy appears to be the business of settling problems whose solutions have no outcome anyway—pure speculation and mental masturbation. None of this is aided by actually existing philosophy,

For Philosophy

With much of the world upended, to turn to philosophy might seem like a strange move. Philosophy, the most abstract and seemingly out of touch of all intellectual disciplines, appears a strange bedfellow for a time when small fires are coming out of the ground here and there: Egypt, Chile, China, Southern Europe, India, and even the United States. For decades there's been a philosophical slumber in the political world; a cautious balance of traditions guarded by academia and a drift across vast oceans swimming away from all the tumult raging ashore.

It's precisely in times of great change that people turn again to philosophy. Today we stand at crossroads in world history again with the global flows of capital reorganizing, the loss of the "stability" of Western and formerly Soviet-aligned powers, new struggles arising around the world, and an uncertain future both for liberation and survival at least in the world as we've known it. With the breakdown of the previous geopolitical balance of forces, agreements, and models, the dominant forms of thought, too, are under fire. The failures of the powerful to organize society have raised many questions about the ability of existing philosophies to account for history's sour turns. When matters like environmental catastrophe, the potential for massive wars (and expanding areas of conflict), economic collapse, and so on are on the table, key sectors within the liberatory political landscape return to philosophy to reevaluate and seek new ways forward. The surprising popular success of Marx's *Capital* in bookstores during the throes of world financial crisis explained thusly makes perfect sense. Fundamental questions are being raised, and people who normally do not engage

of the natural sciences.² Francisco Ferrer's early 20th century Modern School, which became the model of anarchist education over the following decades, was allegedly "based solely upon the Natural Sciences" which Ferrer considered to be the font of a unitary truth applicable to all of existence including human relations.³ The prominent Spanish anarchist Fermín Salvochea was so optimistic about the potential of the revolution to unshackle scientific inquiry from capitalist fetters that he speculated in 1888 that post-revolutionary medicine could even discover the key to immortality.⁴ For some late 19th century anarchists, science was "our God."⁵

As with just about every aspect of anarchism, there were those who dissented. Nietzschean anarchists attacked the supremacy of rationalism and science while the primitivists of the Parisian *L'État naturel* and the prominent Spanish anarchist Ricardo Mella were some of the most critical of positivism.⁶ It should also be noted that anarchists were no less enthusiastic about the emergence of social sciences like sociology. Nevertheless, the majority of late 19th and early 20th century anarchists adopted the positivist, rationalist, and modernist optimism of their era.

If the confidence that these anarchists expressed in the ability of the natural sciences to solve the 'social question' feels distant and removed from present-day considerations of societal change, that's because it is. The horrors of the world wars and the Holocaust dashed the 19th century Western expectation of a clean upward as-

² Peter Kropotkin, "Modern Science and Anarchism" in Roger N. Baldwin ed., *Anarchism: A Collection of Revolutionary Writings* (Mineola, New York: Dover Publications, 2002), 15556.

³ William Archer, *The Life, Trial and Death of Francisco Ferrer* (New York: Moffat, Yard and Co., 1911), 22.

⁴ José Álvarez Junco, *La ideología política del anarquismo español (1868–1910)* (Madrid: Siglo veintiuno editoriales, 1976), 316.

⁵ *Ibid.*, 50.

⁶ *Ibid.*, 161; Ferran Aisa, *La cultura anarquista a Catalunya* (Barcelona: Edicions de 1984, 2006), 78; Girón Sierra, *En la mesa con Darwin*, 63.

cent for humanity. As the 20th century advanced, movements for decolonization, feminism, queer liberation, black liberation, and others revealed the hypocrisy at the heart of the fundamentally imperial, patriarchal, heteronormative, and white supremacist concept of Western ‘progress.’ While it would be unfair to lump turn of the century anarchists in with imperialists, they were not entirely immune to the oppressive modes of thought of their era. Likewise, post-structuralist critiques of conceptions of truth, justice, and objectivity itself pushed many radicals to examine discourses of power, analyze fragmented subjectivities, and dissect socially reproduced layers of domination rather than turn to the natural sciences as sources of liberation. Inherent in this post-modern turn has been a widespread wariness of master narratives and grand theoretical formulations across much of the political spectrum after Fukuyama’s “end of history.”

The audacity of Scott Nicholas Nappalos’ *Emergence and Anarchism* lies in its ability to step back from the fray of intellectual trends and taboos to offer a clear and sober analysis of how we can start to answer some of the most basic questions about social transformation while avoiding the limitations and pitfalls of both modernist and postmodernist thought. Fundamentally, Nappalos reaffirms the importance of theory, philosophy, and metapolitics against antiintellectual and ‘pragmatist’ tendencies prevalent in some “horizontalist” movements that reduce liberation to a technics of practices and tactics. In so doing, he refuses to allow the positivist baggage of past attempts to utilize science for socialist ends to prevent us from gleaning useful models from the natural world to help solve social problems today.

Most profoundly, perhaps, his use of the scientific concept of emergence to describe multi-causal events and developments whose outcomes are “more than the sum of their parts,” so to speak, presents opportunities to build bridges between post-structuralism and more recent perspectives on social transformation and the natural sciences in a somewhat similar vein to Deleuze and Guat-

Part 1: Philosophy

Chomsky charts how power flows through these organizations as a complex and dynamic system producing emergent propaganda.²¹

As much as these ideas were present as an undercurrent there is a lack of explicit work to explore emergence on its own and put it at the core of a libertarian approach to social transformation. Likewise, there's a parallel with power when the anarchist tradition innovated by making power central, distinguishing it from other revolutionary traditions of its time, and yet direct discussion of theories of power can sometimes be difficult to find.²² This is an attempt to lay out the groundwork for such a politics, rather than to give immediate solutions. To address that lacuna, the focus here is developing bases for social transformation—drawing out the connections between agency, cognition, power, and emergence for a broad theory of a revolutionary process and action. These chapters are a stepping off in that unfinished direction.

²¹ Noam Chomsky and Edward Herman, *Manufacturing Consent: The Political Economy of the Mass Media* (New York: Pantheon, 1988).

²² This is not helped by the lack of original sources or historical exploration due to institutional hostility to the tradition.

tari's use of the botanical concept of the rhizome. The plurality and polyvalence of emergence open up alternative routes to put Foucauldian notions of power or broad conceptions of intersectionality, for example, into conversation with scientific insights in the pursuit of liberation.

Emergence and Anarchism adeptly explores the tensions and synergies between individuals and collectivities at the heart of anarchism's attempt to synthesize personal and collective agency. By delving into the inner workings of agency, it challenges one-dimensional distinctions between what have been referred to as insurrectionary and mass anarchism.

Recognizing the enormity of the project of re-orienting some of the philosophical foundations of revolutionary thought, Nappalos strategically scales back his main goal by entreating the reader to recognize the necessity of theories for action and the inseparability of method and philosophy. *Emergence and Anarchism* aspires to be a foundational building block for future theorizing and conceptualizing. It accomplishes this goal. Agree or disagree with its premises and conclusions, it confronts us with a broad array of fundamental questions at the very heart of social transformation that cannot be ignored. More than offering us answers to such questions, Nappalos demands that we all take it upon ourselves to think through how change occurs, for "philosophy is the domain of all people irrespective of their intelligence, gender, class, race, or position." As a health care worker, Nappalos directly challenges "the alienation of this activity" from the majority of humanity through his words.

The true value of this work will only become clear in the future to the degree that Nappalos' appeals for re-conceptualizing theory, metapolitics, and agency inspire others to pursue and build upon his train of thought. Many questions remain unanswered about how to build a new world free from hunger, war, and domination. *Emergence and Anarchism* reminds us that to create such a world we must not only examine our political positions but also their metapolitical foundations.

Acknowledgements

Throughout my attempts at writing I've been lucky enough to have people willing to set aside some of their own time to help take rough ideas and turn them into something valuable enough for others to read. A book is always a product of cooperation and the hand of many individuals, even if one person's name ends up on the spine. I want to thank Nate Hawthorne, Adam Weaver, Monica Kostas, Adam Kunin, Don Hamerquist, Kingsley Clarke, and Luz Sierra for our years of collaboration and their dedication to pour through my texts and make them better. Noel Ignatiev, Mark Bray, Don Hammerquist, and Michael Staudenmaier provided me with helpful edits and kind words for the book, and are excellent comrades who have stimulated and inspired me over the years we've known each other. Kevin Gonzalez and Marcos Restrepo gave me early comments on drafts on this book that were important in its development.

Thanks goes to Mark T. for introducing me to the ideas of complex system and emergence, who along with Sarah T. spent countless hours listening and arguing with me years ago until the arguments of this text took a more solid form. Scott G. and Dustin Shannon provided copy-editing services that were sorely needed. I'm grateful for my mother, whose own rebelliousness led her to the civil rights and anti-war movements, and inspired me to question the world I grew up in. There are many others who offered advice, open minds, and their time to discuss these issues without which this work would not have been possible including the generations who worked thanklessly for the cause of human free-

Within the anarchist tradition there remains an untapped current of emergence. Anarchist ideas and methods operate with an understanding of the world in which the decentralized order constructed by individuals in cooperation produces new powers and possibilities simultaneously harnessed and repressed by the society of the State. Anarchism, as a broad tradition spread across the globe, has adherents who have adopted many different approaches including utopian, liberal, and dialectical interpretations of anarchist thought. Still within the core of the tradition anarchist thinkers have often made use of emergence to develop their politics.

Peter Kropotkin, famed Russian evolutionary biologist and anarchist theorist, and Elisée Reclus, a radical anarchist thinker and foundational geographer, both wrote about natural phenomena in terms that today we would call ecological and complexity based. Their views of the world were complex and adaptive with emergent order produced by the interaction from the bottom up forming their biology and geography, respectively, yet leaving a mark on their anarchist thinking that was distinct from the dialectics, humanist, and liberal thought of their day.¹⁹ Other thinkers, such as Australian anarchosyndicalist and ecologist Graham Purchase, have looked to complexity and emergence to provide critiques of the State and capital and a scientific description of how anarchist society could produce better human organization.²⁰ Noam Chomsky perhaps implicitly uses similar ideas in his critique of media in *Manufacturing Consent*. One way to read those arguments is that they provide a model in which unified propaganda is produced throughout media organizations without having overt censorship.

Off Everywhere: The New Global Revolutions (New York: Verso Books, 2012) for examples of these uses of emergence.

¹⁹ Graham Purchase, *Anarchism and Ecology* (Montreal, Canada: Black Rose Books Limited, 1997), 33–74.

²⁰ *Ibid.*, 111–135.

cal critique and emergence at the same time have tended to use it as an explanatory tool for traditional left ideologies rather than an approach in its own right. Biological theorists Richard Lewontin and Richard Levins, for example, have used emergence as a way to explore dialectics. Emergence is a tool for the authors to explore political concepts and events without opening up the implications of those theories to their underlying basic frameworks and political models.¹⁷ Dialectics, however, is fundamentally about contradiction between opposites— theses and anti-theses which oppose each other until transformed through synthesis. This has no parallel in the world of social emergence and complexity in which social causes are numerous or multi-polar and can't be reduced to the abstract binary opposites. Thus even for radical critics of present society, emergence has provided an instrument for explanation, but has not received an in depth attempt at extracting its own unique implications for revolutionary theory, nor to assess its potential to replace prior political starting points including Luhmann's conservative anti-humanism, liberal free agency, and Marxian dialectics.

There is then a distinct absence of proposals or debates about the potential or effect of emergence on how we do politics, or its implications for our basic views about the social world: power, the State, social change, and the role of organized individuals in mass action. This isn't to say that emergence hasn't played a subtler and more hidden role within thought about social change. As an undercurrent, emergentist ideas get frequent play in justifying shifts in political discourse from participatory democratic experiments to revolts.¹⁸

¹⁷ Richard Lewontin and Richard Levins, *Biology under the Influence: Dialectical Essays on the Coevolution of Nature and Society* (New York: Monthly Review Press, 2007), passim.

¹⁸ See Clay Shirky's *Here Comes Everybody: How Change Happens When People Come Together* (New York: Penguin, 2008); and Paul Mason's *Why It's Kicking*

dom and anarchism. Without their sacrifices, we would be lacking a voice and a path for our actions.

Introduction

It's a jarring experience to be confronted with the reality of the great and overwhelming wrongs that exist today. Our history is filled with avoidable evils like the genocide of the indigenous peoples of the Americas, the centuries of barbarity against African peoples, global environmental degradation, and the misery of people torn from their land to become propertyless workers whose generations were murdered, abused, raped, and wasted by successive rulers. The initial shock of discovering these crimes sticks with you, and today the horrors constantly fill our senses through an unending barrage of information that keeps those experiences close. For those who do not withdraw or shut down in despair, an old question lingers: What can we do about it all?

With all the years of resistance across the planet, it is surprising how few answers there are to some very basic problems. If the problems of the world are not permanent, inherent, and natural to humanity, but are in fact contingent, changeable, and driven by specific causes, then there are specific things that can be done to correct injustice. Yet the number of people both aware of these issues and willing to commit themselves to a process of social change is generally small. That minority of people must find ways to act against the weight of the dominating system to create a better world. In the process people who are not yet active have to somehow shift from otherwise going about their lives to become thinking and acting agents of social change and join the effort to liberate humanity. The goal is a better possible world brought about from a society with the forces of domination in control.

discovered thinkers who had engaged this issue. The sources and historical references were included at the frequent requests of different readers over the years to try and situate the ideas better for readers unfamiliar with the territory. A historian or social scientist by trade could likely produce something more systematic and encompassing than I have done here (with the limitations of my abilities and restrictions due to my aims to blame). In general, the bulk of work on the social aspects of emergence have been purely academic and descriptive in nature. Contemporary sociologists seek to use new perspectives on emergence as a means to better model and explain social phenomena in their studies. One of the most famous systems theorists, Niklas Luhmann, was notoriously morally agnostic about the impact of his theories and clung to observation distanced from any practical lessons for action.

In fact, Luhmann's ideas were an attack on the notion of agency and any kind of predictability in trying to make change. His framework was largely conservative and attempted to justify law, governance, and existing social relationships, while the theory itself called into question the ability of the State and law to cleanly impose an order on the world.¹⁶ The questioning ends there, however, and does not investigate or propose further critiques of the State or institutionalized forms of hierarchy despite the weaknesses that Luhmann and systems theorists identified in its attempt to enforce its order. Likewise, he fails to propose alternatives—natural lines of questioning arising from the inherent weaknesses Luhmann and systems theorists demonstrate in the ability of centralized structures to impose their will directly.

Contemporary critical political thought in general has not shifted significantly from more traditional liberal and dialectic narratives towards emergence. The few theorists who uphold radi-

¹⁶ Particularly look to Chapters one, two, and six of Michael King and Christopher J. Thornhill. *Niklas Luhmann's Theory of Politics and Law* (Houndmills, Basingstoke, Hampshire, UK: Palgrave Macmillan, 2003), accessed April 27, 2016, dl4a.org

Heroic in History.¹³ Herbert Spencer famously critiqued this view arguing that notable figures of different periods were mere productions of the whole social environment that produced them, drawing from his interpretations of Darwin.¹⁴

Interestingly William James, one of the pioneers of the concept of emergence, along with other pragmatist philosophers such as John Dewey, expressed a critique of both Carlyle's and Spencer's theories of the role of individuals in history in favor of a complex interaction between the actor and their environment. James argued that individuals are both influenced by and influence their environment in a complex interaction across the vast web of causes and reactions throughout society.¹⁵ This starting point demonstrates a basic emergence approach to understanding what role individuals can play within social networks of immense complexity, and takes us beyond turning actors into mere puppets or superheroes who have mysterious powers. It changes the landscape as we know it through opening up the possibility of explaining both the contribution of countless individuals and the separation of society from them. It is a potentially unifying framework for people who want to change the world through their actions and understand the social forces beyond their reach.

The existing literature on emergence from the perspective of a politics of social change and critique is scater than one might imagine. It should be said that since I am not a scholar, there are likely to be gaps in my own knowledge and research capacity to dig for sources. In fact, the bulk of this book was written before I

¹³ Thomas Carlyle, *On Heroes, Hero-Worship, and the Heroic in History* (New York: Frederick A. Stokes & Brother, 1888), accessed April 27, 2016, www.questia.com#.

¹⁴ Herbert Spencer, *The Study of Sociology* (New York: D. Appleton and Company, 1896), passim, accessed January 1, 2015, www.questia.com.

¹⁵ William James, "Great Men, Great Thoughts, and the Environment (Lecture Delivered before the Harvard Natural History Society)," *Atlantic Monthly*, October, 1880, passim, accessed January 1, 2015, www.uky.edu.

Perhaps surprisingly, the traditions that tried to dismantle domination and exploitation have provided few answers for basic elements of radical social change. It is a frequent and frustrating experience to discover the lack of responses to fundamental questions, such as: How is revolution possible? How can someone become radicalized? What means allows a revolutionary minority to become a majority? How is the rule of all people possible?

Paradoxes of Struggle

Years ago, I was involved in the union at my job where we organized a strike in a social service facility. In the lead-up to the strike there was a series of fairly brutal workplace injuries that happened largely because of unsafe staffing with a patient population suffering from severe mental health issues. Management claimed they had no money to pay for more staff, while at the same time they were giving out raises to administrators of over 25% at a nonprofit serving children who were largely victims of abuse. The staff, battered and ignored, overall were withdrawn. A majority of the workers didn't even bother turning up to the strike vote. The organizing committee, which I was a member of, was pretty worried, but things had come to a head and we were resolved to move forward and stop work. I expected a real fight to build support and for many to cross the picket line.

The day of the strike the vast majority of all the workers walked out while half the organizing committee of longtime union activists crossed the picket line and became entrenched scabs for the life of the strike. Once on the picket line, workers who had previously been cold, shut down, and abused were literally crying with joy and outpacing the union bureaucracy's plans by attacking the vehicles of the bosses driving into the job site. Virtual strangers began not only fighting for themselves, but also questioning the class divisions at work, the role of the government in their work and lives,

and even the system itself. Conversations on the picket line went much further than the union wanted and that any of the few radicals involved had imagined.

That transformation stuck with me. The opening that came with taking action altered the way I thought about social change and ultimately shifted the course of my life. It was puzzling. How did it happen? How does a fighting force come together to stay planted on sidewalks for three months in the winter without much money or support from the outside world? Why did the organizers so quickly betray the strike, while those who ignored the union became its staunchest supporters? After the strike people largely went their own ways and returned to their daily lives, though a minority carried their experiences into new activities and activism. Those events and tensions were far from rare. Similar dynamics play out in all conflicts where the agency of people struggling is shifted in ways that don't neatly line up with how they or their leaders think about it.

Throughout the history of workers' movements new struggles emerged and forms innovated that went beyond the norms of their days and generally in opposition to the unions and political parties that drew their strength from the support of the working class. During World War II US workers at the same time voted for unprecedented (at the time) pledges for labor peace with no-strike agreements, and then unleashed one of the largest and most militant strike waves in our history. They did so against the leadership of the unions and the Democratic Party drumming up nationalist support for the "good war", and even against the Communist Party who sought to rally support to save Soviet Russia under attack.¹

Workers similarly shook things up for the *Unidad Popular* (UP), or Popular Unity, government in Allende's Chile. The UP

¹ For an in depth account from a worker-theorist who participated, see Martin Glaberman, *Wartime Strikes: The Struggle against the No Strike Pledge in the UAW during World War II* (Detroit: Bewick Editions, 1980), accessed December 28, 2015 libcom.org.

emerged with scientists calling for revolution,¹¹ IT gurus proposing stateless societies, and capitalist managers questioning the need for managing workers.¹² This is not accidental. Emergence confronts us with a change in thinking from what we are used to—and one that has not yet fully played out. It is not simply a new theory, but rather sets of theories describing new phenomena. This carries with it the potential for changes in our behavior, interpretations of events, and thoughts on political reality. The framework of emergence is an attempt to give us tools to describe the world then; but more importantly it is theory with implications for transforming our situation.

What impact on our actions does emergence have? Theories surrounding collective liberation specifically hinge on relationships of individual agents to collectivities, yet theories around the individual's world and society have been disjointed. Too often individuals get treated as gods, directly causing changes in society or society mysteriously moving along aloof from the individuals within. The Great Man theory of history popularized in the 19th century has managed to hang on despite early damning criticisms that undermined its intellectual foundations. The theory sought to explain historical periods and events in terms of exceptional individuals who altered the course of their days, and was elaborated famously by Thomas Carlyle in his work *On Heroes, Hero-Worship and the*

¹¹ Reported in Naomi Klein, "How Science Is Telling Us All to Revolt," *New Statesman*, October 29, 2013, accessed December 28, 2015, www.newstatesman.com. Original paper by Brad Werner, "Is earth F**ked? Dynamically Futility of Global Environmental Management and Possibilities for Sustainability via Direct Action Activism," *American Geophysical Union*, Fall Meeting 2012, adsabs.harvard.edu.

¹² David Gelles, "At Zappos, Pushing Shoes and a Vision," *New York Times*, July 17, 2015, accessed December 28, 2015, www.nytimes.com. Matthew Shaer, "The Boss Stops Here," *New York Magazine*, June 16, 2013, accessed December 28, 2015, nymag.com.

systems established the foundations for modeling emergence. Computer scientists used these tools to help physicists test theories of weather, friction, and electrical networks. Biologists began describing swarms, hives, and evolution in terms of complexity and emergence.⁶ Social scientists developed new concepts of the behavior of economic markets, internet communication networks, self-organization in cities, and the evolution of language norms through emergence.⁷

The growth of complexity science has led to the creation of tools to analyze societies that previously were ignored. This work is quite new and there's much less exploration of the political implications of understanding societies as living systems than you would imagine. This is particularly true for revolutionary politics. Recently, the media has reported on scientists and think-tanks using complex adaptive systems modeling to predict riots from food prices,⁸ national security threats from climate change,⁹ and regional conflicts in a multi-polar world.¹⁰ Strange results have

⁶ For overviews, see: John Holland, *Emergence: From Chaos to Order* (Reading, MA: Addison-Wesley Helix, 1998); Peter Corning, "The Re-emergence of "Emergence": A Venerable Concept in Search of a Theory" *Complexity* 7, No. 6 (2002): 18–30; Richard Lewontin, *The Triple Helix: Gene, Organism, and Environment* (Cambridge, MA: Harvard University Press, 2001); and Steven Johnson, *Emergence: The Connected Lives of Ants, Brains, Cities, and Software* (New York: Scribner, 2002).

⁷ A succinct account of emergence within the social sciences is found in Richard Sawyer, *Social Emergence: Societies as Complex Systems* (Cambridge, UK: Cambridge University Press, 2005).

⁸ Marco Lagi, Karla Z. Bertrand, and Yaneer Bar-Yam, *The Food Crises and Political Instability in North Africa and the Middle East* (2011), accessed April 27, 2016, necsi.edu.

⁹ U.S. Department of Defense, *National Security Implications of Climate-Related Risks and a Changing Climate* (July 23, 2015), accessed April 27, 2016, archive.defense.gov.

¹⁰ Robert D Kaplan, "The South China Sea is the Future of Conflict," *Foreign Policy* (August 15, 2011), accessed December 28, 2015, foreignpolicy.com.

had sought to nationalize industries slowly and strategically and coordinate workers' activity via structures of the State as part of populist reforms. The workers interpreted the victory of the left-wing parties differently, seeing it as a green light to take on directly the deepest problems affecting them. Land seizures, factory occupations, and self-defense structures against police, employers, and the right sprung up that were organized by the workers in opposition to the directions of the UP functionaries. While the vision of socialist policy makers was limited to social welfare and State ownership, the workers began to take matters into their own hands by taking over their workplaces and neighborhoods to be used to their own ends.² These initiatives outside the officialdom would provide the only serious resistance to the horrific coup and tragedy that would come as the UP systematically disarmed itself against an open and immanent threat from the military and radical right which ultimately led to indiscriminate killing, torture, and immiseration for decades thereafter.

The dominant script of history is colored by the habit of viewing things through the lens of those in charge; a perspective that systematically misses exactly the dynamic that bursts open on picket lines, barricades, and protests. These days there's a fair deal of debate around the Spanish Civil War (largely because of the growing influence of anarchist ideas broadly), and the various positions and moves by heads of the different factions. Augustin Guillamón, in his detailed study of the neighborhood defense committees of the Spanish anarchist union the *Confederación Nacional del Trabajo* (CNT), or National Confederation of Labor, reminds us how the insurrection and following war almost was not a thing at all. The Republican government, socialists, communists, and trade union leaders were nearly ready to abdicate after Franco's coup emerged.

² Focusing on cotton workers in Santiago, Peter Winn presents that narrative arc of the Chilean experience during that period in *Weavers of Revolution: The Yarur Workers and Chile's Road to Socialism* (New York: Oxford University Press, 1987).

The militants of the anarchist CNT on the other hand had prepared in the years leading up to the events. Worker militants organized by their districts studied their areas and sought to find what would be necessary to disarm the military and begin creating anarchist society should a revolution occur. Decades of urban class warfare (which saw workers and union activists frequently assassinated, tortured, and abused by paramilitary forces of the State and employers) and aborted insurrections (dubbed “revolutionary gymnastics” by the CNT) provided collective memory and skills for the workers who lived through an institutionalized culture of resistance to violent repression and poverty. At a critical moment at the outset of the coup, a generalized workingclass force rallied behind the defense committees, which represented one of the only real bodies organized to oppose the fascist revolt. Only thereafter did the civil war become possible and did the vying factions step back into the fray saved by the popular response that moved into the opening that had developed.³

Agency and Emergence

There are two central problems embedded within these examples: the problem of agency and the problem of emergence. Emergence is a concept that originally came from philosophy dating at least to the 19th century, but has been taken up by various sciences in the past fifty years to look at complex systems like living organisms, ecosystems, societies, and weather patterns. In these systems new things emerge out of the interaction of vast numbers of components that together produce something novel that is greater than the sum of its parts. Ants produce emergent hive behavior with intelligence that doesn’t exist in any individual colony member; neurons create conscious thought that does not share properties of the

³ Augustín Guillamón, *Ready for Revolution: The CNT Defense Committees in Barcelona, 1933-1938* (Oakland: AK Press, 2014), passim.

This isn’t to say there aren’t things to learn from Marxism. In fact, the case is quite the opposite. The focus here, however, is to put forward new foundations rather than to discuss the failures of those traditions, produce more exegesis of texts, or try to renovate or explore critiques of Marxism in depth. A book critiquing interpretations of texts is much less valuable than independent arguments aimed at our own time, especially given how rare that is for these topics in spite of the popularity of libertarian thought today.

The core argument of this text is that those seeking liberation face particular challenges as agents. We are tasked with moving from minorities committed to acting against powerful forces stacked against us, while seeking to spread and propagate revolutionary ideas and actions in a society built to contain and diffuse them. To do so involves wrestling with large-scale social powers that are beyond our grasp, difficult to anticipate, and yet crucial for our actions to have an effect. A path forward can be found in adopting an analysis of our context in terms of emergence, societies as exhibiting behaviors characteristic of living systems, and a concept of power that links our agency to the world of social relationships. These elements taken together provide tools for interpreting our world and guiding our actions that may open up new possibilities.

There are four sections in this book. The first part states the case for the universality and use of philosophy, and explores broad issues around the theoretical foundations of revolutionary politics. The second section is the bulk of the work and lays out the theory of emergence, its life in the sciences, and its application to social and political thought. In the third section, those ideas are applied to power as a central aspect of our mental lives and a unique concept that bridges the world of agency and social emergence. In the fourth section, power and emergence are used to understand the possibility of revolutionary action and the problem of agency.

In the past few decades understanding of complex systems has exploded. Advances in mathematical modeling of complex

and property, while defending the central institutions of power through seeking to minimize their damage.

Prior to the Second World War anarchism was a global revolutionary movement, largely of the laboring classes, that stretched from the Americas to East Asia. In many areas outside Europe, anarchist movements obtained dominance as the leading light for generations of revolutionaries. A number of factors shifted the field for anarchist movements including the rise of the USSR and Soviet-allied movements, changed patterns of migration and assimilation, nationalism, revolutions in capitalist production in industries dominated by anarchists, and the spread of fascism and dictatorships in its strongholds in the 1920s-30s. Anarchism in most of the West (with some notable exceptions like Bulgaria and Spain for example) became a shadow of its former self and too often retreated into a more passive role as the mere moral conscience of the left when eclipsed by the Marxist-state-building project earlier in the century. Anarchism lived on however as an active practice through the Second World War especially in Korea, Eastern Europe, Cuba, and the Southern Cone of South America.⁴ In Uruguay, Argentina, Chile, and Brazil anarchists retained key influences over struggles and revolutionary thinking up to the dictatorships in the 1970s. In some cases, there is continuity through to the present.⁵

As thinking has shifted away from the Marxism of the previous generation towards libertarian alternatives, gaps remain. One way to look at the approach in this text is as an anarchist framework for revolutionary thought and action once we have left dialectics, the Marxist vision of revolution, and historical materialism behind.

⁴ The last chapter gives a short overview, but some background may be found throughout Steven Hirsch and Lucien Van der Walt eds., *Anarchism and Syndicalism in the Colonial and Postcolonial World, 1870–1940: The Praxis of National Liberation, Internationalism, and Social Revolution* (Leiden, Netherlands: Brill publishers, 2010).

⁵ Daniel Barret, *Los Sediciosos Despertares de la Anarquía* (Buenos Aires, Argentina: Libros de Anarres, 2011), passim.

chemical reactions inside our cells; and cities create systematic patterns of growth and decay created by people merely going about their days. The second section of this text takes on emergence and its related issues.

People by their nature are agents. We take action and think about what to do or what not to do. Seeking social change is one kind of agency. One aspect of the struggle for a better world is choosing what we do as individuals and coordinating with others. The change itself happens on another level of organization. Like all social things, it arises out of the actions of millions and a larger context. What can be a surprise is how these two elements often do not match up. Based on everything we knew as organizers, we did not expect for our co-organizers to become scabs and the silent majority to become militants. Since then, there's been a number of other surprises like the Arab Spring, Madison, Occupy, Brazil's anti-World Cup and Olympics protests, and Black Lives Matter responses in Ferguson, Baltimore, and Chicago, amongst others. The complexities of social movements within a globalized world keep expanding. Since 2001 at least a series of financial crises have plagued the advanced capitalist countries, international relations have been rocked by the breakdown of the Washington Consensus and the rise of competitive powers of the BRIC (Brazil Russia India China) countries amongst others; previously stable lines of political division have gradually blurred.

The second factor in my exploration of agency and emergence was my introduction to the life sciences through professional training as a nurse. Biology explores causality in a fundamentally different manner from what I had been used to. The life sciences and medicine study adaptive living systems with staggering complexity organized into different levels, each with their own logic, properties, and issues. Working in hospitals brings health care practitioners into contact with that reality as they try to navigate individuals in front of them with their own composition and reality, and connect that to the more abstract science of populations, diseases, and

treatments. It's one thing to understand statistical trends from data of populations; it's another thing altogether to apply that knowledge to people who as individuals can vary substantially.

From the outset parallels between the biological world and the political world were obvious. Biology provides fodder for political metaphors, such as the spread of cancers, how the immune system uses memory and exposure to evolve defenses to unknown dangers, and the self-organized order that emerges out of reproduction. Health care is not only a source of analogies, but is viscerally political. Attempts to solve social problems of health through individual initiative and agent-level change are notoriously inefficient. The greatest public health victories utilized collective intervention through the community and the restructuring of urban space in a holistic way. The reduction of tuberculosis was largely won before antibiotics were discovered due to public health campaigners' understanding of social organization and emergent disease. The ridiculous state of American health care makes any tensions between the biological and political more acute for health care workers. Recontextualized away from disease, the issues and potential solutions to social problems have at least a parallel to the social nature of disease, its reproduction, and treatment.

This work is primarily a work of philosophy and metapolitics. Its contents spell out a general philosophical picture of the world, specifically about the lives of individuals and social systems, but particularly from the perspective of developing further tools for understanding and engaging in political struggles. Although the inquiry is philosophical in nature, the approach arises from issues in the biological sciences, history, and real problems in our lives as thinking, desiring, and intentional beings in societies of solidarity, conflict, and injustice. Though it draws on biological and complexity science, I am not a scientific researcher and this is not a work of empirical scientific research or hypotheses. The goal is to use lessons from the discussion to further our capacity for social change and thought.

Politics of Liberation

There are basic assumptions for this project that won't be explored: a critique of existing society as unjust and unnecessarily oppressive, as well as a belief in the possibility of a fundamentally better world. This is to say that things have been different, they can be changed, and it is worth working for a different way to live. Social problems like crime, violence, war, poverty, abuse, and alienation are not eternal or inevitable, but rather are specific products of our society. For example, before modern capitalism, work was limited by the cycles of agriculture or hunting. Societies were structured on these rhythms and allocated downtime for personal and cultural uses. With the growth of capitalism, potential work time exploded. Long hours, overtime, and the consumption of life by stupefying work is not a permanent fixture of human life, but rather they are recent and avoidable symptoms of modern capitalism. Nor are they merely incidental or sorted out by a minor fix, but instead they are systematically produced by a system built to maintain wealth and power in the hands of certain minorities and out of reach of the bulk of the population. This perspective is built into the project. The questions of agency, living systems, and emergence are explored in the service of a politics of liberation.

Part of the historical shifts in our era have been driven by a loss in faith in many political traditions globally. For nearly a century the dominant leftist tendencies centered on a methodological and theoretical framework that has suffered from a significant loss of credibility worldwide. Marxism went unchallenged in its dominance in liberatory thinking from perhaps the Second World War until recently. The pillars of this thought centered on a number of variants on dialectics, historical materialism, and Marxist visions for obtaining communist society. Each of these pieces has since suffered a crisis of legitimacy. Marxism's main competitor was a liberalism that sought to improve capitalism and expand the powers of the State in the service of an abstract conception of rights

other such emergent properties of sodium chloride are all distinct in some sense from the chemical and physical forces that make it so. There are the forces themselves and then the qualities of those forces in the world. Physical things correspond to these forces and qualities, and living things as well. Reactions occur to the uses things are put to, to their phenomenal experience, and to their role within the actions of living organisms. There is a practical level of explanation here that is distinct from lower ones, and is not identical to how we explain it. The functioning at one level is different from that at another. Salt in my body is on another plane in some way from the electrons and neutrons that make it up.⁹

Emergence isn't magic; something does not come from nothing. Nor is it random or disorganized. Emergence is systematic. Certain properties of systems produce emergent things in discreet processes. The science of emergence is to understand and model the functioning of such systems, and explain the processes and rules governing emergence. Any deeper understanding of the way that things emerge takes us into the territory of *complexity*—systems that exhibit very unique properties in the natural world.

⁹ This is distinct from the discussion of whether properties of salt can be reduced to a robust chemical explanation of such, which indeed is more plausible with salt than other examples of reported emergence. It would not, however, likely explain our experience of salt or the emergent responses of living systems to salt even if you can reduce salt's properties to a combination of sodium and chlorine's collective natures.

example we can see how different positions, which nearly everyone on some level has, take distinct positions on both descriptive and normative philosophy of mind, ethics, metaphysics, and life. This is distinct from making those processes conscious, codifying them, having a language specific to describe them, and so on. People may have tacit beliefs about what the ultimate reality of life is without either naming or being aware of them, and yet engage in self-reflection and change their underlying theories based on reasoning. We can compare thinking of life as the beginning of a chain of events starting at sex, the growth of a sentient humanlike being, or the moment when a new form of life is shifted from the cells of the egg upon conception. Each carries a philosophical view with associated beliefs and explanations.

Antonio Gramsci, an Italian revolutionary, made a famous distinction between good sense and common sense. For Gramsci, all people had both good sense and common sense. Common sense is socially inherited for the most part. Each individual has their own thoughts and beliefs, many of which are founded upon habit and tradition embodied in a place and their period. This is the fragmented contradictory set of philosophical thinking we all have. Good sense on the other hand is where people's thought becomes more conscious, ordered, and coherent. Gramsci especially praised the attempts of everyday people to try and shape their thinking to their experiences. Theory moving in tandem with and influencing practice was called praxis. People have experiences, they theorize them, and those theories generate new practices, which in turn modify the theory, and so on.

While everyone philosophizes consciously and unconsciously — good sense must be cultivated. Gramsci lays out then the inherent nature of philosophy to living, and argues that we should perfect it. Yet we're not perfecting philosophy as an abstract, but rather to fit our concrete context: our struggles, position, and aspirations both informing and being informed by our experiences. The distinction between good sense and common sense points to the reasonable

notion that all people no matter their education, intelligence, or position engage in philosophical thinking though with different levels of conscious processes, specificity, and effort.⁴

People do not normally consider this theorizing or engaging in high intellectual activity, but it is. Obviously there's a distinction between the work of individuals who spend decades working out an analyses of their own and the positions individuals come to as a reaction to things occurring to them and around them. Yet the gulf is not as wide as might be thought. Between viewing our political mental life as purely passive or cultivated, there lies a dynamic interplay. People are not merely responsive, but also must filter their responses. Responses come through the lens of their beliefs, desires, and intentions. As people live and grow, they inevitably encounter elements of life that contradict what they think and what they have been taught. How they choose to respond to these contradictions is one path that leads to philosophical thinking, and politics is no different. We need only look at all the various shifts in discourse, surveys, and activity following the financial crisis of 2008 to see evidence for widespread philosophical thought throughout society.

A significant barrier to recognizing this ultimately comes from an excessively individualistic world view in which people form their ideas roughly in a vacuum, as though peering through the windows that are our eyes at the world outside, and only then return to social life to implement their ideas. In reality the situation is much more complex since divisions between individual and social life are incredibly blurred. People's responses and questions do not occur in isolation. The speech, actions, and reactions of the countless others with whom we are in intimate contact (in modern cities and suburbs) influence our conscious thinking and unconscious activity. We do not ask questions out of nowhere, but rather we bring our own contributions to the experiences and options of-

⁴ Antonio Gramsci, *Prison Notebooks: Three Volume Set* (New York, Columbia University Press, 2011), *passim*.

Wherever one stands in the debate, its sufficient to note the limitations of our minds to follow such changes and the novelty of the properties created for the purposes of the arguments here. Because of the way that emergence happens, there is a division between reality and our experience of it.

In one sense this is obvious. We can't see the microscopic world with our eyes. Artificial tools are necessary to experience or even model the heavens above and the worlds below. While my thoughts evolve from interactions of chemicals, it isn't necessarily the case that we could ever trace an individual thought to particular chemical reactions. It is likely the case that causal chains are sufficiently complex that we can't follow how it evolves in particular instances.

There's no good way to look at the popular revolt in Hungary in 1956, for example, and explain exactly how particular individuals physically and chemically came to the decision to take up arms against the USSR. But they did so for reasons that are built out of that same physical stuff on some level. Everything emergent is made of matter. However, when you put it all together, it's sufficiently complicated that for any one instance we can't say exactly how it occurred (except by larger trends, general rules, models, and so on).

When I raise a glass to my lips, no scientific account yet can trace all the physical and chemical reactions to produce an account of my hand rising. More importantly, even with such a list, we wouldn't learn very much about that act, someone raising an arm. There is therefore a division between our knowledge and the reality of living systems and events therein. This creates a limitation in our knowledge and ability to foresee how particular events may unfold both for upcoming events and our influence on them. We may never know in any exact sense what causes a particular protest, nor how our actions will affect the development or death of social changes.

Likewise, the experience of the taste of salt, the shape of its formations in the earth, the shine of its flats against the sun, and

emphatically no; the mind is produced by chemicals, but there is a leap when the mind is created that is objectively new and irreducible.⁷ A third position argues that there are different activities when looking at causes and effects and when comparing the qualities and order of things at different levels.

Corning, for instance, tries to connect emergence to broader synergistic effects of combinations of things throughout the world.⁸ The synergy of combinations presents new useful elements not present in the constituting components, and this is true whether or not there are any creatures to use or understand them. The novelty is objective (that is, it exists outside our minds or capability of knowing things). Such properties are measurable and observable, and yet they are still made up of and created by more fundamental causes. The third view in one way or another makes reference to different conceptual modes between causal explanations (following chains of causes and events) and understanding novelty at different levels characterized by emergence. It involves both limits on knowledge based on our minds and fundamentally new physical properties that emerge.

of such models for making predictions and learning about the systems themselves. We can engineer models that can do calculations and follow paths that our minds cannot.

⁷ Though not relevant to the purposes of this text, assessing the relevance of social and political emergence, there are varieties here we are skipping. Some forms of emergentism reject both reducibility and physicalism (the idea that the world is exclusively physical). There are non-reducible variants of physicalism, reducible physicalism (in matter not thought), and irreducible non-physicalism (amongst other positions). At stake here is both what the universe is made of, how high-level things relate to lower-level things, our explanations of the world and sciences, and how we understand it. An adequate exploration of these themes would take us well outside our domain. An excellent resource for these debates is found in the collection of philosophical and scientific articles within Bedau and Humphreys, *Emergence: Contemporary Readings in Philosophy and Science* (2008).

⁸ Corning "The Re-Emergence of "Emergence": A Venerable Concept in Search of a Theory," 18–30.

ferred to us. Our own ideas and behavior inherently refer to the thoughts and actions of others in an endless spiral, each affecting one another. We all rely on, reformulate, adjust, and create theory in the course of our lives in order to understand our world, our position within it, and the best course of action for us. Philosophy is not alien or external to us. These are underlying issues inherent to being the thinking creature that we are, and they are both inescapable and completely widespread throughout our societies. Philosophers may have the distinction of being called such, but it is only because they have a discipline, tradition, and institutions that support their titles and work. We are all philosophers.

This isn't to diminish the unique contributions individuals make, nor the idea that people can innovate and create genuinely new ideas. It is simply to acknowledge that we can't make sense of any aspect of human mental and social life without referencing the lives, thoughts, and relationships with others. From this perspective, the universality of philosophical thinking is a consequence of the philosophical thought of all of us united in complex networks throughout societies. Intellectuals with texts, theories, and work are one manifestation of that broader social process at hand. Yet more fundamentally it is the inherent process within us all that makes theories possible.

Moves to Deflate

Yet one might ask if philosophy actually adds anything to our thoughts. Is it simply a trick? A mental trap? The ordinary language philosophers argued as such, claiming that philosophical problems develop out of snares in ordinary use of language that philosophers take out of their use-context to generate their quandaries. In some instances, they sought to reduce philosophical problems to linguistic, semantic, or conceptual problems. Wittgenstein, for example argued:

[Philosophical problems] are solved...by looking into the workings of our language, and that in such a way as to make us recognize those workings: in despite of an urge to misunderstand them. The problems are solved, not by giving new information, but by arranging what we have always known. Philosophy is a battle against the bewitchment of our intelligence by means of language.⁵

This approach can reduce philosophical questions to puzzles that fall out of the questions or problem itself. Philosophy then does not actually change our course, but instead only helps us explain away the problems that come out of our language. For example, take the issue of truth. Deflationism about truth similarly attempts to deflate or eliminate the philosophical tension about the nature of truth through an account that is about language and our use of the concept.⁶ Deflationists argued that to say that “grass is green” is true, we are simply saying “grass is green.” Truth adds no new content to the sentence, but can be a useful way to use language as a shorthand for repetition. In doing so, they reduced the problem of truth to a syntactic one, and showed that the ability to assert sentences using truth as a tool played a role.⁷

This move was quite pervasive in the field in an earlier era and parallels popular ideas about the irrelevancy of theoretical issues. At its most extreme this approach rejected the relevance of philosophy altogether. Extrapolating, we see that if such questions are merely semantic tricks which add no new content to our under-

⁵ Ludwig Wittgenstein, *Philosophical Investigations*. (Chichester, West Sussex, UK: Blackwell Publishing, 2010), section 109.

⁶ Those interested for an overview may see Daniel Stoljar and Nic Damnjanovic, *Stanford Encyclopedia of Philosophy*, Fall 2014 ed., s.v. “The Deflationary Theory of Truth,” accessed April 27, 2016, plato.stanford.edu.

⁷ The classic elaboration of this is Alfred Tarski, “The Semantic Conception of Truth: And the Foundations of Semantics,” *Philosophy and Phenomenological Research* 4, no. 3 (1944): 341–376.

of *unlike things*, something from nothing in a sense. For something to be strongly emergent, it isn't just that we have trouble understanding how the emergent thing/property/behavior arose out of its producing elements, but also that it's impossible to reduce it to its parts. Perhaps counterintuitively they still have the power to causally affect lower levels despite being fundamentally distinct. On the other hand, weak emergence is described in terms of the models we use to understand emergent phenomena, and the nature of our ability to follow such processes.⁴ Weak emergence is a question of knowledge or epistemology, and strong emergence is a question of the nature of emergent things themselves or metaphysics. Different philosophers of emergence carve out different terrain based on how they define strong versus weak emergence and whether they believe in one or both. Some are committed only to weak or strong; others argue not only for weak emergence, but also for strong emergence while connecting it to physical causes that seek to eliminate the alleged mystery.⁵

A different position argues that these two phenomena are not incompatible. It is possible for fundamentally new things to emerge from unlike components in a way that is still wholly determined by a chain of causes. The issue hinges on reducibility. Does the mind reduce to chemical interactions or not? Ultimately can we follow the path directly from chemical interactions to thoughts? Weak emergentists argue that, yes, we could; we just don't have the cognitive ability to trace it (except perhaps by modeling artificial life that could show us such paths).⁶ Strong emergentists say

⁴ Mark A. Bedau, “Weak Emergence” *Noûs* 31, s11 (1997): 375–399, accessed May 7, 2016, people.reed.edu.

⁵ Mark A. Bedau, “Downward Causation and Autonomy in Weak Emergence” in *Emergence: Contemporary Readings in Philosophy and Science*, eds. Mark A. Bedau and Paul Ed Humphreys (Cambridge, Massachusetts: MIT press, 2008), 155–188.

⁶ This position is supported by rapidly increasing examples of artificial life models being able to predict otherwise indescribable phenomena like the path of weather, diseases, birthrates, traffic, etc. Research increasingly shows the validity

insofar as these are incommensurable, and it cannot be reduced to their sum or their difference.³

Note the presence of two framings of emergence here that had already arisen in the discussion. There are the ways in which our minds are capable of comprehending the transformation of emergent properties from their parts, and there is the transformation itself. One way to understand the newness or novelty of emergent things (or the *more than* in the end being more than the sum of its parts) is to look at the thing itself and another is to look at how we come to know it.

There's a gap between the complex systems as a whole that produce emergence and our experience of our world as organized, predictable, and discernible. In this gap, we see different levels produce different rules and activities. My thoughts are not chemicals, yet chemicals produce my thoughts. A single thought, such as thinking of a goldfish floating in a bowl, is created by the events and substance of the brain, the nerves, and the whole organism of the human being thinking the thought. Yet reducing that thought simply to relationships between sodium, potassium, and chloride in neurons, for example, (if that were possible) does not describe the thought itself. The thought has different properties than its constitutive components. There's a transformation that occurs that produces thinking out of material and chemical components. The atomic level is distinct from that of thoughts. But where is the gap? Is it in the thinking? In the substance? What are the new things that emerge out of their parts, yet do not resemble or work like the parents that gave birth to them?

Within emergentist thought there has been a variety of positions. Some philosophers have introduced a distinction that classifies different theories as strong or weak emergence. Strong emergence involves commitments to *fundamentally new things emerging out*

³ George Henry Lewes, *Problems of Life and Mind* (London: Trubner & Co., 1874), 369, accessed April 27, 2016, archive.org.

standing of questions, then what bearing could they have on anything of substance? Even if we inherently end up philosophizing, this doesn't show that it has any use beyond the curiosity of the theory-phile.

First, it's worth considering that philosophy for its own sake has an inherent good. It may be good for people engaging in inquiry to test their minds, more deeply analyze assumptions unexamined, and develop abilities within the philosophical realm that help with analysis and reasoning that are more applied. Philosophical practice could be a type of mental exercise to build abilities one wouldn't otherwise get. The process alone can improve us and benefit us.

Yet, broad skepticism concerning the importance of all philosophical inquiries is hard to sustain. For one, large sections of contested social life are imbued with purely theoretical questions. Ethics is an obvious example. It is not that there are timeless and unmoving ethical contents that philosophy merely tries to reconcile with our intuitive beliefs and practices. Instead, ethical sentiments have both apparent universals and historical and sociological variation. The values of the ancients are not necessarily the values of today. Whether we *ought to* have values different than our own is a philosophical problem. Historically humanity has been repeatedly wrong concerning ethical judgments, particularly concerning the lower orders of society, the dominated, and the exploited. Euthanasia, racism, sexism, and countless forms of dehumanization point to the contextual and changing nature of values. There is no way of approaching these questions, which are clearly vital, without philosophy in one form or another.

Beyond ethical issues there are always fundamental assumptions beneath all forms of thought that are likewise contested. Psychology, politics, sociology, the sciences, and literature all have their philosophical bedrock they are built upon. In the literary arts, for example, growing interest in language, globalization, and broad cross-linguistic trends led to an examination of the notion of trans-

lation. Translating works of literature is common, and when reflected upon choices around translation show elements of artistic creation. For translators of literature, concepts like meaning, intention, form, and aesthetic judgments form the core of their activity. Each discipline and human endeavor has its philosophical issues like translation in literature.

Physics would appear to be the most solid of all subjects. Yet, physics is beset by methodological issues raised by theories that explain the behavior of subatomic particles. Quantum mechanics and string theory are two examples of theories that provide answers that contradict basic beliefs we have about what it means to be an observer, how we come to have knowledge about observed phenomena, space, time, and motion.⁸ Hard problems in the physical sciences that contradict what we believe about the world can lead to philosophical investigations, which likewise can generate new research. It is no accident that many of the great scientists themselves were invested in philosophical debates of their time, such as Einstein with the logical positivists and Newton with the rationalists and Neo-Platonists.

The problem of consciousness in recent time is one example of an issue raised by philosophers, drawing from neuroscience, which has been taken up further by neuroscientists for new kinds of research. Philosophical interest in the raw experiential sense of “what is it like” has led to investigations and model from cognitive scientists and neuroscientists.⁹ Philosophers of mind draw from new research to help find those boundaries as well: where does our concept of consciousness meet with what we know about the brain? Philosophy can help us with roadblocks in other domains, and it also provides the underlying basis for doing work in

⁸ For an accessible overview of some of these issues, see Bernard d’Espagnat, *On Physics and Philosophy* (Princeton, NJ: Princeton University Press, 2006).

⁹ I’m isolating philosophy’s contribution here, whereas in reality it is a consistent back and forth between all the elements and disciplines of cognitive science driving forward these questions.

change states of matter. After exploring various examples in which the combination of chemicals or forces produces novel materials, reactions, or properties, he concludes:

As a general rule, causes in combination produce exactly the same effects as when acting singly: but that this rule, though general, is not universal: that in some instances, at some particular points in the transition from separate to united action, the laws change, and an entirely new set of effects are either added to, or take the place of, those which arise from the separate agency of the same causes: the laws of these new effects being again susceptible of composition, to an indefinite extent, like the laws which they superseded.²

Another early theorist of emergence was G.H. Lewes, a nineteenth-century philosopher, who tried to understand the mind and how ultimately thoughts can arise from the physical matter of the brain. He defines emergence in terms of the difference between the parts and the whole, and stresses the difficulty reducing one to the other:

Every resultant is either a sum or a difference of the co-operant forces; their sum, when their directions are the same—their difference, when their directions are contrary. Further, every resultant is clearly traceable in its components, because these are homogeneous and commensurable. It is otherwise with emergents, when, instead of adding measurable motion to measurable motion, or things of one kind to other individuals of their kind, there is a co-operation of things of unlike kinds. The emergent is unlike its components

² John Stuart Mill, *A System of Logic, Ratiocinative and Inductive* (New York: Harpers and Brothers Publishers, 1882), 246, accessed April 27, 2016, archive.org.

What is Emergence?

Emergence is a concept originally developed in the 19th century by philosophers looking at the problems of life and change. Today, alterations in our understanding of the living and physical world are spreading its use throughout the sciences. The social world, being a formation of living things, also exhibits emergence, and theories of emergence can help us understand otherwise mysterious social phenomena. Emergence gives us a toolbox to understand and explain complex phenomenon through familiar things from daily life like cities, bodies, and natural phenomena. Because emergence is a feature that is familiar and surrounds us, it can become a means of comprehending and better communicating liberatory critiques and proposals.

Early theorists of emergence began writing about the subject in the 19th century. They came from the UK primarily, though some US thinkers also wrote on the subject.¹ John Stuart Mill was perhaps one of the first, and with impressive brevity and clarity set out the problem in his *A System of Logic* in the chapter “On the Composition of Causes.” Mill came to emergence looking at what happens when different forces combine. In many cases, causes simply add. In other situations, the addition of different causes produces totally novel qualities that are not derived from the mere addition of their parts, such as in chemical reactions in which new substances are formed or when substances are heated to the point at which they

¹ For the history of this current of thought see Brian McLaughlin, “The Rise and Fall of British Emergentism” in *Emergence or Reduction?: Prospects for Nonreductive Physicalism*, eds. Ansgar Beckermann, Hans Flohr, and Jaegwon Kim (New York; Walter de Gruyter, 1992), 49–93.

other fields, which can help or hinder our understanding of that work (such as conceptualizations of things like time, causation, perception, and so on in physics). Discipline-specific philosophical problems reflect the ethical, metaphysical, and epistemological quandaries of their domain. At the same time, they raise the underlying general philosophical problems they draw from and contribute to. Philosophy is perhaps less of a separate sphere or brand than a type of activity exhibited in broad swaths of human life with associated content and questions.

In politics, consider the role of philosophy in major world events. Marxism in the political world became one of the most influential currents in history. Marxism likewise arose partly from debates within the Hegelian societies, which in turn were debates generated by disagreements over history, knowledge, and the ultimate nature of subjectivity and reality. This isn't to abstract away the role of history and struggle in forming political currents, but just to raise the relevancy of a philosophical element amongst others. All major political thought has found its grounding in philosophical problems concerning a few key questions: ethics, agency, knowledge, and society. Political problems are ones that address us both as members of societies and as agents within the world. It is unavoidable that there be deep questions about the direction, foundation, and justification for our judgments, a path to a good society, and how we come to have our beliefs about political questions. This is even truer for any critical politics. Rejecting doing philosophy within liberatory thought means embracing exclusively what we happen to believe or practice without reflection. If the present order is rejected, then the ability to deflate philosophical problems about politics becomes problematic as intuitive political philosophy is often based upon a corrupt material and moral order.

Looking to science, politics, and even literature, philosophy raises elements both of thought and practice that can contribute to changing activity and generating new ideas. As experiences generate new ideas, we respond to the ideas and create new forms

of practice. This relationship is complex and not obvious, but it points to a deeper analysis of the role of philosophy beyond mere semantics. If we accept that there are philosophical questions of substantive content and that these are unavoidable at least on some level, then additional questions are raised.

Good Sense and the Professionals

Our world thus reflects our inherent philosophical beliefs, and when our beliefs change they can reshape the world (though not necessarily directly or simply). Philosophy, as we discussed, helps us when our thoughts hit limits. Particularly in times of turmoil, philosophy is turned to for help. But what are the consequences of having it be the domain only of philosophers? That is, if only professional philosophers do philosophy, how will that affect our own thinking?

If we refuse to engage in it, we cede that territory to others and often others who may or may not have our best interests in mind. Philosophy as a professional field relies upon a series of elite institutions to fund, train, and employ their staff. The politics and dynamics of academic employment is sordid enough to raise questions about the ability of professional academics to generate tools for people trying to better their lives and societies. Their institutions are largely run by elite intellectuals who uphold philosophy as the property of fulltime academics, which serves a hierarchical social organization that continually places the thinking of what is best for society into the hands of the few. Immense social pressure exerted through competition, funding, and the moderating effect of employment judged through ability to publish has deeply conservative effects on every discipline in academia. On the one hand there is a steady stream of trivial technical work aimed at securing and maintaining one's employment, and, on the other hand, strong defense of the existing power structures in one modified form or

Part 2: Emergence

contradictions seen already: how hierarchy can emerge from anti-hierarchy, how dispositions and intentions relate to beliefs and desires, and where motivation fits in.

another. This is merely to say that professional institutions reflect the power dynamics within society as a whole. Privilege and power get disproportionate voices and have extensive means to reproduce ideology throughout society, academia included.

By failing to take up the theories that are continually pushed upon us, and questioning our own, we allow leaders (either of movements or of dominant society) to often decide key questions for us that not only can impact the underlying theories, but often day-to-day strategies and tactics of struggles for liberation. For instance, contemplate writings and coverage of things like the foreclosure crisis in the United States. Through the media, academic publications, think-tanks, and government reports various positions on resistance, the problem, and potential solutions are developed. People interact with these through points of intersection in their daily life: their union, church, school, workplace, television, associations, and political affiliations. These positions are developed largely by people who have direct investment in the maintenance of the system through the funding of their employment, and the simple fact that it is working for them. Consequently, institutions of the powerful tend to set the debates. In the case of foreclosures key actors like SEIU, the Democratic Party, and a network of non-profits tied to foundation grants or unions led to focusing on the defense of private property of individuals rather than questioning capitalist housing itself that turns people's homes and neighborhoods into commodities which has generated countless similar crises.

While this does not mean that it's not possible for such people to be critical, on a broader social level it is true that perspectives that protect the dominant view are consistently overrepresented and defended by professional thinkers. This translates into people seeking to remedy the problem looking towards official channels set by the dominant power holders.

Dissidents do exist of course. Yet still too often we are lacking a vehicle for independent thought. Meanwhile, hostile perspectives

that seek to maintain the status quo are able to use a monopoly of professional intellectuals to move concrete philosophies in everyday life that serve their interests, often against the interests of the great majority. This is not to pass judgment on those individuals or to reduce their positions to their social class, but rather to raise the issue that allowing for a whole realm of human mental life to be dominated by professionals or even to write it off is to passively accept the reproduction of the ruling ideology on fundamental questions for people trying to enact change. If we want to see critical perspectives, especially those of the dominated, we have to independently intervene and create philosophy with wider participation.

Recognizing the role of philosophy in our lives begs for another approach. The division of labor between thinkers and workers, the academies and society at large should be questioned. There should be an effort to expand working intellectual life, and to deepen both the capacity of people to engage with philosophy in their daily lives. Obviously not everyone will become a philosopher and write theories, but everyone can learn to think philosophically, question dominant philosophical thinking, and develop their own positions. Everyone, though particularly liberatory movements, should engage in questioning and developing theory in the course of their actions. There's no reason to assume this is only a matter of individual education and willpower, either. Our education system pushes us to think individualistically in a way that doesn't reflect how people learn. Scientists most evidently do not do research in this manner. Collaboration and collective projects are at the heart of their practice, beyond some base level of mastery that all scientists much engage on their own. If we recognize the potential for people to learn collaboratively with common aims and interests, the possibility of a popular intellectual life informed by people's aspirations could be a tangible reality.

This is not a call for everyone to sit, as Descartes did, in front of a fireplace contemplating the mysteries of the universe. That is fine

what does that mean in *this environment* for *these people* with *this situation* and *this history*?

Secondly, these accounts highlight the way in which a theory of practices can guide us towards our aims. It is not merely getting to the gates of power that matters, but the process and tools by which we got there. A putsch is different from a popular uprising. The sequences of events that produces putsches and popular uprisings have historically meant a great deal in terms of the ability of rulers or would-be rulers to stem the tide of popular power. And as another example: winning the freedom of political prisoners through taking action versus it being granted by the courts acting on a purely legal basis is different. Process is an inherent part of liberatory politics—not merely outcomes.

Lastly, the content of our struggles combined with our methodology are what makes struggles liberatory or not. Liberatory methods are grounded in the conjuncture of those struggling, are based on liberatory processes, but they also are directed at liberatory content. This content must also be fought for, and is not contained within the fight itself (even if it's suggested). By honing in on content one can see that within liberatory methods there is still a struggle for liberation. That is, the struggle is not merely between liberatory methods and other methods, but within libertarian struggles there are other tendencies that lead us away from our goals. Those battles are fought largely around content.

When past thinkers honed in on method they unearthed strong relationships among history, aims, and tactics. This is a relevant insight today. It is clear however that something deeper is necessary as well. Part of the task of building a liberatory thought and practice is elaborating a method that incorporates within it a positive content of liberation, and harvests the material reality of its application at the same time. Such a method connects the relationship between social forces and our orientation as agents figuring out what to do in a constantly changing world. The tools extracted in the course of this inquiry will give us insights into some of the

plied to ends; ends aren't automatically generated by tactics. This cuts both ways for instance between different trends in the libertarian world: social anarchism and insurrectionary anarchism. Militancy itself isn't inherently liberating, even decentralized or popular militancy.

Likewise, popular democracy can just as easily produce authoritarian consequences as liberatory ones. There is no reason to assume that struggles against authority towards a better social order could be divorced from the ethical content of such aims. It is easy to forget that libertarian means can be directed at contradictory ends, like when people use process and spaces for their own emotional needs against the collectivity. Without such, we rely upon either a belief in the inevitability of our victory, or that the means themselves inherently produce just and good outcomes. Both beliefs are false since what produces injustice and hierarchy is not simply how they are achieved, but also why. Part of structures and social relationships are the ideas and goals of the people within them.

There are lessons we can extract from the exploration of methodological thought in whatever form. First, the emphasis on the historical nature of liberatory thought is critical. Often philosophies are thought of as things that are contemplated, laid out, and brought back to the world to be debated and in some manner implemented. Perhaps in other less concrete fields this can seem more plausible, but in the social world it is patently impossible. The issue involves both time and space. Concepts, institutions, and actors do not remain the same across time. People who expend their time, for example, in order to live are not the same in every age. A slave, peasant, worker, and a subsistence farmer all expend time for their ability to live, but the social relationships that define their work change across the ages. This change is both defined by the society they grow up in, and the time period they exist in. An emphasis on understanding our ideas through method helps keep us grounded in analyzing these factors. If we seek liberation,

and often fulfilling to many, yet it is different from what we have been discussing. Within us, philosophy grows and develops, tracing the arcs of our lives and our beliefs. Theory and philosophy are not islands to which we swim only when things have gotten rough on the mainland. Our theory is not simply internal to us, but it additionally undergirds the rest of our activities and thinking. Theory evolves with our experiences. Humans are biological creatures with an endowment that shapes our thought through our genetic legacy, yet it is an open process. As we grow, change, struggle, and thrive, our ideas about the world change with our experiences. Living in cities and experiencing the technological revolution of mass communication, for example, certainly altered the way humans thought about their lives, families, work, and so on. In actual fact, theory and practice do grow together.

The best, of course, is when our theory and our practice move together organically, learning from practice and creating new theory, and the theory generating new practice. This is sometimes called praxis. Praxis is an ideal we aspire to. That is, that we should make our philosophies explicit, question them, weigh them against our experiences, and reformulate them so we have more tools to keep doing what we think is the best thing to do. This intentional, conscious process can help us think more clearly and learn from our mistakes. Action is more than our conscious intentions, and yet at the same time this doesn't invalidate the usefulness of trying to achieve a praxis.

Philosophy as something inherent to our mental lives, something within reach of all, can be liberating both in understanding these points and in applying them. The universality of philosophy within society doesn't mean that we should diminish nor exalt explicitly- theoretical texts like this one. Instead, it is to recognize that philosophy is the domain of all people irrespective of their intelligence, gender, class, race, or position. In societies based on domination the alienation from philosophy is apparent. It is also a grave mistake to look at such activity as alien to the oppressed

and the sole property of elites. There is no option to avoid doing philosophy; there is only a choice to do it well or not.

This isn't to say there aren't barriers. Today's society is built on divisions that try to enforce the ownership of theoretical thought by professional intellectuals. Anti-intellectualism is ultimately self-defeating. In the course of this struggle we have to be creative and find new ways to do philosophy—a philosophy of collective creation and a liberatory philosophy. Simply wishing philosophy to be popular is not enough. We can't merely overcome these issues by manipulating the terminology or method to be more accessible, while people continue to experience the limiting and alienating effects of capitalist work and all its stupefaction of everyday life. Just as artistic creation has been stolen from the public and relegated to a spectacle by professionals reproducing artistic commodities for the market, so philosophy often has been chained to an exploitive system of thought. We need to seize philosophy again, see what we have available to us, and discern how we can recreate it for our own purposes.

destroyed. How many more actually were operating no one can say for sure.¹²

This did not make Beam's ideas liberatory obviously, no more than others using decentralized organizations to authoritarian ends. While a libertarian methodology is necessary to achieving equality and liberty, it isn't sufficient. Structures and forms alone don't come with automatic guarantees. You may utilize a libertarian method and still produce new (or old) forms of destructive hierarchy.

Using libertarian structures certainly will help us. Direct democracy likely minimizes potentials for authoritarian abuse. All things being equal direct democracy is better than directives from dictators or the aristocracy of representative structures. Direct action does have an inherent liberatory potential as well. Acting directly means cutting out the mediation from our lives: representatives, bureaucrats, recuperative institutions, and so on. Yet this is different from identifying our goals with the structures that can help us achieve those goals. What makes something liberatory is its recognition of the capacity of people to self-govern, implement egalitarian social relations, or whatever. The content of our goals is served by structures, but structures and means provide no guarantees that we will achieve them. There is another component missing here.

This is another way to say that there is also a need for content in the radical project of transforming society. On the skeleton of our method and tactics, we build it up through putting the flesh of content on the bones. Anarchism can be liberatory not only because it uses direct democracy to achieve its ends, but also because of its ends: organization of society's products for all, self-organization, cooperative labor, and a holistic development of individuals for their own chosen ends (to give potential examples). Tactics are ap-

¹² The length of this quote is instructive and worth repeating because it is a strong example against this kind of thinking. Louis Beam, "Leaderless Resistance," *The Seditonist* 12 (1992): 12–13, accessed April 27, 2016, www.researchgate.net.

respondence“ were formed throughout the Thirteen colonies. Their purpose was to subvert the government and thereby aid the cause of independence. The “Sons of Liberty“, who made a name for themselves dumping government taxed tea into the harbor at Boston, were the action arm of the committees of correspondence. Each committee was a secret cell that operated totally independently of the other cells. Information on the government was passed from committee to committee, from colony to colony, and then acted upon on a local basis. Yet even in these bygone days of poor communication, of weeks to months for a letter to be delivered, the committees without any central direction whatsoever, were remarkable similar in tactics employed to resist government tyranny. It was, as the first American patriots knew, totally unnecessary for anyone to give an order for anything. Information was made available to each committee, and each committee acted as it saw fit. A recent example of the cell system taken from the left wing of politics are the Communists. The Communist, in order to get around the obvious problems involved in pyramidal organization, developed to an art the cell system. They had numerous independent cells which operated completely isolated from one another and particularly with no knowledge of each other, but were orchestrated together by a central headquarters. For instance, during World War II, in Washington, it is known that there were at least six secret Communist cells operating at high levels in the United States government (plus all the open Communists who were protected and promoted by President Roosevelt), however, only one of the cells was rooted out and

Metapolitics

Issues inherent to ethics, social justice, biology, science, and societies are confronted through the course of the arguments working from emergence to agency. Though we’ve been speaking about philosophy in general, much of this work takes on critical political philosophy specifically. In this sense it comes from the perspective of a critique of today’s society alongside aspirations for a fundamentally different social order. The main focus of such is with political questions, and specifically with the underlying method and framework for doing politics.

Political questions can be divided into two different levels of analysis. One the one hand are raw political questions like: Is abortion wrong? Is it just for starvation to exist? What is the best form of governance for society? These questions deal with content and specific issues within a broader framework for political debate. This is simply politics or perhaps social questions. Answers at this level address assertions, such as “Abortion is morally permissible because it is not murder, and therefore should be socially permitted by law.”

Beneath these is a different type of questioning, questions about the underlying methodology and theoretical foundations for asking any political questions at all. This is the metapolitical. Metapolitics deals with the fundamentals that make settling political questions possible. For example, we might ask what the notion of a polity is altogether. What methods yield political truths? What distinguishes the political from other categories like the social or biological? Metapolitical inquiries provide answers not to political questions, but rather to the underlying concepts and structures

upon which political questions are built. All political actors have latent philosophical foundations that they use to understand and guide their struggles. Ethical, social, and philosophical beliefs form the core from which people create their ideas for a political path to the world they seek, and an understanding of the current one. Metapolitical theories then give us the tools with which we build our theories.

This does not mean that when people come to political conclusions and take part in political acts that take sides they are explicitly thinking first of their metapolitical assumptions and then second working out a response. Metapolitics is a level of analysis, a place where questions of a certain sort can be asked. Anyone who engages in political life (which means social life in general and not merely conscious political activity), engages in metapolitical thought. The reasons are the same as for the universality of doing philosophy. Since we are creatures with minds and live in societies like we do, metapolitics is an implicit and unconscious element of human social life. We can attribute metapolitical assumptions to people either by their thoughts and expressions or by their actions. Human nature, for instance, often plays a strong role in political theory. Most people likely have thoughts about human nature, make judgments based on it, and indeed shape their lives in relation to perceived nature in people. Yet what about the concept of human nature itself? What is it? Answers to these questions are metapolitical; but simply by having belief about human nature, people have tacit commitments to ideas about nature itself.

Besides latent thoughts, there is as well conscious metapolitical thought. This is also universal, though not in an obvious form. Because of the dominance of professional intellectuals and the sequestering of their thought to institutions, such as academia, think-tanks, NGOs, and so on, metapolitical activity of nonprofessionals is not widely recognized. Yet people do come to change their beliefs about fundamental ways in which society operates and how to effect change. People come to believe or stop believing in the ability

This framing of the issue is not completely right though. At the core it seeks to express the idea that a libertarian method uses libertarian means to libertarian ends. This connects the third piece. There is a core set of values that helps us choose our tactics, evaluate struggles, and analyze our situation. Yet in the second component of the method, people often put forward structures or forms of tactics. Direct democracy is a structure in which decisions are made, but not necessarily the relationships or decisions of those people. Direct action is a type of action carried out by people, but it is not necessarily direct action to libertarian ends by people with libertarian intentions. Direct action can also be used to different ends—authoritarian and repressive ones like radical fascist actions. Using libertarian means will not necessarily bring us libertarian outcomes.

Consider when hierarchy emerges from horizontal structures. There are many mundane examples. Formal democratic procedures don't bar people from dominating through other means, such as charisma, social connections, education, or knowledge. Fascist groups use direct action to attack immigrants, queers, and leftists. People can use informal hierarchies and re-create bureaucracies in directly democratic councils to dominate. Horizontal delegation can be manipulated through networks of power, which can be utilized to carry out agendas against minorities or even majorities. For instance, a militant racist and anti-communist in the US military developed a concept of leaderless resistance against a potential soviet invasion. Louis Beam, a Ku Klux Klan leader, took this up and argued for decentralized cells organized without higher bodies:

An alternative to the pyramid type of organization is the cell system. In the past, many political groups (both right and left) have used the cell system to further their objectives. Two examples will suffice. During the American Revolution "committees of cor-

economic development, but that now contribute to—rather than alleviate—material and cultural deficit. If so, there will be no doctrine of social change fixed for the present and future, nor even, necessarily, a specific and unchanging concept of the goals towards which social change should tend.¹¹

Emma Goldman likewise emphasized the relativity of the application of an anarchist method in the quote at the outset of the chapter. This isn't to say simply that there is a plurality of different ways anarchism could manifest, but rather that methodology gets its life directly through its struggles. If we think in terms of what Chomsky writes, the method is worked out based on the oppressions and illegitimate authorities that people seek to dismantle. The doctrine is understood through application of the method to the reality of the rebels seeking liberation, and not merely through attempting to codify it or imposing a set of beliefs to a subservient reality.

Secondly, there are the actual tactics and techniques inherent to the method that define it. Typically, anarchists focus on tactics, and usually direct action, directly democratic assemblies, and horizontal delegation. Using these ways of solving problems is supposed to bring us towards the anarchist ideals. It is not simply the targets (the State, capital, oppression, and so on), nor a decentralized and historically rooted application. Inherent to the method itself are certain practices that make it anarchist. There is a relationship between the ends (goals) and the means, and the means are secured by choice of tactics. Direct action and direct democracy are themselves thought to deconstruct statist relationships within those struggling. Horizontal structures begin to rebuild power relationships on an anarchist basis.

¹¹ Noam Chomsky, "Notes on Anarchism," in Daniel Guerin, *Anarchism: From Theory to Practice* (New York: Monthly Review Press, 1970), accessed May 8, 2016, chomsky.info.

of individuals to fundamentally control the course of history. People come to see institutional structures of power or capital as determining agents controlling all society independent of the individuals involved. People become cynical of the potential for escaping the invariable dominance of human nature corrupting all social life. Within these attitudinal responses to political events, people take on political positions proper, but also are changing their underlying assumptions about how societies operate, and forming new opinions based on this.

Simply making our internal process conscious doesn't guarantee it will help us either though. Most of human mental life is unconscious anyway, and being conscious of underlying assumptions does not necessarily allow us to escape pervasive errors or introduce new ones. Engaging in explicit metapolitics as this work is intended to do is simply to add to our capabilities and experience as people trying to work critically within a process for liberation. The explicitness is not a holy grail, nor is it a standalone solution. It is one part of our political activity, amongst many. The relative importance of this is an open question. Realistically, it is likely to help us through addressing real underlying issues, but it also does not have any great privileged status that invalidates other elements of political life. The contestation of theory, practice, intuition, creativity, emotion, reason, and so on reflect the divisions within society that try to advertise and monopolize their dominance alongside the struggle of individuals and institutions within this system. More collaboration, humility, and respect for the plurality of contributions is sorely needed. The crisis in political thinking is unfolding rapidly in an evolving world, making rethinking foundations for political inquiry more relevant today than ever.

Method and Content

Anarchism is not, as some may suppose, a theory of the future to be realized through divine inspiration. It is a living force in the affairs of our life, constantly creating new conditions. The methods of Anarchism therefore do not comprise an iron-clad program to be carried out under all circumstances. Methods must grow out of the economic needs of each place and clime, and of the intellectual and temperamental requirements of the individual. –Emma Goldman.¹

One approach to doing politics centers on the nature of political methods. Some radicals have proposed viewing political methodology as the fundamental basis for politics. Within the Marxist tradition one school of thought used methods as what defines Marxism. For example, Karl Korsch² argued that:

‘Scientific socialism’ properly so-called is quite essentially the product of the application of that mode of thought which Marx and Engels designated as their

¹ Emma Goldman, *Anarchism and Other Essays* (New York: Mother Earth Publishing Association: 1911), 62, accessed April 27, 2016, archive.org.

² Though it is an interesting twist in the story that Karl Korsch himself came to critique the idea that a coherent Marxist method exists and Marxism’s role in the failures of the Russian revolution and Germany post-WWI in his worthwhile texts “A Non-Dogmatic Approach to Marxism” *Politics*, May, 1946, accessed April 27, 2016, libcom.org and “Ten Theses on Marxism Today” *TELOS* 26 (Winter 1975–1976), accessed April 27, 2016, www.marxists.org.

A Liberatory Method

What about a liberatory method? What would a method of liberatory thought entail? What makes a method liberatory in the first place? A liberatory method should contain a few key elements: the techniques and methods, the aim and scope, and evaluations. Here libertarians have elaborated considerable work. Tactical elements, the objects of libertarian struggle, and truth have been explored by the tradition. Yet explicit discussions of the method are unfortunately rare and unsettled.

First, there is the scope of the libertarian’s objectives. There is no single theory of such, and indeed it is contested. One central theme is that of libertarian struggle as being defined not by particular institutions, but through the relationships of those struggling to the power relations they are combatting or new powers being constructed. Libertarians do not seek to rid us of injustice simply by attacking the existing State as an institution, but rather by transforming the relationships between those in power and those suffering the consequences of illegitimate power. The construction of liberatory answers is therefore based on contextual historical and regional circumstances. Social relations of power vary, and thus particular solutions reflect the historical, objective, and subjective features of the problems posed. The libertarian struggle is defined by its material circumstances, its participants, and their place in history. There is neither a timeless central framing (good vs. evil), nor is it only defined through central institutions like particular states or capitalists. Noam Chomsky puts forward a definition of anarchism quite close to this view in his introduction originally to Daniel Guerin’s book, *Anarchism*:

At every stage of history our concern must be to dismantle those forms of authority and oppression that survive from an era when they might have been justified in terms of the need for security or survival or

perpetrated great crimes of history.¹⁰ Today determinism has fallen out of style, perhaps in part because of the historical failures of the Marxist-Leninist states and the seemingly never-ending human tragedies of the 20th century and beyond (fascism, ethnic cleansing, religious and nationalism terrors, life in the capitalist peripheries, and so on). Whatever history's course, it doesn't seem to be headed step-by-step towards paradise.

Based on the previous discussion, we should be skeptical of a strong way of interpreting those ideas in general. Anarchism for example is more than simply a method for achieving anarchist goals. If different radical philosophies are only methods, then they run up against the problem that they contain within their methods underlying theories, and theories that go beyond the steps and process of their method. The vision, goals, and assumptions of all radical projects commit us to doing theory in one form or another. Methodology is also important, but doesn't allow us to evade theory as methodology itself has its own theoretical work.

Stepping back a bit allows us to extract truths from these ideas. A more charitable way of reading it, perhaps, is less as a way of rejecting theory altogether (in favor of pure method), and instead that radicals do not hold their theoretical forefathers as pure truth-bearers. Everything is on the table. People set out from the path of their inspiration, but the ultimate judge of the beliefs is our practices. These impulses are broadly correct and useful. While we may not be able to circumvent politics or theory by focusing on a pure methodology, methods are clearly important. Against dogmas and stagnant ideologies, looking to methods and practices gives us ways to discuss and test our ideas in the political world. In this way, methodology-centric politics does stress important elements of political work.

¹⁰ Determinism was perhaps the manifest destiny of the official Marxist-Leninist ideologues and states.

'dialectical method'... Only those who completely overlook that Marx's 'proletarian dialectic' differs essentially from every other (metaphysical and dialectical) mode of thought, and represents that specific mode of thought in which alone the new content of the proletarian class views formed in the proletarian class struggle can find a theoretical-scientific expression corresponding to its true being; only those could get the idea that this dialectical mode of thought, as it represents 'only the form' of scientific socialism, consequently would also be 'something peripheral and indifferent to the matter,' so much so that the same material content of thought could be as well or even better expressed in another form.³

Since this position is about how we carry out politics altogether, it is a metapolitical position, though one that attempts to sidestep doing theoretical work in a way. The popularity amongst political thinkers in discussing method and political-struggle-as-method warrants investigations of the problem. What is method? What is content? What relationship is there between theory and method?

Alongside issues with philosophy sits the problem of methods. Methods are

not simply a section of theoretical issues. In their rawest form, methods are systematic ways (and associated conceptual tools, analysis of such, and so on) of trying to achieve something. Methods involve steps, sequences, and instruments for carrying out practices in some form or another. This is often obscured in metapolitical discussions of method, which more frequently focus on hazy notions of frames, world-views, and perspectives as methods. Hard cases make bad law, so let's take up more concrete notions of method.

³ Karl Korsch, *The Marxist Dialectic*, trans. Karl-Heinz Otto (1923), accessed January 4, 2015, www.marxists.org.

The scientific method is one of the most tangible examples we have. In a nutshell, the scientific method consists of research, posing a hypothesis or something we propose in order to test it, conducting experiments, and drawing conclusions. The parts are related, but also related in the sense of moving through the steps in a direction. Methods have elements of theory or concepts and elements of construction or process. From another perspective, the scientific method is about systematically weighing certain kinds of beliefs (scientific ones) against their ability to predict real world events.⁴ There are past evidence, hypotheses, future experiments, and/or predictions we test them against. Each component is related and serves to gain our object (knowing what's right or not). Likewise, there's a process we go through.

The scientific method was practiced throughout history before being codified as the method of science. There were experiments, hypotheses, and people went through similar steps to draw conclusions about the world. This isn't to say people always intuitively engaged in the method, but people certainly formed hypotheses, conducted experiments, and used the data as the judge of their beliefs.⁵ A method then is not only something we consciously follow or even understand, there's also an unconscious practical element to it that our theory of methods tries to codify and capture.

At the same time the production of the theory of the scientific method gave scientists further tools for doing their work. Armed with a way to understand that work, future scientists inherited an understanding of how to account for existing data (research) as well as future data (experiments) in a way that can be reproduced,

⁴ Whether or not science is fundamentally about predictions or whether it is adequate to give better accounts of the past/present and potential predictions does not affect my argument either way, so I proceed with this most simplistic notion of science for argument's sake.

⁵ There were certainly other methods such as magical or religious methods which sought knowledge through appealing to spiritual beings in rituals, prayers, etc.

Marxists would likely reject this as a crass deformation of their ideas, though it is often what the Stalinist orthodoxy (and notably the overwhelming majority of Marxists throughout history) tried to pass off as their dialectical science for decades. On the other hand, a broader approach of defining the dialectical method as looking to multi-level changing processes across time is not a method. It's much more of a framing for problems, or a set of vocabulary and ways of thinking that we can use. Used in this way, Lukacs gives us more of a theoretical perspective than a method. There's a laxity here about what counts as a method. A method is not simply a way of looking at things and broad lessons to learn from. Indeed, when most write about "a Marxist method," they in fact do not mean a method at all, but instead a collection of ways of framing things, question-posing, and assumptions that have no clear methodology. In practice this is evident. The rarity of people able to understand and apply a dialectical or Marxist method makes its obscurity and difficulty applying it clear.

Historically there was a strong strand of thought, determinism, that made methods appear perhaps more important than they are. Many Marxists and a few anarchists (such as perhaps Kropotkin) followed the belief of the inevitability of their future society. The victory against capitalism was seen as being secured by natural economic laws governing society. Believing that such laws guaranteed ultimate victory led to privileging methods both for interpreting history and in trying to act. If historical fate secures victory, then theory as well as action are somewhat less important than our method for understanding and proceeding with the inherent laws that are already unfolding. Analysis (and methodology of analysis) would have a higher place than actually trying to solve problems and intervene since we already know the outcome.

Determinism pushes people towards passivity, since the inevitability of victory problematizes which, if any, actions are necessary. At its worst it provided justification for religiosity towards the actions of its adherents, often at the same time they

If we understand methods to be a set of practices in sequence with associated theoretical assumptions, there is good reason to be a skeptic about the use of methods that are in currency amongst some radical thinkers. For instance, consider the differences between Lukacs' method and those of the anarchists discussed above. Lukacs centers his ideas on method on notions of dialectical materialism, and the teachings of its founders. What would those steps be and how could they be understood to follow a systematic pattern? Understanding in any usable way how dialectics are a method to draw conclusions is notoriously obscure. Whatever use of dialectics there is, there's a looseness about method being employed here.⁹ Compare this to Goldman's notions or Malatesta's conception of creating a just economy based on experimentation in a postrevolutionary moment. The anarchist conception of method embodied here is about implementing libertarian practice with libertarian means. Sometimes this is partially characterized by having one's means match one's ends. This is much more methodical than what Lukacs is proposing. There are theoretical commitments (ethics, notions of practice), a series of strategic and tactical proposals, and a method for how to relate them across time.

There is good reason to be skeptical in general about what Lukacs calls a method at all. If it is taken at its crudest, one would have to try to extract sequences from dialectics. One approach would be trying to reduce phenomena to their contradictions and look to a synthesis in some complicated manner. Lukacs and most

nomics" in eds. Deric Shannon, Anthony J Nocella II, and John Asimakopoulos, *The Accumulation of Freedom: Writings on Anarchist Economics* (Oakland: AK Press, 2012).

⁹ The best of dialectics uses it as a way of looking at problems. There are some similarities with a more fluid and libertarian approach to dialectics with emergence. This is not the place to address the good and bad of dialectics, but emergence could be seen as a possible tool for people who do think dialectics is useful and want a more rigorous and usable form of that kind of thinking. All of this line of thinking reinforces the misuse of the concept of method in some circles.

thus verifying hypotheses. The theory posed a challenge; run your belief through this course of tests, and the likelihood of it being true is high. That common ground allowed for collaboration, evaluation, and assessing scientific work. With set rules of the game open to all, it forms a shared way of hashing out our beliefs not just as individuals but also collectively. It created the backbone then not just of specific theories, but for how science as a collective activity of humanity would develop.

The first thing we should take from this is that theory (or philosophy) and methods are not identical. Theories are not necessarily organized into methods, and methods are more than just specific theories. The scientific method was practiced in various forms before it was theorized, systematized, or institutionalized. Likewise, methods themselves have theoretical components. There are the steps, sequences, relationships among the elements (hypothesis-evidence-experiments-conclusions), and importantly practices. There's theoretical work and there's methodological work; related but distinct. The scientific method commits people to theories about evidence, experimentation, predictions, inference, time, observation, and so on. There may be many positions compatible with a method, but it is not theory-neutral.

Sometimes people try to argue that theory is a waste of time and that instead we should focus on strategy and methods only (or worse, just do what's most immediate). It should be clear why this is a false dichotomy. Theory is inherently a part of methods. Without reflecting on our underlying assumptions (and theories), people tend to reproduce uncritically the dominant schools of thought of their time. While somewhat inevitable, accepting assumed theory robs us of tools to critically assess our work via our methods.

The example of the scientific method clarifies what use theory can have. By creating a method, with associated theorizing, the scientific method was able to blossom and expand the scope of inquiry. Though any method we might want to consider may be in existence already producing fruitful activities, the story doesn't

end there. By creating overt methods (through engaging in theoretical or philosophical accounts of both existing processes and ones that we want to exist), we gain extra tools to do what we want to do. Making things explicit lets us evaluate our underlying assumptions, identify problems, and experiment. It gives us more space to try new things and figure out what's ultimately driving us forward or holding us back.

This is all true independently of the fact that explicit theorizing isn't the be-all and end-all of doing good work. Method is judged not by our conceptualization of it, but by the sum functioning of getting us what we want. Theory has a role there, but only as a component of the total effort. We don't get to opt out of theory, but likewise we can't only do theory and believe that we have a method.

Methods for Liberation

What about methods for liberation specifically? Understanding the differences and relationships between philosophy and methods, and their respective uses, leads us to further questions. Radical thinkers have often sought to cast their traditions as ultimately reflecting a methodology of struggle rather than an ideology. Emma Goldman is one example of this within anarchism. Goldman was an Eastern European immigrant radicalized by her experience of life in the United States. She came to be one of the foremost radical voices of her day for not only anarchism, but also the liberation of women and the struggles of workers. George Lukacs is another within Marxism. A participant in the Hungarian insurrection, he was a one-time dissident Marxist who later joined the officialdom, repudiated his own ideas, and ultimately became a faithful defender of the orthodoxy of the Soviet Union. The young Lukacs argued that Marxism was not a set of theses to implement as a canon, but instead a method for coming to conclusions.

Orthodox Marxism... does not imply the uncritical acceptance of the results of Marx's investigations. It is not the 'belief' in this or that thesis, nor the exegesis of a 'sacred' book. On the contrary, orthodoxy refers exclusively to method. It is the scientific conviction that dialectical materialism is the road to truth and that its methods can be developed, expanded and deepened only along the lines laid down by its founders.⁶

Since Lukacs and Goldman, many thinkers sought to elaborate and sometimes place method at the center of radical work. Yet what does this mean? What does such a method look like? Lukacs says such a method is the scientific conviction—which we can only interpret to mean a belief that is evaluated against evidence rather than faith.

Goldman's quote at the outset of this chapter goes perhaps more deeply in placing the implementation of the method into the context of the people carrying it out. It varies based on the environment it is realized in. These were ideas also raised by Errico Malatesta, the Italian revolutionary electrician and theorist of anarchism whose participation in the movement led him to organizing and participating in revolts across Europe, the Americas, and Africa.⁷ Malatesta took such a position in discussing how an anarchist society would develop economically through a series of experiments varying with local context. Kropotkin himself argued similarly in describing the function of anarchist society.⁸

⁶ Georg Lukács, *History and Class Consciousness: Studies in Marxist Dialectics*, trans. R. Livingstone (Cambridge, MA: MIT Press, 1971), accessed April 29, 2016, www.Marxists.org.

⁷ Errico Malatesta, *Errico Malatesta: His Life and Ideas*, ed. Vernon Richards (London: Freedom Press, 1984), 104.

⁸ Peter Kropotkin, *Encyclopedia Britannica*, 11th ed., s.v. "Anarchism" (New York, 1910), passim, accessed January 14, 2016, dwardmac.pitzer.edu. See also the discussion of an anarchist method to post-capitalist society in Wayne Price's essay "The Anarchist Method: An Experimental Approach to Post-Capitalist Eco-

to perfect their work because disciplinary infrastructure is always necessary. If there weren't coercive and repressive means within the workplaces, people might otherwise organize it to their benefit (let alone avoid work all together), and management recognizes this problem. If workers were radically free, they might redirect their activity not towards profit of the owners, but rather toward their own collective benefit, toward the benefit of others, or toward some other aim. Just as the order they produce is emergent, people working together can create emergent forces towards their ends. This is something management exists to restrain, repress, and channel into the desires and whims of those who maintain wealth and power.

This example teaches us a number of things. Inherent in emergence is a critique of hierarchical power relations. In understanding how social organization is an emergent property of social relationships, and how centralized power is inherently flawed in attempting to bridge those gaps, we see also a critique of institutionalized hierarchies and a libertarian method for political work. Those hierarchies are a net drain on society and introduce a form of disease into how the social organism functions. Complex systems help us critique why centralized management of labor and society are regressive forces that parasitically feed off the emergent orders of human collective creations.

Likewise, the order that exists is already emergently produced by people adapting and responding to their circumstances. In our daily lives, we have the inherent ability to construct alternative orders, not as architects or planners, but rather through our interactions within the social ecology. While there are no guarantees about what kinds of organization can be produced, investigating emergence opens up possibilities. We see both inherent antagonism created by emergent parasitic classes and the possibilities of more libertarian orders without dystopian social engineering schemes. Emergence provides a framework to think through that

The Mystery of Political Events: The Problem of Emergence

Action is at the center of social thought, particularly when viewed through an ethical or political lens. We approach the world as beings that feel, perceive, weigh, decide, and choose courses of action. Likewise, things beyond our choosing act upon us. Society is built from a multiplicity of interwoven forces, events, causes, and responses. Faced with this, we choose how to act while limited by our objective situation. In a messy world with limited possibilities, questions about how to proceed ethically and bring about the best outcomes perpetually arise.

Within the political realm, a number of cases are troubling. For instance, many movements for human liberation contribute to catastrophic disasters and, worse, end up setting back freedom and wellbeing for decades. As discussed in the preceding chapter, struggles against hierarchy can produce new hierarchies; libertarian methods can produce authoritarian structures. Many of the 20th century's revolutions (at certain points in their trajectories) seem to have had this character. Whole sections of the socialist movement helped mobilize Europe for the First World War and popular revolts contributed to creating the repressive world of the official Marxist-Leninist countries (Russia, China, Vietnam, Cuba, and so on) that strangled their peoples for nearly a century (and a few still continue to do so today). Oppressive hierarchies and injustices repeatedly emerge from otherwise liberatory and non-hierarchical efforts.

Indeed, many dramatic political events appear to have come out of nowhere, even when we know they do not. Riots, revolutions, crises, and coups are clearly the product of countless actions of individuals. But when they occur, they often don't seem that way. The singularity of historical events, their apparent uniqueness, can make the actions of individuals and groups appear strange and almost magical. This is more acute with dramatic events, but equally present in our daily lives and social existence. From the perspectives of people committed to changing society, such quandaries are even more troubling. *Actions have force; they change things. Yet it is nearly impossible to trace the force of those acts in practice.* History rolls along either in spite of our actions or disproportionately explodes because of them.

It is here that the structure of the most fundamental political disputes gets laid. There is a gulf between behavior on a gross social level (with associated forces, structures, powers, and entities) and the actions of agents within those systems. Our experiences and ideas about how our actions affect the world seem to depart from how political events often unfold and respond to our actions. Strangely, political thought has often been only glancing, or worse silent, on these issues.

There's a gap that needs to be fleshed out. The world of agents is connected physically and conceptually to the world of social forces. Yet how? Where do the reasoning, problems, and interventions of people come into contact and separate from, or where are they even born within those large scale social forces that are so evident in our lives? Such a gap lies beneath political theory in its philosophical and metatheoretical groundings—the structures upon which all of our social thinking rests. This problem, connecting the worlds of agency and emergent social forces, is a political question because it speaks to the attempts of individuals and groups to find ways to alter the course of history through their actions. Looking at it another way, it is simply to explore how our actions can positively affect efforts towards a liberatory society given the immense and

engineering and totalitarian thinking that emerged in the 19th and 20th centuries.

The point is deeper than just a rejection of the worst forms of social engineering and the crassest management. When we look at the emergent world, we see that in fact other alternatives can be more fruitful. Interestingly, managers and industrial relations theorists have begun looking at emergence for management strategies through creating environments of autonomous workflow organization aimed at profit. In other words, they see that what functions the best is when organization arises organically out of social relationships of workers cooperating on the job. People are creative, and collaboratively they make work run better with minimal mediation by managerial structures. Workers can independently solve problems that hold back profit, but often are impeded by managerial bureaucracy from improving business. This is something that is evident to anyone who's ever worked in a subservient position. Social order emerges from the complex interactions of individuals united in an effort through largely decentralized person-to-person networks.

But there's work and then there's work. There is a complex interplay between emotional bonds, aspirations, incentives, and a system of control that maintains an individual's participation in the workforce. Workers engage in work not because they are necessarily personally committed to their job, but also because of a compulsory system of discipline. We work because we need to pay the bills, and if we don't work how they want us to, there's an array of disciplinary measures in place to force us back into line and to work harder. On the one hand, you need the voluntary labor and initiative of individuals creating solutions to problems in an unmediated collective environment. On the other hand, you need to ensure that people work and do so for the profit of the company. That mediation creates inefficiency and antagonism.

The rub here though is that there's an inherent tension in the attempt (selforganized capitalist workplaces) to empower workers

vessels it was meant for, and thus both wasted humanity in its creation and made the effort in vain.⁴

The focus on central planning and party discipline of these governments explains their fascination with crowds. Mass games, large orchestrated exhibits of synchronized movements and images generally telling official party history, and military marching formations can be viewed through this light. It was a totalitarian fantasy to reduce the chaos of the crowd to the discipline and organization of the committee, politburo, and sect. People are transformed into colors, objects, and components moving much as a machine does, and without any relationship to their aesthetic creation except their implementation of the planned spectacle. Mass games are a metaphor for the totalitarian imagination in which the party can drive all of society through central planning, and where society is mobilized into an amorphous mass unified around the thought of the planner.⁵

Both traditional micro-management and centralized planning of Marxist-Leninist governments (USSR, China, Cuba, and so on) were likewise bound to suffer systematic problems for similar reasons. Acting at a higher level of organization, such strategies attempt to directly cause activity in systems with different logic at lower levels, where simple causation is materially impossible in the way conceived. There simply is no way to force the complexity of workforces into the logic of individuals in a boardroom. Nothing gets done without the collective intelligence and emergence of order from workers interacting in an adaptive system. It is literally impossible to engineer liberated societies in the manner of social

⁴ Fisher's describes the history and situates it well as a more general phenomenon in Mark Fisher, *Capitalist Realism: Is There No Alternative?* (Ropley, Hants, UK: Zero Books), 2009.

⁵ The documentary, *A State of Mind*, provides an interesting look into this phenomenon in contemporary North Korea. Daniel Gordon, *A State of Mind*, DVD (New York: Kino International, 2005).

unpredictable powers that seem beyond our grasp and defy prediction.

How does a riot happen? Or how did the financial crisis which began at the end of the first decade of the millennium come to be? What reality is there behind the mythology of the Great Men of history? Did a small handful of armed guerrillas in the mountains really overtake Cuba? Did Hitler conquer Germany? How was Russia brought under the tyranny of the Stalinist bureaucracy? Hierarchy emerging from non-hierarchy, apparently spontaneous events, disproportionate influences of actions on the course of history, the impossibly complex ping-ponging of individuals' actions in creating riots and revolts, and power which takes on a life of its own, these phenomena need explanations and interventions. If we were able to connect societal functioning to the world of actors systematically, a foundation could be constructed to approach these problems. In our new century such issues have become too present to not take up in light of the events of Egypt, Tunisia, Latin America, and Occupy, the disruptions in China and India, or even worker unrest in the United States. Each month the political landscape shifts, revealing slowly a changing world and unfamiliar environment for those who seek the transformation of society.

This series of problems is connected by key characteristics and relationships. The events are more than the sum of their parts. New things appear that do not share the traits of the actions, parts, and structures that produced them. It is this *coming out from* that will take up the course of this work and lead us through biology, power, agency, and cognition. This is the problem of emergence.

Living Systems

Emergence is a product of systems that exhibit forms of complexity. In fact, one definition of complex systems is that they are systems in which agents or elements interact in a way that produces emergence. Complexity itself, and the systems that exhibit it, would require a whole book for full exploration. Instead, we will look at what some of the notable features of complex systems are, and specifically those that contribute to our understanding of agency and events in the political world of societies. Such systems exist in a range of domains: raw physical forces, astronomy, biology, and psychological, chemical, and social systems. We find emergent behavior in the interaction of forces within subatomic particles, large scale interactions of planetary systems and galaxies; we also find emergent forces within weather like hurricanes, geologic phenomena like earthquakes, and so on. Non-living non-rational systems can produce emergent forces as real as the fury of a tornado, and out of chaos produce reliable orderly large-scale emergent events.

If we look ahead to the exploration of social emergence, the treatment of these non-living systems will be limited. Though they are no less examples of emergence and there is a great deal to learn from there, the primary task will be understanding the living systems that produce emergence. This is because living systems are most closely linked to social systems to the point that one could reasonably ask whether a distinction between living and social systems is even worthwhile. More importantly as politics agents, we have a setting off point within the living world. Our perspective and framework derive from such systems, and it is the characteris-

be followed when. Workers instead produce the rules collectively through their interactions and follow some level of discipline. The example of work-to-rule strikes shows the ability of people to emergently create organization in the face of attempts to impose order constructed at a different level and points to their ability to destroy and replace it at will.

There are darker examples, such as the USSR's attempts to build the Belomor canal. The canal was taken by the Soviet authorities as a triumph of central planning in the Soviet economy using gulag labor. The canal was conceived as part of building industrial infrastructure necessary for transforming the Soviet economy into a functioning industrial economy. The building of the canal cost countless lives and created massive suffering for the gulag laborers who built it.³ Separated from the reality of construction on the ground, and insulated from the creativity and collective knowledge of the laborers forced to work under tight centralized discipline, the bureaucracies could not produce a well-functioning project. Though often ignored, the individual and collective creativity of workers serve a crucial role in making plans and engineering function properly in implementation. Workers solve problems with collective intelligence that could neither be planned for nor anticipated by bureaucracies. The massive financial and human costs, prison labor, and so on of the canal are severe enough to show the dangers of central planning. Yet even more ironic is that the canal itself ultimately served no function except to transport foreign dignitaries and party officials on tourist ferries as a propaganda effort. The canal was never made wide enough to transport the industrial

³ An extended history of such is contained in Cynthia Ann Ruder, *Making History for Stalin: The Story of the Belomor Canal* (Gainesville, FL: University Press of Florida, 1998).

A traditional method of striking called work-to-rule uses exactly this tension. Working-to-rule involves following all the formal rules and standards management creates, but which are essentially never followed precisely because to do so would be too inefficient. Before mail sorting and processing was mechanized, in theory workers were required to weigh all letters to ensure proper postage was paid. Workers in the Austrian postal service typically did not weigh letters that were clearly underweight, thereby obeying the rules in spirit but modifying them to ensure workflow. During conflict with management, they began weighing each piece of mail, which tied up deliveries significantly. Workers thereby effectively rebelled against management through strict obedience.² This manipulates management's weakness in organizing the workplace from above.

It is successful because when workers actually follow all of management's rules, work stops. This is due to the fact that the rules created by managerial hierarchies do not reflect the reality of daily work life. The bureaucracy of management is an emergent product of the company separate from the workforce. The rules they create are often contradictory, inefficient, and could not function if they were applied fully. Workers know this and selectively ignore them without ever spelling out in paper or deciding explicitly which rules they follow. Work-to-rule shatters this emergent order by implementing the artificial regime of management, grinding work to a halt by following the rules that cannot be applied at that level.

There is a subtle genius here. One on hand, it means that the rules and order of which management conceives aren't really followed, or at least that workers selectively and intuitively follow rules in a way that allows work to continue. This is done intuitively—workers do not generally sit down together and decide which rules will

² Industrial Workers of the World. "Work-to-Rule: A Guide" ed. Libcom Collective (2006), *passim*, accessed April 27, 2016, libcom.org.

tics of those systems that give us the tools to gain deeper insights into the politics of emergence.

A Living World

We inhabit a living biological world. Our bodies, environment, social world, and cities all exist and evolve either as or because of living organisms. There's something special about the way living things work. Living organisms and systems change and develop new capabilities over time (evolution and adaptation). Through the march of time, life takes on new properties to survive and adapt to its environment. Our planet has some amazing examples of this like bacteria that developed to live within volcanoes or that survive within nuclear waste, or even the coconut palm, which developed the ability to travel across the seas with its seeds to find new shores to grow upon. Living things and systems are able to respond to and create new situations based on their environment and neighboring life. Trees shed leaves to survive the winter; people gain immunity to diseases through exposure; and streams of traffic keep moving around accidents that block their course.

Most importantly, living things are emergent. New properties emerge out of the organization of their parts (organs, cells, and units). In a basic sense, a living adapting organism is the most obvious example of emergence. Out of countless chemical/physical events and reactions, a more highly organized entity emerges—life. Life constructs larger structures though; organisms join together; they struggle, co-evolve, form ecosystems, make war, and cooperate. Life selforganizes forests, cities, and our whole planet. Living organisms are systems, but they also build larger scale systems through their actions. The world itself as we experience it is an emergent product of the interaction of countless living organisms bound together in vast networks of systems.

The connection between biology and emergence traces back to at least to Darwin, who proposed a process of natural selection in which traits were (somehow) promoted or inhibited across time, which led to adaptations to increase survival or the flourishing of a species. It's easy to misunderstand how this works in practice. Darwin did not mean to imply that this principle applied to individuals per se. Given the complexity of biological systems, many living things may happen to survive while others more adapted to survival can die. Darwin wrote:

It may be well here to remark that with all beings there must be much fortuitous destruction, which can have little or no influence on the course of natural selection. For instance, a vast number of eggs or seeds are annually devoured, and these could be modified through natural selection only if they varied in some manner which protected them from their enemies. Yet many of these eggs or seeds would perhaps, if not destroyed, have yielded individuals better adapted to their conditions of life than any of those which happened to survive. So again a vast number of mature animals and plants, whether or not they be the best adapted to their conditions, must be annually destroyed by accidental causes, which would not be in the least degree mitigated by certain changes of structure or constitution which would in other ways be beneficial to the species.¹

It is only when we look at broader statistical trends that the evolution of the species can be said to take place.² Within the lives

¹ Charles Darwin, *The Origin of the Species*, (1872), quoted in Elizabeth Grosz, *The Nick of Time: Politics, Evolution, and the Untimely* (Durham, NC: Duke University Press, 2004), 49

² Grosz, *The Nick of Time: Politics, Evolution, and the Untimely*, 46–61.

life and modeling integrates the lessons of emergence through its centering on levels and the special behavior of living systems.

This isn't to say that individual analyses of sociologists, philosophers, or political thinkers are irrelevant. Rather it's to delineate how different types of analyses put us into different relations with different points of the system. Models abstract features to make them manageable. They represent reality so we can play with it and get results that approximate reality, more or less. They reflect reality then, but they are not reality. Likewise, the role of the political thinker isolates other features of society, crafting a narrative and arguing for threads. Both reflect reality and have their own role. Looking at the difference between those two modes of analysis illuminates emergence. The multiplicity of perspectives characteristic of emergence produces those different paths to discovery. Living systems create different channels we can explore, and each channel contains truths and projects singular to its own domain. Emergence shows us the limitations of the nature of our inquiries at least in attempting to grasp all social phenomena from the comforts of the armchairs of political strategists. Modeling can show us the emergent behavior of different elements of systems at certain levels, but it is limited by its variables, perception, and level of analysis. The same is true with individual analyses, statistical regressions, or experiments in action.

The uptake of all this is not only limits, but also suggested directions for action. First, emergence allows us to understand specific failures and avoid them, showing more promising paths. For example, levels of organization and causality demonstrate why attempts to control individuals and society on a broad level fail. At work, micromanaging is a good example of how trying to impose upper-level plans directly on groups actually breaks down efficient production (except when the workers disregard managerial discipline). Bosses micromanaging disrupts the emergent workflow through their attempts to insert concerns from the managerial level directly on the plane of the employees carrying out the work.

properties that the individuals do not, even though the individuals create it. This isn't to say analysis is impossible or unimportant; quite the opposite is true. As political agents, the complexity of living systems limits our predictive and anticipatory power. Yet there are other tools available that let us address complexity, levels, and emergence.

Today's complexity science in practice bears this out. Unbound by prior radical thinkers' methodologies, today's scientists use artificial modeling of complex systems to make projections. Researchers of the dominant ruling forces (economists, political scientists, sociologists, biologists, military planners, law enforcement, and so on) look to large-scale modeling to help guide their attempts to drive society. In 2013 complexity researchers used emergence theory to predict worldwide disruptions surrounding food, which made international news and exposed a wider trend of military and government researchers attempting to outpace explosive protest movements and maintain social control.¹ The prevalence of such models is becoming deeper, touching everything from election campaigning, the National Weather Service, military models of artificial life in warfare, and law enforcement's attempts to use passive technology to track potential radicals.

This is the burgeoning field of artificial life, or more mundanely simply modeling. Models exist, but as of yet they are very broad. Still, reflect on the fact that it is through modeling the system as a whole that the path of hurricanes and famines, spread of disease, and so on may be tracked rather than just contemplated by thinkers creating lists of historical events and trends. Likewise, this departs from the traditional sociology of individual researchers trying to pinpoint trends using their reflection in combination with citing studies, and extrapolating an order in a linear manner. Artificial

¹ Marco Lagi, Yavni Bar-Yam, and Yaneer Bar-Yam, "UPDATE July 2012—the Food Crises: The US Drought" (July 23, 2012), accessed April 27, 2016, necsi.edu.

of particular individuals, a number of other factors (being in the right time or the right place for instance) may end up determining their personal circumstances of survival, health, and proliferation. At a higher level of biologic organization and over time, patterns of emergent biological orders evolve.

From the Biological World to Emergence

To understand a living systems approach to anything social (let alone struggles and movements), we must first understand the nature and functioning of such systems. First, those things are living or have life, and second they exist in systems. A definition of life itself is a well-worn philosophical battleground. Whatever it is that makes something alive versus inanimate, living things are more than a list of their chemical facts. They are higher-level organizations of chemical components that exhibit all the things we know living things to do.³ Defining a system is equally treacherous and would represent another detour from our road. Roughly, living systems are organized; they have things (living and non-living) in interconnected relationships; and they have properties and behavior specific to their arrangement. Apart from the philosophical and scientific jargon, living systems are organized groupings of a particular kind. In the following discussion, we'll get a sense of the types of things that living systems do, and in the process better understand life and systems.

One of the hallmarks of our experience as humans is that our world is ordered, organized into levels. This is to say that biological and social reality isn't flat like a plate where everything is laid out next to each other. Instead there are worlds of atoms, worlds

³ We could make any number of lists here (adaptation, evolution, self-organization, reproduction, etc.). This is mostly incidental to the following arguments, but worth studying for those with interest. From the emergentist perspective, see Bruce H. Weber, "What is Life? Defining Life in the Context of Emergent Complexity" *Origins of Life and Evolution of Biospheres* 40, no. 2 (2010): 221–229.

of chemicals, worlds of cells, creatures, eco-systems, and galaxies. There is the level of the creatures and plants in an area, and then the level of the forest itself. There is our settlement, and then the mountain range we live in. The body has organs. Within organs are cells, organelles, enzymes, chemicals, and so on. Society has individuals, groups, formations, structures, etc. As time rolls on, the levels change and affect one another; new levels emerge and others crumble. The world of living systems is the world of organisms, bodies, minds, ecosystems, bioregions, and societies.

What happens at different levels is organized. For example, DNA is the hallmark of life as we know it. Biologists now have sophisticated knowledge of how DNA is transcribed and replicated, and how it produces proteins within the cells that make most of the behavior of living organisms possible. When we talk about cells, we can talk about the order of DNA, proteins, membranes, and so on. There are rules of how DNA functions in cells, how cells work, the role of the specific enzymes or proteins, and so on. These rules and behaviors are consistent, regulated, and predictable. But these are not identical universal rules that apply willy-nilly everywhere at all levels and at any time. Though my arm runs on the power of DNA, we have different concepts and order for my arm than for one cell in my arm. We could look at DNA forever, but it would not tell you about why dancers move the way they do. Dance is made possible by the activity of DNA, yet DNA's organization and that of dancing are different. The rules in each domain are distinct.

A Single Spark Can Light a Prairie Fire

Higher levels are generated by lower levels, and yet the path is not evident. This is because the individual pieces are hard to separate, and because of the complexity of interactions among the pieces. How do all the cells in the arm of a dancer add up to a graceful or clumsy maneuver? *Feedback* is an integral concept to under-

about these situations from others when similar events did not take place. Yet they share an attempt to isolate the interaction of individuals with their respective factors (actions of Bouazizi, content of Obama's message, social media in the Arab Spring) with the overall event.

In fact, the causality is much more complex than that. Similar to explaining a riot, what makes people vote is complicated. It may be useful to isolate single elements to look at them, but that's not how those decisions are made. Even when we're not in physical proximity to each other, such as in riots, crowds, traffic, and so on, our political decisions are made through constant dialogue among ourselves on a worldwide scale (though obviously how worldwide and to what extent depends on the individual event, too). The decision to escalate protests, enter into the electoral world, or modify my relationship to those movements comes not in isolation, but instead within a total framework of the world political environment, the forces around me, and the decisions of people I know, my own history, etc.

Both levels of organization and complexity can thus change the way we look at political events, but emergence itself also makes its own contribution. Consider the newness of emergence. With emergence, things that are not contained (however we understand this) in their parts come into existence. Neither study of its parts nor the thing itself will tell us the complete story of the emergent thing. As we said before, no list of chemical reactions could tell us about the life of a cell. Likewise, with political entities we are similarly limited. Take the State. If we look at the institutions, personalities, and functions of the State in society, we will fail to understand the way in which the State is created through the relationships of individuals throughout society. Yet looking only at those interactions will not make visible to us the overarching force of the State in society. The State is more than the sum of the interactions of individuals that create its reality. It is an emergent force beyond the level of individuals, though constituted by them. The State has

While it may seem intuitive, in fact it goes against a large portion of liberatory thinking and tradition. Adoption of different approaches as political agents will not elevate us above the system we reside in nor the emergent forces that are beyond our immediate control. Had we been participants in the crowd in Tunisia, we would have had no way of knowing that such an event would have the effect it did. Neither could we anticipate the effect of the struggles that occurred surrounding Bouazizi's suicide. Our position within the tumult of actions places us in a poor vantage point to the stage upon which social forces act out in history. We do gain insight about emergent events, but only when we switch frames to that higher-level of analysis, and neither translate directly into each other. Each level has its own domain, logic, practice, and analysis.

Likewise, within levels, complexity exceeds our capacity to follow the movement of social forces. It is logical that we would be unable, say, to trace the actions and causality of each person in a crowd that comes to take part in a riot.

The riot is made up of all the myriad thoughts, beliefs, desires, physicality between individuals, motions, and experiences of all the participants. Each motion, action, and response in combination yields uncountable interactions each defining each other in a dizzying array of reactions. Though it's readily understandable why it's difficult to think that way, we regularly attempt to do this anyway. Much of political thinking is directed towards applying the logic of individuals to these group situations, something emergence should make us suspicious of.

During the Arab Spring many activists and some in the media sought to attribute the protests to the role of social media. In Tunisia the suicide of Bouazizi was cited as the cause of the disruptions. Obama's messages of hope and change in 2008 are argued to have caused youth, blacks, and Latinos to vote in record numbers. Surely all these things played roles in the events analyzed. Likely these analyses seek to capture what is different

standing living systems. Things don't happen in isolation in bodies, ecosystems, societies, or worlds. They occur in the context of infinite other acting entities that are all responding to the changes around them.

For example, for every chemical reaction in each individual cell, nearly every other cell responds in one way or another through hormones, intercellular signaling, consumption and generation of energy, and so on. Take oxygen. Cells use oxygen in their basic functioning. Cells use up oxygen in making energy, and produce carbon dioxide as a byproduct. Oxygen is breathed in; carbon dioxide is breathed out. Oxygen and carbon dioxide can build up in the bloodstream of animals in various proportions. As each cell is consuming and producing oxygen and carbon dioxide, there is a balance in the blood. Too much carbon dioxide in the blood causes a chain of reactions telling the cells to slow down, use less oxygen, and produce less carbon dioxide. With each change in direction, every other cell in the body is affected in one way or another, though obviously some more than others. The actions of each cell resonates with all others in essence. It is like a web in which pulling one strand pulls on every other strand.

For even the simplest event like lifting a can with my hand, the sheer number of chemical reactions and atomic movements, as well as all the physical forces involved, are overwhelming. Imagine that I could name every chemical and every event in all the cells of my arm (which would be in effect infeasible because of the sheer number of cells, reactions, complexity, and so on). It would be impossible in practice to trace exactly how my arm moved. A full explanation of a single movement would involve all the reactions and occurrences in cells and components that play a role. Yet, if all cells are being inherently affected by each other, responding to each other, and sending signals to one another, then in every event, such as a motion, countless cells and causes would be involved. Looking to the oxygen example, we see that in living systems causes are tied together. Individual units are inherently bound up to the goings on

of all the other units linked to them in systems. All their actions are in feedback with one another. The contribution of individuals must be described in relation to others because all causes are inherently linked. They refer to one another to the point that their actions are mutually referential.

Think about a crowd in a frenzy, perhaps if there's a fire in a building. If we want to trace the paths of all individuals trying to escape, we can simply look at how they move (their intentions, paths, abilities, and so on). As each person moves (causes motion), every other person in the crowd reacts to a degree and moves as well, though to greater or lesser degrees based on their distances to one and another, the chairs and exits in their way, and so on). That movement influences everyone else around: if someone turns in front of me my path is blocked and I move right, thereby altering the course of those behind and to the right of me, and so on. This is feedback—the echoing, amplification, and mutual resonance of causes in a complex system. One special hallmark of living systems then is that the behavior of any individual or component cannot easily be understood to act without looking to a greater system of causes. Though this seems intuitive in a sense, it goes against our experience of the world. As individuals in crowds, we often do not perceive our own path as inherently intertwined with that of the crowd as a system. We perceive it as arising from our will, and perhaps feel frustrated by people who stand in our way.

The Identity of Individuals

Looking at the complex web of causes behind my arm moving raises additional problems. What causes are *my own* causes that make *my arm* move? Is it merely my will or my muscles, or does it include the gases and forces that my arm moves through, or the compounds that fuel its movement? We cannot only look at people to understand their actions, but rather we also need to see the

Emergent Potentials and Limits: Applied Knowledge and Nature

Emergence and living systems teach us two kinds of lessons that help us struggle: lessons about what we know and how we know it, and lessons about the nature and qualities of the social world. The most intuitive and obvious outcome of these ideas are as limits of what we can know, understand, and do. As aweinspiring as emergence is, it makes clear the limits of our minds and capacities. Our abilities to predict, control, and interpret living systems are limited by both our own capacity to follow them and by the sheer force of dominant powers within. On the streets of New York City, the patterns and undulations of the crowd are impossible to see. We only get a sense of it in glimpses. From the trees, the shape and evolution of the forest is obscured. Or take the example of Mohamed Bouazizi, the Tunisian street vendor whose suicide served as inspiration for many in 2011. As individuals, our ability to register events like this and make predictions is quite limited. Other such suicides have occurred throughout history without the same effect. Similar causes, based on their context, have dissimilar results. From the level of agents where we stand, we are unable to pull ourselves out of our own situation to the higher-level of organization, society, and track the events of our lives towards larger emergent ones. This is a hard limit based on the structure of society and the limitations of our minds.

Interest, unfortunately, in emergence has been largely academic, and it's found much more popularity as a tool for metaphors about existing theories than in something worth taking seriously on its own. Specifically, there has been a failure to thoroughly consider the implications for practice of viewing social struggle and societies via emergence. Previously I've tried to introduce emergence in the course of analyses of post-capitalist economics, workplace organizing, and political organization within history.¹⁵ Beyond limited attempts like these, the field remains wide open.

¹⁵ A few examples of such are Scott Nicholas Nappalos, "Ditching Class," in *The Accumulation of Freedom: Writings on Anarchist Economics*, eds. Anthony J. Nocella, Deric Shannon, and John Asimakopoulos, (Oakland, CA: AK Press, 2012), 291–331. Also see the three-part essay *Towards Theory of Political Organization for Our Time* (2011), accessed April 27, 2016, libcom.org.

complete environment in which actions take place. In the world of individuals and causes, separating *the agent* out is, in practice, difficult. This is because biological entities are historical, and have both an individual developmental story and a collective one connected to countless other life forms.⁴

That history is not monodirectional. The story of each living thing is constantly itself contributing to the vast changes swirling around us at all time, and being redefined by all the others it is in constant connection with, and which indeed make up its being despite being in some sense separate. There are all the living organisms inside me, on my skin, and in the air, the energy around me, the forces of physics, the energy my body creates and absorbs, and so on. Bacteria live on my skin, in my gut, and throughout my body. Without them I could not survive, even while we normally would not include them as a part of ourselves. When the food I eat is digested and sustains me—we tend to think that *we* do it. What about the myriad of organisms involved? Is the bacteria part of me? Is it separate? In what sense is the digestion mine? Two things are true: there is something that is me that is digesting, and there is a whole world of causes and effects apart from me occurring. In living systems those relationships are nearly impossible to pull apart.

Take the example of mitochondria, the energy factory of cells. Mitochondria exist within cells and help them do what they need to do. Mitochondria have distinct DNA from the rest of your cells (i.e. nuclear DNA, what most people mean by saying DNA). The striking resemblance of mitochondria (in terms of their DNA and organization) to bacteria led scientists to hypothesize that they are an adaptation of internalized bacteria (to simplify things) that was beneficial along the way. At some stage in evolution, bacteria likely made it inside the cell and co-evolved to play a functional role

⁴ Lewontin and Levins, *Biology under the Influence: Dialectical Essays on the Coevolution of Nature and Society*, 223.

within the cell. We now consider mitochondria to be a part of us, a component of our cells.

The divisions between our environment, things alongside us, things in cohabitation with us, and parts of us are much blurrier than we believe. Rather than discovering clear lines of what is internal versus external, part of us versus environmental, in reality we are finding changing and adapting interactions between individual components and environment. The degree of interaction is so vast and complex that distinguishing among the contributions of individual components and their effects, as well as borders between elements that are neither fixed nor easily identifiable, becomes for practical purposes impossible. That is, not only does complexity make it difficult to trace the path of causation between lower and higher levels in living systems (like our bodies), but also the divisions between the components themselves are often unclear.

Disproportionate Effect

This state of feedback is not only characterized by mutual influences, but also by dramatic causes. Normally, when we combine things, you can say that we add them. Simplifying for the purpose of argument, if I use 5 lbs. of strength, I could push a 1-lb. object a given distance. If I use 10 lbs. of strength, I could push the same object double the distance. The relationship between the increase of force I use produces a proportional increase in effect; the distance is increased by the same measure. In emergence, it doesn't work like that.⁵

A popular metaphor for this is a butterfly flapping its wings in South America, causing a tsunami in Japan. The butterfly's wings do this because they help initiate a series of events that have much

⁵ A more robust account of the physics of moving an object would also complicate the example I gave of course.

analysis of capitalism and predictions for how the system evolves clearly use his interpretation of that framework in a way that is productive and is useful for revolutionaries.¹² While critical of liberal reform and the social democratic tradition Wallerstein has been often agnostic on other possibilities or at times bordering on similar positions he critiques. His positive proposals then have limited applicability for those who seek a different route to a society beyond the State and capital. Still, for such theorists it is clear that they've moved beyond the methods, vocabulary, and theories of the left they grew out of and are producing interesting novel analyses that are relevant and challenging.

A few scattered articles have explored more overtly revolutionary implications of emergence and complexity in preliminary ways. Nicole Pepperell's dissertation attempts to cash out a Marxist approach to capitalism via emergence. Pepperell seeks to make dialectics compatible with emergence, and to recast concepts of Marxist political economy into the language of emergence. If we set aside whether polar dialectics are compatible with the multidimensional world of emergence, we will see that this is an important attempt to wrestle with our changed understanding and struggles with large scale forces like capitalism from a critical perspective.¹³ Richard Lewontin and Richard Levins explore emergence in depth as biologists. However, their aim is not to elaborate a framework from an emergence perspective, but rather to explore biology through the lens of Marxian dialectics.¹⁴ They do however draw interesting conclusions for social change out of these issues.

¹² For example, look at Immanuel Wallerstein, "Crisis of the Capitalist System: Where Do We Go from Here?" The Harold Wolpe Lecture, University of KwaZulu-Natal, November 5, 2009, republished in *Monthly Review Zine*, November 11, 2009, accessed January 24, 2016, mrzine.monthlyreview.org.

¹³ These ideas are most explicit in Nicole Pepperell, "Disassembling Capital" (PhD diss., RMIT University, 2010), accessed April 27, 2016, rtheory.files.wordpress.com.

¹⁴ See their collection of essays, Lewontin and Levins, *Biology under the Influence: Dialectical Essays on the Coevolution of Nature and Society*.

of the break from Marxism by Bookchin was a shift towards the more methodologically open process Rucker speaks of and coming to view struggles and the new society in terms of emergent relationships between people and their environment. Like Purchase, Bookchin uses ideas about living systems and complexity in both his critiques and proposals, without necessarily elaborating a theory of emergence.

There are three aspects to the role of (perhaps proto-) emergence theories within anarchism: an understanding of the natural world as exhibiting emergence out of complex systems, using that functioning to demonstrate weaknesses in the dominant power system, and proposals for social change and future society drawn from emergence. In Reclus and Kropotkin, these are implicit threads that run throughout their thought. Proudhon directly addresses the phenomenon and uses it to critique the State and capitalism. Purchase raises the potentials of emergence for anarchist thought, including ecology and our relationship with the natural world, though without elaborating a theory of emergence or agency. These developments are particularly remarkable given that the general thrust of European thinking from the 1600s until the present can be classified essentially as reductionism.¹¹ Such science was reductive in so far as scientists and thinkers broke up their subjects of study into analyzable parts and sought to reconstruct them piece by piece. This method led to the emergence of science as we know it, and only hundreds of years later did the limitations of such approaches become clear.

More recently some radical thinkers have taken up emergence directly and drawn out lessons. Immanuel Wallerstein, Dante Arrighi, and other World Systems theorists should be mentioned. Wallerstein in particular was influenced by complexity theory and his

¹¹ Lewontin and Levins, *Biology under the Influence: Dialectical Essays on the Coevolution of Nature and Society*, 183. The authors here however mean a more specific type of reductionism that would negate emergence conclusions. This is not necessary for the argument that follows.

greater power than itself. The example of the butterfly is actually a distortion because it abstracts the way in which the butterfly is merely a single link in a chain. The butterfly flaps its wings and flies upon the winds caused by temperatures, lakes, oceans, and currents. Other wings, machinery, factories, mountains, and so on shape the air that moves the butterfly. In turn the butterfly has an effect upon the air it flies upon. The air is systematically connected to waters, such as seas, which respond to temperature, force, and shifts in the air above. Butterflies flying cannot be extracted from all the forces of nature, living things, and interactions of the systems they exist in. In this way then in theory the flapping of the butterfly's wings could initiate a series of events that cause a tsunami.

Taking another example, think of someone applying force on a bicycle. Weather is a complex system that can produce unpredictable events like large gusts. In the broader system including the environment and all the forces moving a cyclist, a random rapid gust can make the cyclist's application of force to the pedals have a disproportionate effect by changing the action's relationship to motion through air. This is an extreme example, but it illustrates the ways in which in such systems causes can be amplified dramatically, and even take on new characteristics in light of the strength of response.

Like the disproportionate power of the butterfly's wings flapping, complex (living) systems exhibit what can be called nonlinear causation. It's nonlinear because what happens isn't a straight line of actions with equal and proportional response like dominos falling in a row, but instead even small causes like butterfly wings can have disproportionate power. Social disruptions are the perfect example of this, as simple events can set off a rapid and dramatic chain of events. For example, in 2011 when Mohamed Bouazizi, a street vendor in Tunisia, set himself on fire, it contributed to subsequent protests in ways that went well beyond the act itself. The symbol of the vendor's suffering, his suicide, mobilized other forces in a disproportionate way, spreading the fires of resistance well be-

yond the single act of defiance. In a system in which parts are systematically interrelated, causes don't occur in isolation, but instead ricochet and amplify each other. This isn't to say that the suicide *caused* the protests throughout Tunisia. Instead, its effect was disproportionate because of its occurrence within a complex system that overall produced an emergent event, the ruptures of 2011. The focus of media on the event itself in some ways shows how complex systems work since it is the salience of the act of protest that is so important to us and not the conditions that allowed the act to have whatever resonance it may have had.

Both feedback and nonlinear causation make single acts difficult to trace. In a hurricane it would be hard to tell what caused any individual object flying through the air to take flight. If I had not pushed the weight, would it have spontaneously taken to flight anyway? What interactions with other flying objects, currents, reflection of winds off buildings, and so on are relevant? This disconnect occurs between the different levels of organization. We can't follow the chain from chemicals to motion, or from individuals to a riot. It requires a different level of explanation, which our minds at least cannot trace from lists of chemical facts. There is a shift from one level of explanation to the other that escapes our way of thinking. The complexity and interconnectedness of causes makes analyzing them difficult in such systems.

Levels and Properties

These systems then have forms of interconnectedness in which the pieces are mutually defined, produce effects in a broad system of interrelated causes, and do so in ways that make them challenging to parse for our minds. Within this complex web of relationships there are organized levels like we discussed. There are chemicals, cellular components, cells, organs, and bodies. Importantly, the levels don't merely differ by scale. Cells don't look like bodies

There is scarcely an historical event to whose shaping economic causes have not contributed, but economic forces are not the only motive powers which have set everything else in motion. All social phenomena are the result of a series of various causes, in most cases so inwardly related that it is quite impossible clearly to separate one from the other. We are always dealing with the interplay of various causes which, as a rule, can be clearly recognized but cannot be calculated according to scientific methods.⁸

More recently, Graham Purchase developed a unique ecological critique based on complexity and chaos theory. He posits a natural order that is stifled when the emergent order of society is constrained through centralized or dominating minorities. Starting in the 1980s, he connected the potential for climate crisis to capitalism and the State via emergent disequilibria that might problematize human societies.⁹ One could object to the narrative of naturalness as being arbitrarily defined. Where would the line be drawn exactly in terms of nature on different forms of social organization? Still, exchanging naturalness for values is an obvious way to see the utility of Purchase's writings. There are better and worse ways to organize societies based on the goals the author argues for, such as ecological health, solidarity, and human flourishing; and those can be connected to an understanding of the natural phenomena of emergence that could either encourage or inhibit achieving those goals.

Though it would be a longer argument this is at least part of what is going on with Murray Bookchin's social ecology.¹⁰ Part

⁸ Rucker, *Nationalism and Culture*, 28.

⁹ His collection of writings here gives a good overview: Purchase, *Anarchism and Ecology*.

¹⁰ See for example Murray Bookchin, *The Ecology of Freedom: The Emergence and Dissolution of Hierarchy* (Palo Alto, CA: Cheshire Books, 1982), accessed May 7, 2016, libcom.org.

was a key factor in disguising the functioning of social systems. “Social power, inaccessible to the senses in spite of its reality, seemed to the first men an emanation of the divine Being, for this reason the worthy object of their religion... Even today, the economists have barely identified the collective force.”⁶ Nor did he believe that emergence was produced in a unidirectional manner of individuals creating higher-level organization, as can be seen when he argued that “(t)hrough the grouping of individual forces, and through the relation of the groups, the whole nation forms one body: it is a real being, of a higher order, whose movement implicates the existence and fortune of everyone. The individual is immersed in society; he emerges from this great power, from which he would separate only to fall into nothingness.”⁷ Here the individual is seen both as a product of society and an element producing the society shaping her at the same time. Proudhon clearly elaborates the novel aspects of emergent social forms, and connects them to the individual with all the political implications of the view at the center of his thinking around the State and even his economic ideas. It’s safe to say that this aspect of his contribution is not well recognized, and though his ideas on emergence are not fully developed, he is one of the few thinkers both to utilize that framework and to connect it to his critique of capitalism and the potential of liberatory society.

Anarchist thinking around emergence was not limited to describing nature, but rather it was also integral to an understanding of power and the capacity of groups for their own liberation. Rudolph Rocker, the German union organizer and theorist of anarcho-syndicalism, elaborates an emergence approach to how radicals attempt to sort out history and courses of action. Criticizing the Marxian view of history as determined purely by economic forces, he wrote:

⁶ Ibid., 661.

⁷ Ibid., 663.

and bodies don’t look like cells (except when you go back down to the level of cells). At different levels, new elements emerge. Emergence is made possible by the different levels of organization by complex systems. Take a very simple example, salt. When sodium and chlorine combine, they create a familiar compound: salt. Salt has properties that neither sodium nor chlorine has—the tastes of salt, its formation of crystals, and so on. Sodium is a silvery-white very reactive explosive metal. Chlorine is a pale yellow gas. Salt is a stable, innocuous compound unlike its dangerous parents, sodium and chloride.

The new properties of salt are caused by the atomic properties of its components (sodium and chlorine). Yet the properties of the new thing are not described by just putting them together. The effect, salt, is more than the sum of its parts. Whatever way we look at it, the metallic and gaseous properties of sodium and chlorine don’t add up to salty properties. However the combination occurs, it ends up producing something fundamentally different. Thus with emergence there are new things that emerge from lower levels, and the properties that emerge are more than simply the sum of the properties of their lower level components.⁶

Emergence, then, is a theory of organization and existence across time. Chemicals interacting over time create compounds. Cells replicating and dividing grow until a baby is created (with a lot of work along the way). Out of the chaos of heat and pressure over a time period, a highly ordered diamond forms from carbon. Living systems are merely a more particular case of these, as are social systems within living systems. Representative government evolves alongside emergent forces of wealth and power that interact to try and wrest more and more control over the forces of the State from other powers and the citizenry. In complex adaptive

⁶ With the case of salt, we could probably produce a sufficiently robust chemical explanation of its chemical properties based on the atomic and molecular facts. Still the example is illustrative, so it is worth keeping.

systems, there are ordered or organized interrelationships among components in the whole that act together to produce new events, structures, or properties.

Stability and Disruption

This world is not simply chaos, however. Systemic order also exists. New things do not emerge without organization. New things emerging and causing transformations in massively complex chains may seem mysterious. This is actually counterintuitive since it doesn't feel that way. We walk on the ground and eat food regularly because of the stability of our world, not because of its chaos. We can rely upon the sun rising, rivers flowing to the seas, and people behaving largely in a regular fashion. Every day the efforts of billions of people deliver food, medicine, energy, and goods to people all over the world with remarkable regularity. The order itself is emergent, the product of countless interactions of pieces in a systemic whole.

Living systems in general (though not only living systems) are selforganizing. Self-organization means that they are able to respond as a system with ordered internal behavior. Consider body temperature in mammals. The environmental temperature fluctuates, but the self-organizing system of the mammalian body maintains a stable body temperature throughout. The body emergently produces consistency through the interaction of all the heat-bearing and heat-shedding activities of the cells, ingestion of compounds, sweating, cool/heat-seeking behavior, and so on. Living systems then can respond in an ordered fashion to neighboring causes (such as when our bodies respond to infections), and over time tend to evolve. On a short timescale, they adapt. As we reproduce, as all living systems do, the offspring respond to their environment and traits are promoted or inhibited in an ongoing cycle of reproduction over time. On a longer timescale,

organization with a new course of life and of progress before it.⁴

It was not only the scientists amongst the anarchists who came to emergence. Pierre Proudhon, the French socialist and member of the First International Workingmen's Association, was an important early thinker of the anarchist movement. He influenced key figures, such as Bakunin, Kropotkin, and Reclus, though he held important differences with the collectivist and communist forms of anarchism that developed thereafter by preferring cooperatives and a people's bank in what he called mutualism. Laying out his theory of power, Proudhon argued that there are specifically collective forms of power that are not reducible to individuals who constitute them.

It is not only individuals that are endowed with force; collectivities also have theirs. To speak here only of human collectivities, let us suppose that the individuals, in such numbers as one might wish, in whatever manner and to whatever end, group their forces: the resultant of these agglomerated forces, which must not be confused with their sum, constitutes the force or power of the group... Collective force being a fact as positive as individual force, the first perfectly distinct from the second, collective beings are as much realities as individual ones.⁵

This argument may seem out of place or extraneous except that Proudhon then immediately uses the concept of emergent powers to construct his critique of the State, a topic we will return to. Likewise, he understood that the issue of our knowledge of emergence

⁴ Ibid., 217.

⁵ Pierre Joseph Proudhon, *Property is Theft!: A Pierre-Joseph Proudhon Anthology*, ed. Iain McKay (Oakland, CA: AK Press, 2011), 655.

against the State and capitalism. In his chapter, "The Distribution of Human Population," from *Man and the Earth*, he presents a view of human societies as coevolving with their environment and producing emergent *organisms* out of their activity and adaptation. His concept of geography, surely one of the earliest such approaches in modern European traditions, is on display when he argues that "(e)very new city immediately constitutes, by its configuration of dwellings, a collective organism. Each cell seeks to develop in perfect health, as is necessary for the health of the whole. History demonstrates that sickness is no respecter of persons; the palace is in danger when the plague rages through the slums."³ His geography is embedded with a picture of human (and ecological) life viewed through the prism of living systems (microcosms) that interact to form emergent structures with their own separate properties.

The earliest groupings are microcosmic, and then they become more and more extended and complex over time, to the degree that an ideal arises and becomes more difficult to achieve. Each of these small societies constitutes by nature an independent and self-sufficient organism. However, none of them are completely closed, except for those that are isolated on islands, peninsulas, or in mountain cirques whose access has been cut off. As groups of men encounter one and another, direct and indirect relations arise. In this way, following internal changes and external events, each swarm ends its particular, individual evolution and joins willingly or forcibly with another body politic so that both are integrated into a superior

³ Reclus, *Anarchy, Geography, Modernity: Selected Writings of Elisée Reclus*, 178.

they evolve. Species develop abilities that allow them to thrive in their environment and pass on mutations to their offspring.

Within the organization of these systems, there are varying degrees of stability. Just as laws operate at different levels (like DNA behaving predictably), stability too emerges in systems. Ecosystems are a vivid example of this. Out of the chaos of the innumerable parts of the forest, a relatively stable order emerges in which all the creatures and plants are connected and evolve alongside one another. A forest often can be a forest for thousands of years without gross disruptions, absorbing damage from even landslides, volcanoes, or hurricanes.

Still, it would be a mistake to see equilibrium as timeless because our world is alive; equilibriums occur, grow, change, and also break down; mass extinctions occur; forests die; seas grow and retreat; asteroids destroy regions; new forms of life evolve that colonize novel areas. In society, regimes fall; empires last a thousand years before collapsing; slavery is destroyed and resurrected; revolutions lay waste to everything people thought about governments and economies. Living systems grow, stabilize, die, and give birth to new offspring, ecosystems, and orders.

A body when ill begins to lose its order. If bacteria can spread throughout the body, the body loses its ability to self-regulate, disease may set in, and the results are potentially fatal. Chemicals run wild opening veins, temperatures increase, organs become damaged through loss of blood, and toxins from bacteria corrode living tissue. These systems then have equilibrium, which can vary. When stability or equilibrium decreases, disorder increases and space emerges for new orders to reproduce and spread.

Social Emergence

The social world is a world of emergence. Two people exchanging crops from their back yards exhibit a social relationship of

exchange. Similar exchanges on a global scale create emergent forces of markets whose effects are grossly distinct from simple one-to-one exchanges of surpluses amongst neighbors. Individuals owning property create forces within society of vested interests that create laws, attack other forces, anticipate challengers, and act nearly as organisms within a field of other emergent organisms. The interactions of individuals create such forces, but the forces themselves exhibit behavior distinct from individuals.

Emergence then is a potential tool for understanding how societies and social organizations develop, unfold, and change. In a cell, all the enzymes, DNA, RNA, organelles, and so on systematically interact to make things happen. You can't understand anything that happens in a cell except in reference to the totality of causes, or at least a rather complicated chain of chemicals and structures. Society is the same. Let's take a series of examples.

Earlier we discussed the path of people fleeing a fire. Traffic is a ready phenomenon that shows emergence in societies. From pedestrian traffic to the great flows of the world's cities, the movement of people within complex adaptive transit systems exhibit the behavior of living systems. Traffic jams can be disproportionately caused by small actions by one or two individuals, such as in a crash. Slow traffic causes large shifts in the system, rerouting many people, changing the behavior of drivers, and unfurling countless events in the lives of those traveling and awaiting those traveling across cities.

Another obvious case is the growth and change of cities themselves. Far

from growing linearly bit-by-bit, cities evolve in an emergent fashion. Urban decay of neighborhoods or the boom of fashionable areas emerge out of innumerable changes happening in the homes, businesses, and streets of their areas. Those changes themselves are intimately connected to larger shifts in society, which are affected by the evolution of the neighborhoods and their residents.

Interestingly, anarchist thought had from its outset deep emergent currents within. This isn't to say that other theories were not present; some adopted dialectical or other alternatives of their day, but anarchism was unique amongst modern social movements for developing independent ideas about emergence in an environment in which such ideas were both uncommon and largely unexplored. Explicit discussion of emergence in the anarchist literature is uncommon, but the general approach is clear enough if you look throughout the tradition—something that should be celebrated and highlighted.

Two of the heavyweights of libertarian thought came to anarchism in part due to their scientific research. Peter Kropotkin became an anarchist partly due to his work as an evolutionary biologist. He is widely recognized for his foundational work on the role of cooperation and mutual aid in evolution.¹ Kropotkin's ideas about emergence are clearest in his biological writings and within his political work in which he speaks of nature and evolution. There is a clear connection between those ideas and his political proposals, but it is one that has not been made explicit frequently. Graham Purchase did so and demonstrates Kropotkin's anticipation of emergence and complexity theory in his PhD thesis about Kropotkin's thought.²

Elisée Reclus, a contemporary of Kropotkin, veteran of the Paris Commune, and militant anarchist, is famed as one of the founders of modern geography. Reclus describes in his writings on the natural world how order emerges from complex interaction between innumerable elements, and ties this to how order can emerge from the base up in anarchist society and the struggle

¹ For an overview from the sciences, see Lee Alan Dugatkin, "Kropotkin's Adventure in Science and Politics" *Scientific American*, September 13, 2011, accessed February 16, 2015, www.scientificamerican.com.

² Graham Purchase, "Peter Kropotkin: Ecologist, Philosopher and Revolutionary" (PhD diss., University of New South Wales, 2003), *passim*, accessed February 15, 2016, libcom.org

Revolutionaries and Emergence: Prelude to a Politics

Emergence is not only a tool of knowledge, but also one of action. The specific properties of living systems have implications suggestive of directions for struggle and show the limits of others. An understanding of social systems and emergence can unify seemingly disparate social categories. It gives us a foundation for critical thought and practice when applied to the social world.

Yet despite years of work by scientists and philosophers, the application of this work to a critical politics is rare. Bringing an emergence perspective to social struggles is work that must be carried out in the coming years. The connection of large-scale political questions like the nature of the State, capitalism, and hierarchical oppression are clear examples of places where emergence can inform our understanding and potentially transform our practices. What is the essence of the State? How does it reproduce itself? How can the State be overcome?

We have a general framework for understanding emergence and a direction to approaching social problems. The task of working through the specific problems is up to those of us active in taking up emergence. Addressing things like the State, capitalism, patriarchy, and so on is beyond the scope of this text and in some ways would distract from laying out emergence as a means to take a variety of positions on those issues—emergence as a metapolitical tool.

Neighborhoods can expand and decay explosively, though gradual change is more common.

People act and develop in ways that aren't simply the sum of perspectives or actions of the individuals involved. A common example of this is mob mentality, when crowds behave differently from how people normally would on their own in some sense. When combined into social groups, individuals become generators of emergent powers and behaviors that do not directly reflect their routine mental states or even actions. A mob is simply a different kind of entity than the people who are swept up into it, though obviously the people create the mob. The law reflects these different perspectives as well. There are different crimes and sentences for rioting, the acts of property destruction or violence associated with it, and inciting to riot. This is part of an attempt to segregate components of the emergent force that comes into motion, its causes, and manners of participation.

All of human life in societies exhibit emergence. The most mundane facts and changes can be viewed in a new light once we grasp the influence of living systems and their emergence within our lives. Though this is clear with the mundane, it's more profound when we look at the political world. Social organizations of power, and events contesting that power, also lie within the realm of emergence.

Though often people fixate on the power of the media, we see examples of emergent phenomena with governments, elections, and "popular support." Consider the evolution of the victor in elections. The end results of votes can differ from opinion polling, visible activity in the streets, and even established methods of advertising, funding, and hype. This isn't only because governments and capitalists attempt to socially engineer legitimacy and support, but also because of the ping-ponging of people's views, actions, and social groups. Whether or not people think a candidate is winning or not influences their likelihood to show their support and mobilize. The sense of a candidate's likely victory is complexly produced, not

from a single organ like the media, but rather from a multiplicity of factors throughout society. This is infamously fickle, including factors such as weather on voting day, positioning within the ballot, physical appearances, and so on.

Popular opinion has an emergent character that can resist even massive attempts to socially engineer the public's thinking. Politicians have repeatedly attacked social security and utilized corporate media to try to assault the vast popularity for the program. Despite such attempts, popular opinion continues to strongly support maintaining and even expanding social security, and that support alone is sufficient to stave off further attacks. This is true even without any major public force protecting or advocating for social security (perhaps until recently). Institutional liberal organizations in the past were content to accept market reforms alongside a trimmed-down social safety net, something that remains unpopular, leaving public opinion without an advocate.⁷ It is the emergent force of popular will here that poses a threat to established power, and that will is created not only through the organs of ruling powers (media, schools, think-tanks, organizations, and so on), but also through the complex interaction of individuals throughout society. In this case, power was unable to impose its will on a system that continues to reproduce emergent counter-powers against austerity of that kind.

Today social scientists have begun exploring the impact of emergence in their fields.⁸ Complex systems and emergence present narratives of social structure and behavior that link individual psychology and biology, while contributing explanations of how social structure functions in line with more basic natural phenomena. Viewing society and social structures through the prism of living systems and emergence also raises questions for those who seek

⁷ The failure of those attempts is covered in Erik Laursen, *The People's Pension: The Struggle to Defend Social Security since Reagan* (Oakland, CA: AK Press, 2012).

⁸ See Sawyer, *Social Emergence: Societies as Complex Systems*.

social liberation. These concepts reflect the divisions in both our experience of the world (as thinking agents trying to respond from our own perspective to others and forces greater than ourselves) and the emergent orders that govern everything that are beyond any of us. If things like states, movements, institutions, rights, freedoms, work, and slavery are emergent, then what questions does it raise about how things came to be the way they are? What other ways of being are possible?

Most importantly, how could we change what shouldn't be?

of facet of mental life. It isn't simply ethical positions, because within it, it contains both an analysis of the existing social world and certain practical commitments to changing it. Likewise, it's not merely a series of practices because of the necessary ethical commitments and beliefs inherent. There appears to be two factors bearing down on the situation.

First, there is mental life and the thinking of the individual. Reflection on the death penalty certainly has a role to play in bringing the agent to act, form beliefs, and maintain various desires and intentions. Reflection can change behavior, alter beliefs, and bring about new forms of thought and relationships to others. This is evident in simple ways. If I find myself biting my nails unconsciously, becoming aware of that fact can allow me to stop my behavior. It's also true of larger scale beliefs. Consider people watching television in the

1950s who witnessed the brutal repression of civil rights activists by State and mob violence. The overt awareness of brutality and repression made conscious by the perception of the images of violence led to changes regarding segregation and racism in some.⁵ Conscious beliefs like "the world is round," "capitalism is wrong," or "this world is an illusion," can have a deep influence on the course of history. Occupy's "1% versus the 99%" certainly had, in whatever complicated scheme we want to cook up, a causal effect on the events of history. Thoughts can make things happen. The act of reflection certainly can then have the power to transform tacit beliefs, values, and ideology alongside behavior.

Second, there is the force of history acting upon individuals. Our thinking often is changed not by our conscious reflection, but rather by the imposition of external forces on our minds. Advertising is a particularly obvious example of this. Many of the cultural associations with smoking (relaxation, rebellion, being

⁵ This has been often overstated relative to the role of social struggle however.

project, leaving that plane open and arming us with both critique and examples for moving forward in a critical liberatory struggle.

Second, emergence allows us to understand and act upon the potential of political events. It presents an alternative means of understanding political events that moves away from mechanistic and determinist accounts. Emergence uses the multiplicity of levels within events and the complexity in how they unfolding over time. Doing so presents a number of available approaches to both creating and understanding action. For instance, ruptures are political events that roughly break from the dominant order of their time, often ushering in new eras. Though caused by the actions of individuals, events such as ruptures burst politics as usual to present new potentials as the equilibrium of dominant power is disrupted. These shifts are disorienting for political agents, because they are disproportionately caused by and occur with complexity that outpaces our capacity to understand them. We cause them, but they seem to us to come out of nowhere (until much later we are able to carry out a higher level of analysis). Ruptures are clear examples of nonlinear causation and emergence forces coming out of seemingly nowhere. Without understanding social emergence, the speed and depth of changes in such insurrectionary eras can seem mystical. Indeed, much political thinking is divided between belief in spontaneous rebellion and in only relying on the actions of small groups substituting themselves for larger bodies. Emergence gives us tools to see how ruptures are possible and how they come from real activity of groups and individuals before the rupture, as well as to situate them within the functioning and evolution of systems of power.

If this is right, it is evident how we can both help facilitate ruptures (though we will be unable to reliably predict them with any great accuracy) and deepen them. Ruptures are another way of saying a breakdown in the equilibrium of social forces and institutions. Think about a body struck with a horrible disease like cancer. Whole organ systems, hormonal triggers, blood vessels, and

so on are hijacked by the cancer to sustain its own life against the body it emerged from (since cancer cells are your own cells mutated against you). The normal functioning of the body begins to change and rapid shifts in the rules of normal chemical reactions, body functions, and so on occur. In society likewise, when the forces of equilibrium are functioning well, some doors are realistically closed. Our ability to help produce emergent liberatory forces on any significant basis is improbable (though it's hard to know this from where we stand at any given moment). While the system has a functioning cooling system and can absorb the heat we produce, it keeps moving. But sometimes systemic problems can break down those recuperative mechanisms and produce so much activity that the whole thing begins to deteriorate.

As that order breaks down, however, new possibilities for new emergences can rapidly explode as the previous system's means of ensuring stability break down. Political events have systemic contexts. Ruptures are merely a name for particularly extreme version of events that are more routine. How causality unfolds depends on the broader stability and equilibrium of the system, the emergent forces within, and the composition of the higher-level emergent powers maintaining order. Emergence allows us to feel out where we stand in the changes of the system, where to intervene, and how to grow with the changing forces that social struggle creates. As a framework, it gives us the ability to propose specific answers to those questions, though not any particular proposal. This isn't to say have faith in spontaneity, but rather it is the opposite; it gives us tools and an understanding of the historical reality of the dynamic between organized activity and the emergence of new protagonists in struggle. As we stand, agents trying to choose different courses of action, emergence brings to light how we are situated in a web of causes throughout society that can reverberate with other forces in society and either be absorbed, amplified, or transformed in the unfolding of political events.

is a similar and consistent mistake that came up earlier in our inquiry. As agents, we come at the world through our experience as reasoning subjects making choices. Beyond that conscious experience as agents, there is also an interaction with the world that makes up political subjectivity.

A better way to approach the problem is thinking of it as a form of cognition. Cognition is a concept of mental processes. Cognition involves mentation, but not necessarily always conscious mentation or awareness. Cognition is likewise connected to behavior. While consciousness is fundamentally about experiences of phenomena, cognition straddles the line between thought and thought embodied in the behavior and activities of agents. Roughly speaking, cognition is a broad enough concept to let us get at the problem looking at the experiences, awareness, and activity of agents. Political cognition is a series of processes both conscious and unconscious (or exhibited) through patterned activity and mental content. It is the synthesis of internal life that is acted out.

With the death penalty example, consider now an activist who does participate in associated activity, such as letters to senators, rallies, reading publications, and so on. We have a few components. There are the person's convictions about what constitutes undue killing, the role of society and prisons, beliefs about justice, and alternatives to dealing with criminals. These constitute the normative and ethical states associated with the ideas. Additionally, there are ideas about how changes might occur, actions that are warranted, and the beliefs that make up the implementation of their vision. Lastly, there are the activities themselves that both reflect the thinking and are themselves a component of what it means to hold such beliefs and convictions.

Political cognition then is a systematic relationship between thought, activity, and values in an agent. Here the previous discussion helps us understand how it develops. In a certain respect it is no different from how people come to form ideas in general. Taken another way, political cognition is a very particular sort

ertarian ideas and the transformative potential of struggle within and against capitalism.³

The initial framing itself starts off on the wrong foot, however. Consider a person who believes in the need to abolish the death penalty, subscribes to a legislative agenda to achieve that end, has all the resources necessary to start taking those actions, but never in life takes up the cause. In the sense of thought, the person has political consciousness concerning the death penalty. There is the awareness, thinking, ethical elements, and intent. Yet still, the person never moves to act upon those. This case is not merely speculative, because a lots of people do live like this. A number of factors can disassociate someone's will to implement their plans: weakness of will, distractions, alienation, depression, lack of interest, other priorities, feelings of helplessness, and so on.

In this case, we would not really think that the person has political consciousness in the strong sense, because they never act on it. The action validates the mental content of their beliefs, and specifically their intent and ethical commitments. To will something and think that it's the good or right thing to do carries with it some commitment to action. In extreme cases, if someone never acts at all, it casts some doubt at least on the depth of belief. It certainly is possible to hold things one fails to act upon, but political consciousness is a stronger kind of thing. It is one we expect to have some causal force beyond a mere speculative commitment. There appears to be an action component of consciousness.

For these reasons, consciousness is a bad framing of the issue.⁴ Consciousness reduces the role of political ideas to their role as part of experience as a subject, reasoning, and decisions. Recall that this

³ For my account of such, see Scott Nicholas Nappalos, *The Anarchosyndicalist Contribution to the Theory of Revolutionary Consciousness* (2009), accessed February 15, 2016, snappalos.wordpress.com.

⁴ On the more semantic side, consciousness carries with it spiritual connotations in popular speech, which may unintentionally encourage overly intellectual takes on the role of ideas. Framing is only so important, but it is worth a mention.

Likewise, the activities of organized bodies, even quite small ones, can in the right context have disproportionate effects. We don't need to look only at butterfly wings and tsunamis here. Anyone seriously involved in social struggle has tasted the dramatic shifts that can help when a small group in a certain moment takes action. This can be both positively when it moves a movement forward, such as in the Flint sit-down strike when the organizers made the decision to strike by occupying the factory and thereby started a revolution in workplace organizing, or negatively when small groups clumsily attack the police at the wrong moment and a protest collapses. Groups acting in a favorable context can have deep transformative consequences. In the right situation, organized revolutionaries can have a disproportionate effect either against popular power or with it. Lewontin and Levins propose a model of action based on these considerations.

In chaotic systems, anything cannot happen; only a range of alternatives within a set of constraints can happen. It would take more than the flap of a butterfly's wing to induce monsoon rains in Finland or a drought in the Amazon or equal representation of women on the Harvard faculty. Great quantities of energy and matter are involved in particular configurations for the major events to occur. Only when a system is poised on the brink can a tiny event set it off. Therefore, the task of promoting change is one of promoting the conditions under which small, local events can precipitate the desired restructuring.⁶

Here the authors focus primarily on these kinds of ruptures and suggest focusing on facilitating them, but we could expand that view. From the perspective of human liberation, it may be superior

⁶ Lewontin and Levins, *Biology under the Influence: Dialectical Essays on the Coevolution of Nature and Society*, 183.

to find ways to promote consistent counter-powers across a wide area that may not lead immediately to such ruptures, but may improve the lives of numbers of people, and encourage the shifts in conviction and thought that empower new revolutionaries and aid insurrectionary work in other contexts. These differences show the potential of the theory for cashing out strategic differences, rather than being limited only to a single frame.

This isn't to overemphasize the actions of small groups, nor to say groupings should act in the name of movements, but rather to place revolutionaries within a non-privileged sphere of revolutionary action without the assumption of leadership that substitutes itself for the multitude. There are potentials and limitations to this kind of causation, and understanding the problems of groups attempting to act in the name of systems as a whole, emergence places the role of organized revolutionaries back within the movement, rather than as its executor. Ruptures are when these elements become most obvious and necessary.

Yet even within normal political activities where equilibrium is sustained, these tools can be applied to understand counter-systemic action by political agents in more localized forms and in strategic thinking. Brazil, for example, exploded in protest that nearly brought the government to its knees in 2013 over increases in the cost of transit with grievances over the existing services. The *Movimento Passe Livre*, or Free Fare Movement, arose some ten years earlier out of localized struggles in different cities where organizers were persistently agitating around transit issues with limited success until the fury of the population boiled over.⁷ It is easy to forget that a vast sea of grievances that exists within society is typically brought to a more cohesive form by the

⁷ Coletivo Maria Tonha. "Fundador do MPL Fala Sobre o Movimento, as Jornadas de Junho e o Tarifa Zero," *Brasil De Fato*, July 25, 2013, accessed January 14, 2016, www.brasildefato.com.br.

burdened by the daily routine of capitalism.¹ Conversely, a broad swath of leftist opposition to official Leninism identified with alternatives to this model. Martin Glaberman and CLR James, dissident exTrotskyists in the United States, proposed the transformative potential of action that precedes shifts in consciousness in the working class. Council communists emphasized the spontaneous activity of the class that could lead to radicalization in practice, even asserting that workers were only potentially radical within the factory walls. EP Thompson argued in the *Making of the English Working-Class* that class consciousness is a process developed across time in experiences rather than a thing or an ideology one adopts.²

This problem in many ways is influenced by issues within the most popular

forms of Marxism, where the dynamics of capitalism themselves creates the working class who are given their revolutionary potential by their position within relations of production. With workers failing to consistently develop socialist ideas, Marxist thinkers then wrestled with a series of models for why this happens. Anarchism came at things from a different angle as its ideas about class and revolutionary potential were more open. Libertarians saw radicalization as a rather specific process of the local context of the revolutionary subject and involving both the conscious cultivation of lib-

¹ Some admirers of Lenin dispute this today and are invested in a textual exegesis project such as that of Lars Lih in his 2006 *Lenin Rediscovered: What is to be done? in Context*. Chicago: Haymarket Books, (2008), accessed April 27, 2016, ouleft.org. But in some ways that speaks to the large scale political shifts created by the collapse of the Soviet Union, and the integration of libertarian if not anarchist ideas such as rejection of institutionalized political elites, direct democracy, and a critique of power within the radical left mainstream today.

² Edward Palmer Thompson, *The Making of the English Working Class* (New York: Pantheon Books, 1963), passim.

Political Cognition

In the preceding chapters action, motivation, and mental life were touched upon. A number of themes are repeated throughout when we look at human action: ideas, awareness, the conscious vs. the unconscious, intention, judgements, values, and norms. In specifically political thought, ideas have always posed a central question: what role do ideas and ideology play in political action? That is, to what degree do political ideas motivate? Are they necessary in order to accomplish political ends? And what function do they play within the causal chains that produce political action?

There are two pieces to the problem. First, what is the relationship between simple thought and action? Second, what is the nature of specifically political ideas? These issues have often been called the problem of political consciousness. Consciousness here is thought of as having overt awareness and intention of the political framework that the person wants to put into place. Within this framing a division was formed between those who believed that such consciousness was a prerequisite for action and those who saw such consciousness as secondary to actions. Realistically, most people fell somewhere in the middle seeing it either as a product of action, something that gradually develops, or a back and forth between the two.

This division is most pronounced in the Marxist tradition due to their focus on the relationship of ideas to capitalism. Leninists traditionally saw revolutionary consciousness coming from a socialist minority, if not from the upper classes, who had the free time for the study of Marxism and would bring these ideas to the proletariat

investment and experience of committed militants who have the vision and practice to shift proposals into concrete actions.

Navigating the evolution of the system, its ability to reproduce, and the breakdown of its order is part of the tasks for forces organizing for liberation. Understanding our limitations, the tentativeness of our predictions, and the real potential (both for recuperation and for disproportionate influences) places both objective factors and group intervention at the core of action. This seems common sense, though for much of the history of political thinking there was an unbridgeable chasm between the individual and society created by ideology that failed to connect agency to society. Living systems demonstrate the balance and relation between different modes of social activity and struggle, not merging them simply by squishing them together, but rather giving each its place in a coherent whole reflecting the structure and adaptation of society itself.

Lastly, it's worth stating that emergence is a materialist theory of the political world.⁸ Materialism in its widest sense tries to explain reality through only appealing to matter. That is to say, there is no external realm of ideas or spirit outside the material world in which we live and breathe. It thus provides a potential method for showing how basic physical forces produce the whole universe, of which the psychological, social, and political spheres are only different presentations of that same basic underlying material reality. Having a direct connection to physical existence and science is a strength of these ideas, for the basic reason that it makes the political cohere to more basic forces in nature.

This isn't to say that society doesn't have its own specific content, but it makes it less magical and mysterious and brings it within the domain of potential actions. Indeed, it's been the

⁸ Marxism coined its own version of materialism as meaning a very specific thing linked to the ideas of Marx. However, here I am using it in the more general sense that philosophers have used it outside of Marxist circles.

obscurity of society's functioning that often has been used as a tool against people, a tool to reinforce dominant power through ritual, faith, and even obscurantist or technocratic science. Political leadership of the State, despite the rhetoric of participation and democracy, wraps itself in rituals of expertise and superhuman abilities to reinforce its exclusive claim to governing, when in reality it is the unconscious actions of millions that sustain the social order that the State struggles to maintain its influence over. The theater of power is filled with parliaments, architectural feats of awe, oval offices, pulpits, and presidential limousines and airplanes. These are not only the excesses of an insulated elite drunk on their own power, but also a conscious cultivation to hide the fact that their decisions can be forced and eroded not with expensive fountain pens, but with the calls and footsteps on the streets below their balconies.⁹ The more we can grasp at this world and bring it within the reach of all, the more power we have to challenge the wrongs enforced on people every day.

Through the discussion of emergence, a view of political events has been elaborated that frames and centers the role of agents and provides a framework for the relationships between peoples' actions and larger social forces. Likewise, this understanding contributes to unifying the living and physical world based on shared laws and matter by explaining why it is difficult for us to conceive of the transformation of the physical into the living and social. It does so arguing that different levels of organization produce different behaviors and properties. Inherent properties of living systems have political significance in demonstrating how order is emergently produced; institutionalized hierarchies introduce inherent problems into social systems and mark the potential for a liberatory selforganized social order.

⁹ Michel Foucault ties the rise of the state to the theater of governing that distinguishes it from prior means of governance. See Michel Foucault, *Security, Territory, Population: Lectures at the Collège de France 1977–1978*, vol. 4, trans. Graham Burchell (New York: Picador, 2009), 265–278.

Part 4: Agency and Cognition

cognition, emergence, and power can offer us a different approach to how liberatory forms of cognition can emerge. The next sections of this book will explore the relationships between cognition, action, and power.

The real work of this theory is yet to be done. Its implications for our understanding of capitalism, the State, and oppressions are in its infancy and will be the task of those of us working to develop this line of thought. Revolution, self-management, non-statist society, and organization are questions ripe for critical answers from an emergentist perspective. It is there in the large questions of liberatory politics that emergence shows its real use. The work of addressing all of them would require a text on its own. There are a few core concepts though that increase our ability to tackle these large questions, and which require their own sections of this book. Part of the appeal of this perspective is its ability to explain the functioning of power as an emergent force in society, and to situate political thinking and action in a radical light. In the next section, power will be explored.

Part 3: Power

decisions for how we move against dominant power, and constructions of proposals for action in our context.

On a critical note these reflections feed a skepticism towards revolutionary aspirations for new states. The composition of the ruling powers will not substantially change the operation of the State itself, which as an emergent entity is the product of the complexity of forces producing it, of which its powerful individuals may try to imprint their will, but ultimately themselves are merely responding to a complex and adaptive system beyond their total control. Domination is maintained by ruling elites only through that system in which their will and influence of course plays a role, but a much more limited one than many believe.

Likewise, this explains how so-called revolutionary states often end up reproducing exploitation despite changing the people and goals. It is not enough to merely destroy the State apparatus or its institutions unless the void of the State can be filled with new forms of emergent orders that disorganize and replace statist ones. Otherwise the State will grow from the forces whose activity becomes organized and coordinated around the functions and relationships of statist power. Instead, we must destroy both the central organs of repression as well as the transmission and emergent relationships that stabilize the State and replace it through new relationships that produce and sustain a libertarian order. Emergence thus shifts our targets of struggle and understanding of where the strength of the State lies.

To the connection between emergence and power, we should add a third concept: cognition. Cognition is where thought and action interact within the minds of agents. At this point the discussion has largely been about largescale forces produced by numbers of actors without delving into the functioning of action. Given the stress on the maintenance or disruption of order by a multitude of agents, it is important for our argument to know how individuals come to act in revolutionary ways, as well as arrive at mental commitment to radical action. Exploring the connections between

powerful through individuals nor merely exercised against people, but indeed transmitted as a social relationship across individuals and groups throughout society. Power within society is an emergent product of social relationships alongside the institutions and forms of the State, instead of simply a property of the State itself (and its police, military, and so on).

Emergence can help us integrate these ideas into a broader framework. The State can be seen as an emergent product, in part, of power relations throughout society that maintain institutions and hierarchies of power, rather than simply being exercised by them. The vast interactions acted out daily by all of us help reproduce the dominance of the State in reaction to the State's institutions and actors. The reach of the State goes beyond its forces of violence, social services, and propaganda in so far as it is able to be created perpetually out of the emergent order of our actions.

This also shows a distinct weakness of State powers. If we participate in the maintenance and construction of power at its most basic level, it's both the case that there is a field of struggle (power) and that we are able to produce different forms of power should the possibility of systemic change arise through emergent power relationships. Where we create and sustain State power comes the potential to disrupt. Since the more obvious displays of State power (police, prisons, and the military) depend on the reproduction of statist relations, new investigations into the conditions that help sustain or interrupt power relations could expose different moments and areas susceptible to liberatory alternatives and resistance.

Emergence places the power to create and destroy oppressive powers in our hands, and the ability to construct alternative human organization for society through emergent social organization. We have then not merely a theory that explains existing power, but a direction on the path towards libertarian society. Coming to think with power and emergence brings additional tools for confronting

Power in the Libertarian Tradition

In social and political life two spheres weave around each other and the events that make up our reality. On the one hand there is the experience of living as individuals with all of our senses, feelings, perceptions, and thoughts. We are creatures with subjective experiences of the world. On the other hand, there is the construction of the social world by large-scale emergent forces that shape us even from before we're born. The cities we live in, political institutions, cultural patterns, and group behaviors all are living forces around us that are greater than the sums of the individuals within them, and in fact make up part of how we become who we are. We inhabit a socially-constructed order of powers that divide, arrange, organize, and rearrange society's many divisions. We ourselves are shaped by our relationships to these forces in all their manifestations, whether classes, genders, races, or more mundane structuring like beauty, charisma, and urban/suburban/rural life. Yet we come at that world as beings with senses, and we enter into political activity through our experiences, desires, and intentional and motivational subjectivity.

As we saw in the last chapter, linking these two aspects of our world is the concept of emergence. Emergence, a concept borrowed from the biological sciences, describes the process of events happening based on higher-level behaviors being produced by lower levels through complex and adaptive means. Just like countless cells having chemical reactions eventually producing our thoughts, systems of domination emerge from countless individuals' experi-

ences and actions. The rules at different levels of analysis are themselves distinct. For example, our neurons use sodium, calcium, and potassium to create signals and patterns in our brains. Those electrolytes however don't feel longing for a lover, but the lovers' loving is made up of and caused in part because of the action of the electrolytes working to make our neurons do what they do.

In a way the world of our experiences and the world of emergent social forces are separated by a great chasm. Individuals function at a level of organization with different rules from, say, capitalism. Our actions produce capitalism, but do so generally without our knowledge and only through the relationships of the system (between individuals, individuals and groups, and between groups and groups). Emergence bridges the world of our mental lives and the world of systems like capitalism.

There is a parallel distinction in the political sphere between emergent social forces and the perspectives of political actors. Power, like emergence, is a concept that functions with our subjectivity and in social relationships or intersubjectively. This aspect of power is underappreciated, and carries with it the potential to understand how our agency interacts with the context we act within.

Anarchism and Power

One of the central insights and value of the anarchist tradition is that power lies at its core. Anarchism builds a critique of existing society and the potential to transform it from an analysis of power in human life. Power itself, however, has been greatly overlooked primarily by the historic left, who have followed selective readings of Marx.¹ They sought to explain power only as a distant effect of economic forces; mere superstructure produced by the economic

¹ Rocker, *Nationalism and Culture*, 21–41.

class basis and role, relations between force and consent, divisions, and so on. The examples offered here are illustrative and should be taken as demonstrating directions that theorists could develop using such a concept, rather than being sufficient in themselves.

Still with the example of statist social relationships, it should be noticed that the understanding of power offered outlines a concrete historical approach itself. Power is a bridge between the subjective and intersubjective worlds, and is so only in reference to concrete social and physical contexts that make power possible. This understanding is part then of a method of rooting political work both in the ethical challenges of liberatory struggle and in a concrete reality of social struggle across different specific historical points.

Power in Action

The concept of power is nearly physical; it is so close to life. One can practically feel it whenever we find ourselves in families, schools, amongst feuding friends, and in the clutches of the disciplinary State. Though there isn't space to lay out a specifically anarchist conception of power here; emergence and social systems provide some interesting directions in that effort for integrating power into the core of our thinking and work. Power traditionally had been thought of as something exercised against people (by political science and sociology), or either ignored or denied beneath economic foundations (by portions of the Marxist tradition.) Yet as Foucault⁵ and indeed many anarchist thinkers argued,⁶ power is something that is as much an ability as something repressive. We have the power to do things and powers over others. Most importantly, Foucault argued that power isn't simply mirrored from the

⁵ For example, Foucault, *Society Must Be Defended: Lectures at the Collège de France 1975–1976*.

⁶ See Felipe Correa, "Crear un Pueblo Fuerte," in *Anarquismo y Poder Popular: Teoría y Práctica Suramericana* (Bogotá, Colombia: Ediciones Gato Negro, 2011).

participants to automatically abolish its role, the abolition of statist relationships is bigger than its structure. If power is emergent and emergent from the reproduction of its relations in a diffuse manner, then simply attacking its structure doesn't guarantee a liberatory outcome. Replacing the State with a system of direct democracy, for example, doesn't ensure that the State will not re-emerge. It is necessary that people and society produce new social relationships, and in essence are transformed in order to make the State's reemergence unlikely.

The problem then with the State is not simply who is in charge of it, but rather the basis for statist relationships throughout society. Here the analysis of power shows its use not only as a tool for understanding, but also as a tool for action. We need to destroy not only the institutionalized hierarchies of the State, but also their basis for ruling throughout social relationships.

This does not mean however that we will understand the State only by looking at power. Power is a foundation for understanding and acting on social struggle. On top of that foundation, the whole social world is built. To understand the State, we need to look the particulars in the context within the development of the situation.⁴ This is to say that power is a fundamental concept, but one concept among many, and we should not make the confusion of seeing the importance of comprehending power with overlooking the need to have specific contextual analyses of our situation and moment. For example, to give a full account of the State one must grasp not only the State as social relationships, but also its history, institutions, its

⁴ A series of anarchists have attempted to answer these questions historically and anthropologically including Harold B. Barclay, *The State* (London: Freedom Press, 2003); Pierre Clastres, *Society Against the State: Essays in Political Anthropology* (New York: Zone Books, 1987); David Graeber, *Fragments of an Anarchist Anthropology* (Chicago: Prickly Paradigm Press, 2004), accessed April 27, 2016, abahlali.org; Peter Kropotkin, *The State: Its Historic Role* (London: "Freedom" Office, 1896), accessed May 8, 2016, theanarchistlibrary.org; and Gaston Leval, Juan Gómez Casas, and Florentino Iglesias, *El Estado en la Historia* (Cali, Colombia: Zero, 1978).

base.² Against this, anarchism consistently critiqued the view of power as a derivative of economic forces. Luigi Fabbri, for instance, wrote "We believe as well that political power is not only an effect of economic force, rather that one and another are alternatively cause and effect."³ There were, in fact, a number of different positions within the anarchist movement, which are present up till today, concerning power.

Some libertarian thinkers emphasized power as an exclusively negative concept. Power is thus a means of coercing autonomous beings to follow one's will. In keeping with these goals, this is not typically a philosophy of power, but rather a revolutionary political orientation to the political powers of the day. Elisée Reclus, for example, argued that anarchism is defined by the resistance to the corrupting influence of power, and aims at dismantling permanent structural power.

The conquest of power can only serve to prolong the duration of the enslavement that accompanies it... It is in fact our struggle against all official power that distinguishes us most essentially. Each individuality seems to us to be the center of the universe and each has the same right to its integral development, without interference from any power that supervises, reprimands, or castigates it.⁴

Malatesta, similarly, does not give a general theory of power, but attempts to delineate its role and functioning both amongst the ruling class and those resisting. His treatment of power, at least in

² Famously in Karl Marx, *Preface and Introduction to a Contribution to the Critique of Political Economy* (Pekin: Foreign Languages Press, 1976).

³ Luigi Fabbri, "El Concepto Anarquista de la Revolución," in *Dictadura y Revolución* (Buenos Aires, Argentina: Ediciones Libertad, 1921), accessed May 8, 2016, folletoslibertad.angelfire.com.

⁴ Reclus, *Anarchy, Geography, Modernity: Selected Writings of Elisée Reclus*, 122–123.

the limited writings of his we have access to in English, focuses on the State.

For us, government is made up of all the governors; and the governors— kings, presidents, ministers, deputies, etc.—are those who have the power to make laws regulating inter-human relations and to see that they are carried out; to levy taxes and to collect them; to impose military conscription; to judge and punish those who contravene the laws; to subject private contracts to rules, scrutiny and sanctions; to monopolize some branches of production and some public services or, if they so wish, all production and all public services; to promote or to hinder the exchange of goods; to wage war or make peace with the governors of other countries; to grant or withdraw privileges...and so on. In short, the governors are those who have the power, to a greater or lesser degree, to make use of the social power, that is of the physical, intellectual and economic power of the whole community, in order to oblige everybody to carry out their wishes. And this power, in our opinion, constitutes the principle of government, of authority.⁵

Mikhail Bakunin, Russian participant of the First International Workingmen's Association and generally considered one of the most important founders of modern anarchism, wrote extensively about power in the context of its transformative effect over individuals. This was against the authoritarian socialists of his day, who believed the existing capitalist State or future potential workers'

⁵ Ericco, Malatesta, *Anarchy: A Pamphlet* (1891), accessed February 2, 2016, dwardmac.pitzer.edu.

Today we can see that he had great clarity about the ability of the internal institutional dynamics of the State in sustaining the participation and investment of its members reaching beyond their ideologies. This mechanism of power can be separated from the repressive mechanism Bakunin describes. In the modern nation state, recuperative functions have perhaps transformed that dynamic that may have seemed more plausible in the 19th century than today. The awareness of the emergence of power through the collective entity of the State transforming individuals into guardians of privilege here sets the libertarian critique of the State apart from the more selective critiques in terms of the composition of the State, its laws, or the embrace of hypothetical class/racial/national reconstructed states.

Reproducing hierarchical power relations within an authoritarian state carries the potential for capitalist relationships to re-emerge. Even if one makes the argument that destroying the economic basis for capitalism is a form of intervention against capitalist power relations, it is insufficient because power relationships do not only flow from single sources, such as the State. Hierarchical power can be constructed from countless points in a decentralized manner and emerge just as our actions emerge not from a single core, but instead they are the products of innumerable chemical reactions in cells. If the statist power relations are not destroyed and an institutionalized form of hierarchy remains within the control of a privileged class of State bureaucracy, from the perspective of power, there's no reason to believe that class tyranny won't re-emerge. That is, unless we specifically undermine such relationships and *reproduce new ones on a different basis*, it's unlikely if not impossible that statist and capitalist power would be overcome.

The State itself is an emergent product of power relationships built in hierarchical society. Yet if we take the analysis of power seriously, then the structure of the State itself is not enough to grapple with it. Just as we cannot expect the class character of its

tionships that penetrate society. Bakunin warned against such a simplistic perspective of the corrupting influence of State power in his debate with statist socialists.

There can be no equality between the sovereign and the subject. On one side there is the feeling of superiority necessarily induced by a high position; on the other, that of inferiority resulting from the sovereign's superior position as the wielder of executive and legislative power. Political power means domination. And where there is domination there must be a substantial part of the population who remain subjected to the domination of their rulers: and subjects will naturally hate their rulers. who will then naturally be forced to subdue the people by even more oppressive measures, further curtailing their freedom. Such is the nature of political power ever since its origin in human society. This also explains why and how men who were the reddest democrats, the most vociferous radicals, once in power become the most moderate conservatives. Such turnabouts are usually and mistakenly regarded as a kind of treason. Their principal cause is the inevitable change of position and perspective. We should never forget that the institutional positions and their attendant privileges are far more powerful motivating forces than mere individual hatred or ill will. If a government composed exclusively of workers were elected tomorrow by universal suffrage, these same workers, who are today the most dedicated democrats and socialists, would tomorrow become the most determined aristocrats, open or secret worshippers of the principle of authority, exploiters and oppressors.³

³ Bakunin, *Bakunin on Anarchy*.

State could be harnessed to create a free socialist society.⁶ Though his view of power is largely a negative one, he made a distinction between power and authority. "In the matter of boots, I defer to the authority of the bootmaker."⁷ Power then for Bakunin consisted of institutionalized and coercive powers, while authority could be oppressive or based on some earned capacity that others could voluntarily respect. If authority is taken as a form of non-State power, his view could be construed as recognizing different forms of power, some constructive and others parasitic.

Similar to what Bakunin had done, Rudolph Rocker divided destructive power from constructive authority in his book, *Nationalism and Culture*. Just as power is negative and authority potentially positive, so Rocker argued against a dangerous nationalism and for a potentially sociable culture. Influenced by the German philosopher Friedrich Nietzsche, Rocker argues for the centrality of power in understanding politics when he claims that "(t)he will to power that always emanates from individuals or small minorities in society is in fact an important driving force in history. The extent of its influence has up to now been studied far too little, although it has frequently been the determining factor in the shaping of the whole of economic and social life."⁸

Though not strictly an anarchist, British philosopher and activist Bertrand Russell was at one time a libertarian socialist and retained ties to anarchist causes late into his life. His book, *Power*, reflects that libertarian perspective of centering social life and analysis of power alongside a critique of the dangers of State power. Criticiz-

⁶ Mikhail Aleksandrovich Bakunin, "On Representative Government and Universal Suffrage," in *Bakunin on Anarchy*, ed. and trans. Sam Dolgoff (New York: Vintage Books, 1971), accessed February 2, 2016, www.marxists.org.

⁷ Mikhail Aleksandrovich Bakunin, *The Political Philosophy of Bakunin: Scientific Anarchism*, comp. and ed. Grigorii Petrovich Maksimov (London: The Free Press, 1964), 253.

⁸ Rocker, *Nationalism and Culture*, 28.

ing orthodox economists and Marxist views that placed economic interest as the fundamental drive of social life, he wrote:

This error in orthodox and Marxist economics is not merely theoretical, but is of the greatest practical importance, and has caused some of the principle events of recent times to be misunderstood. It is only by realizing the love of power is the cause of the activities that are important in social affairs that history whether ancient or modern, can be rightly interpreted... The fundamental concept in social science is Power, in the same sense in which Energy is the fundamental concept in physics.⁹

Russell goes on to provide an analysis of power as the ability to produce intended effects. His account ties power to the intentionality of the agent, something that will be explored more in depth in the fourth part of this book.

Emma Goldman similarly took a Nietzschean view of the will to power as the main force of life. She was not alone. Benjamin Tucker, American individualist anarchist, was one of the first to translate Nietzsche into English for an American audience. Nietzsche's influence on anarchism was greater than one would imagine given Nietzsche's elitism and explicit hostility to socialist and anarchist ideas. In general, it was his critiques of the State, nationalism, and the destructive aspects of power in modern society that appealed to thinkers like Goldman and Rocker, though surely many anarchists felt great disdain for the philosopher. His promotion of the positive aspects of power immanent to all humanity, however, are less easy to identify in the anarchists who explicitly engaged him.

⁹ Bertrand Russell, *Power: A New Social Analysis* (London: Routledge, 2004), 4.

the actors that have the powers, the powers themselves, and the total situation that created both the actors and their situation. To understand the ability to go to war, we must understand the nation, the soldier, the means of producing war materials, living, the species, etc.

Power then occupies a unique position in human life. It is both a constitutive element of our experience of the world, and at the same time a social relationship with emergent powers and properties beyond our individual experience of such. Power is part of who we are, and an expression of our intentionality in the world as actors. At the same time, it makes up our social reality and its force bears down upon us. It comes from within, and while acting from without changes our very being. By occupying this space, a common substance of different arrangements in the subjective and intersubjective realms, power gives us a gift. It can both account for the breadth of much of political life and our experience of such. It is a unifying conceptual force in the hands of political actors.

An Example: The State

It's beyond the scope of this text to provide an adequate analysis of the State. Still looking specifically at power, we can lay out some of the ways that emergence and power can be used for political action. In the realm of the State, for example, power gives us the ability to understand why it is naïve to believe that building a State with the exploited rather than a dominant class would insulate any movement from the corrupting influence of capitalism. If we analyze movements and the State not simply in terms of their class character, but also in terms of an underlying foundation of power relationships, the falsity of that view becomes evident.

This gets at the center of anarchism, which is to center constructive proposals for society in juxtaposition to a critique not of particular elements of power, but in more fundamental power rela-

sustain the social aspect of power. Power as a relational force of possibilities fundamentally shapes our activity as social creatures, causing us to pursue or avoid each other, and providing basic underlying drive and logic to our interactions. These interactions create social force. The social relationships between workers produce the power that can maintain or stop production. Power relations between lovers can sustain or prevent abuse. People exercise, withhold, and transmit power among each other.

With groups, power relations produce emergent forces, events, and even structures. Within the State, ruling forces battle for dominance. Countries engage in power struggles over territory, resources, and position within global hierarchies. Emergent blocks among capitalists struggle for market dominance. Power has an animate life within society that emerges at the level of social forces. Beyond the individuals within, we can see the conquest of power by institutions and emergent powers, such as social organisms (or perhaps ecologies) like the State, classes, and social formations.

At each stage (individual, intersubjective, and emergent social) power relations influence each other in a broad social system. Individual experiences of power influence actions. Transmitted between individuals, they sustain large scale power structures like domination. Regimes' power is challenged or sustained by the actions of individuals working in groups. Power is part of the living system of society, and flows through the different levels, creating new forms and structures. Working between subjective and intersubjective worlds, power is constructed, reproduced, modified, and transmitted between humans throughout society.

Power is either a capacity or an incapacity that people and groups have. Likewise, power is not simply exercised, it may be retained and implied without ever having to be realized. Therefore, power is inherently contextual between the social relationships of its actors and the total environment of an individual with powers. In other words, to understand power we have to understand both

There are other threads within anarchism however that have recognized power as a broader concept. Indeed, within Russell, Rocker, and Goldman power is seen as one of the central components of all social life, and not merely as a negative property of abusive authority. Luce Fabbri, anarchist theorist from Uruguay and daughter of the famous Italian anarchist Luigi Fabbri, argued for such in the early 1950s.

Socialism does not deny that expansive manifestation of the life instinct that is often called the will to power; it satisfies it rather in that which is higher, and that is to say more human if not for fear that we would embarrass ourselves with too many examples of animal solidarity that Kropotkin gives us in his "Mutual Aid" and that we find day to day in nature. A healthy will to power leads to the desire for freedom and self-control, in the desire to form hostile nature and inert matter to the needs of man, the appetite for work, creation of knowledge; and especially in the association that multiplies and extends, until the limits of the known universe, the possibilities and energy of individual action, in the solidarity that is the basis of the collective subconscious of the species, it becomes in the field of consciousness, fraternity, love, spirit of sacrifice. In the individual, a healthy life instinct leads both to give and to do as to take and *to enjoy*; and in this *to give* and in this *to do* seeks ultimately, a superiority.¹⁰

Here power is a feature of daily life and not merely a property of the State and hierarchies. Power indeed can be actively productive. Luce Fabbri does not make use of the distinction between power

¹⁰ Luce Fabbri, *El Camino: Hacia un Socialismo sin Estado: En Cada Paso la Realidad de la Meta* (Montevideo, Uruguay: Editorial Nordan-Comunidad, 2000). 53.

and authority, but instead focuses on good and bad forms of power. In his introduction to anarchism, Angel Cappelletti similarly dismisses the idea that anarchism is against power per se.

‘Anarchism’ does not want to call for the negation of all power and all authority: it wants only to call for the negation of permanent power and institutionalized power or, in other words, negation of the State... The so-called primitive societies are not unfamiliar with power (and even as Pierre Clastres¹¹ wishes, political power) but are characterized essentially against civilized people to ignore the state, that is, permanent and established political power. Anarchists aspire to a society without divisions between rulers and ruled, a society without fixed and predetermined authority, a society where power is not transcendent to the knowledge, moral, and intellectual capacity of each individual.¹²

Proudhon interestingly attempted to give an account of power, even emergent power, in terms of individual and collective force. He begins by questioning what makes up the reality of social power and answers, “collective force,” which he defines as “the faculty or property...of being able to attract and be attracted, to repulse and be repulsed, to move, to act, to think, to PRODUCE, at the very least to resist, by its inertia, influences from the outside.”¹³ Power is something then that expresses itself differently in the entities that contain it. It is a property both of the rulers and the ruled; there is

¹¹ Clastres was a French anarchist anthropologist who broke from Marxism to argue that the State is the creator of class and that some primitive societies are organized against the emergence of the state.

¹² Angel J Cappelletti, *La Ideología Anarquista* (Buenos Aires, Argentina: Libros de la Araucaria, 2006), 18. Translated by the author.

¹³ Proudhon, *Property is Theft!: A Pierre-Joseph Proudhon Reader*, 654–662.

tions manifest at three levels: states of mind, social relations, and as emergent behaviors of groups.

It’s important to note the internal subjective or phenomenological component of power, because it can be easily ignored in the more obvious examples of power between people. There is an experience of power that we go through as beings. Even more still, there are power relationships we can have to ourselves reflexively. For example, the experience of being powerless to overcome one’s challenges as a rock climber is a form of power, and one with a reflexive subjective character that is inherent to that power itself. Without being an agent that is capable of experiencing, willing, and struggling, we couldn’t make sense of that type of power or powerlessness.

Taking a similar example, the experience of being crushed by a rock, but unable to free oneself is again a power relationship. It is a power relationship with an inanimate object, something incapable of having agency, and yet it is still a power relationship. Out of the basic relationship of power, a number of things emerge. Individuals’ power relations produce subjective states. There is a particular kind of terror to being rendered powerless by natural disasters or from attacks by wild animals. There are distinct sensations of pleasure from our power to please others. Our subjective states of power derive in part from our relationship to those powers.

This is not merely metaphorical. Power is a fundamental experience of human life only because we have agency and will to do things. Yet our existence in a social and physical world outside our creation both constitutes and inhibits our will within all the dizzying complexity of our environment. Power doesn’t only enter our life once we enter into all the loves and struggles of being a social creature. It resides deeper in the basic make up of our minds since we are perceptual and cognitive beings.

As agents, we exist in a world of other agents with their own powers and relationships throughout societies. Individuals systematically interact with groups and other individuals, and in doing so

is the type of relationship between an agent or force, the object of their power, and the capacity to do something or another. The power to make others laugh is characterized by ability to humor, to bore, and so on. Powers carve out sets of capacities that are related in such a way. They then are constituted by particular sets of relations between abilities and inabilities of individuals and/or groups.

Power relations take the form of a potential of an actor A to do action X, when that possibility may invoke some B that is another person, group, or institution, or A themselves or itself. Power is thus a concept based on possibilities that modify relationships between people, objects, and their strength to do or not do various things. Each power has a different relation. The power to seduce is about the relationship of someone's presence to the motivational states of others. The power to run quickly is about the states of the body, someone's capacity, and facts about the world. The form of those relationships represent power in general in its role. A better understanding of the concept is had by seeing it as a way of correlating relational states of agents and potential agents to different actions. Politics has largely been concerned with specific types of power rather than power itself. We can think of political power as a set of particular capacities (political ones) between people and social forces. Other forms of power are constructed around different sets of abilities.

Emergent Power

These relations are divided out in a tiered manner. Power is organized according to the relations and states between actors. As said before, power relations can be between individuals and the world, individuals and others, and emergent forces with any combination of individuals/the world/other emergent forces. For the agents of those relationships, power has different effects as well. These rela-

liberating force and repressive force but also mundane force. Proudhon uses this basic concept of power to demonstrate how collective force takes on its own powers beyond the "sum" of its individuals.

Anticipating theorists of power today, Proudhon places the power of the State not in its purely violent force, but in its capacity to reproduce obedience. "It is...not actually the exploiter, it is not the tyrant, whom the workers and citizens follow... It is the social power that they respect, a power ill-defined in their thinking, but outside of which they sense that they cannot subsist." Rulers thus appeal to a broader force to sustain themselves, and the failure to do so leads to revolt Proudhon argues. The nation itself is not its rulers or institutions, but "...the grouping of individual forces, and through the relation of the groups, the whole nation forms one body: it is a real being of a higher order, whose movement implicates the existence and fortune of everyone."¹⁴ This approach of connecting emergent social force to maintaining hierarchical power that is dependent on those emergent networks has not been given its due. Proudhon lays out a barebones emergentist understanding of the State and power in these passages and connects them to a liberatory politics, something unique in his time and rare still today.

Though there are differences between these positions, the commonality is the belief in the centrality of an understanding of power within society, in pursuit of liberation, and against specific forms of power that sustain exploitation and oppression. Building upon this current with its analysis and critique of power, complex systems and emergence offer another view of how power operates within social groups. Power's unique character that crosses between agency and the world of emergence can give us new ways to understand and transform our reality, not merely as a critique of institutional power, but as a living concept of social systems and individuals.

¹⁴ Ibid., 663.

Emergence and Power: Defining Power

Pinning down power is tricky in part because we use it so often. Our daily lives are shaped by the contours of power in all our relationships, intimate and political. It is such an integral part of human experience, it's not surprising to find power peppered throughout our language, culture, and thinking about ourselves and the world. Understanding power means having to grapple with different aspects of the concept. There are so many senses, applications, and uses of power that any analysis of it as a concept will struggle to navigate all of its varied uses. We tend to define power in terms of other concepts that invoke it like potential, potency, ability, and so on. At its most basic, having power means someone can or could do something.

Consider the sentence, "Jane has the power to inspire." If we dissect power, a few elements stand out. There's the relationship between Jane and whatever she has the power to do or over; there's the power itself; and then there's Jane as a powerful person. These three pieces are the relationship of power, what power itself is, and the subject of power. Exploring those different aspects of power will help unpack the problem.

Traditionally most political analyses of power have been about its exercise by political institutions: the power of police or military as armed forces, the power to reconstruct society through State intervention, contestation of the State machinery, and so on. In English, we commonly refer to this as *power over* something or another. The police have power over this neighborhood. A patriarchal

cisely what happens in strikes and job actions that target the workflow inside, such as sit-down, working to rule or slow-down strikes, and even workplace occupations and seizures. Such breaks from the power of bosses are things we see emerge again and again in periods of militancy when workers have begun reorganizing their workplaces with their own desires and perspectives in mind.

In our interactions with countless individuals, we transmit and maintain relationships of power through our actions and thinking. Social interactions are opportunities to express the language of power through our actions. Those relationships, constantly reproduced and modified in daily life, provide the terrain for the construction of power relations across society. Emergent powers come out of those interactions, and draw their life force from the decisions individuals make in groups responding to the structures, patterns, and mechanisms of emergent powers within society. Different power relations are transmitted when we break from established power, and social unrest spreads, creating new relationships and capacities. Protests, strikes, riots, revolutions, and other forms of political events are alterations in the networks of power, and they transmit activity and information through the social networks constitutive of society. When we struggle, we are creating new abilities—powers to do things that were not or could not done previously. The bedrock of power then is our actions and interactions either to confirm, reject, or change the flow of power relationships in society. Emergent social forces like the State or the capitalist class exercise power on individuals and social classes. The State uses its power over the population in crackdowns, propaganda efforts, and social engineering. Capitalists use their power to mobilize vast resources to create new markets. Just as individuals have and transmit power, so do groups and emergent social forces.

Looking at the role of power takes us to its relational aspect. Remember that power can be both experiential and social; it can exist between individuals and the world, individuals and themselves, between individuals, and between groups. A power relationship then

moment, however. Stable relationships develop based on balances of power, experiences of individuals in relationship to powers, and the collective patterning of relationships.

We don't obey the State, for example, simply because there are armed people who will harm us if we don't. Instead respect of State authority is transmitted and reproduced constantly in smaller ways (i.e., deferring to State authorities in trying to solve neighborhood problems, framing discussions with friends in terms of the boundaries laid out in official channels, affirming each other's need to go through established hierarchies, and so on). Similarly, when the respect for authority breaks down or is resisted, it often happens because of subtle acts of defiance and power being reproduced within social groups.

Consider workplaces. They are structured to enforce the existing power relations between bosses and workers, but also between workers. Offices are arranged to reinforce the perception of the boss as powerful and in control (management's offices, parking schemes, break rooms, freedom and direction of foot traffic, and so on), to divide workers from each other, to minimize unproductive social interaction, and so on. This happens through layout design of the rooms, surveillance equipment installation, active patrols by managers, and building in tasks that need perpetual monitoring to keep workers busy. Workers can reinforce the power of management through enforcing management's rules on each other, giving gifts to the boss, hiding conversations between coworkers, and seeking out management to solve interpersonal problems rather than settling them amongst themselves. The power of the boss is constructed through the structures and framework that management organizes, yet the actual power they hold over workers comes in large part from reproducing the respect and order management seeks amongst the workers.

Conversely, the power of the boss is threatened by the failure of workers to reproduce it. When they disobey and start following their own rules, the authority of the boss can evaporate. This is pre-

husband holds power over his wife. Parents have power over their children. Foucault famously made a lot out of its comparison with another sense of power, *the power to do something*.¹ One can have the power to persuade others to listen, the power to seduce a lover, the power to inspire action. *Power over* is about the potential to get others to do what you wish, whereas *power to* is about abilities to act. Both are forms of capacities, one as influence and the other as capabilities.

Discussions of power typically rely on concepts like abilities, potential, potency, or possibility to explain it. Yet such concepts reference power in a basic sense. Defining power in terms of capacity, influence, or ability covertly makes reference to the power to do something in other terms. If Jane is able to jump, she has the power to job; she can or could jump; she is jump-able.

These definitions are circular because power is such a deep component of our mental and social lives that much of our thinking is constructed out of it. Our thinking about actions are built upon our own abilities and limitations, patterns of behavior structures surrounding powers, the abilities of others, and the imposition of the powers of the natural world on our wills. So we drive differently in rain or snow, walk with caution in dangerous neighborhoods, greet friends and loved ones distinctly from others, and exercise rage within the boundaries of acceptable targets and circumstances.

Lewes in his early emergentist text takes up power during his discussions of cause and effect. For similar reasons to above he concludes that power is merely a concept we use to talk about causality with agents. He is a power skeptic therein arguing that there is no thing beyond the cause and effect itself.² In a sense this is true, but he is missing a few things. Most importantly such an account would not explain the social notions of power or more abstract

¹ Michel Foucault, *Society Must Be Defended: Lectures at the Collège de France, 1975–76*, trans. David Macey (New York: Picador, 2003), *passim*.

² Lewes, *Problems of Life and Mind*, 340–346.

potentials. Having a concept like power gives us additional mental tools to understand and describe such states. Perhaps power is merely a robust form of causality, but if so it is a special one, and one we can't manage to think without.

Power shapes both our own thinking about how to act and the society we live and grow in. It stands intimately close to our basic mental processes surrounding action and relationships with others because power is part of our fundamental conceptual vocabulary and is something that resists further breaking down into conceptual parts. Power's closeness to our mental life and its operation throughout society gives it strength as a potential tool for understanding societies and politics.

What about who and what can have power? People can have power, but we also apply the term to other things as well. For instance, power can be discussed as a concept of social events, institutions, and behaviors. In this sense it is described as property of powerful institutions, groups, and people. Governments hold power over people, the working class has the power to shut down production, and a riot has a powerful resonance in the history of a city.

Another framing for power is as a subjectivity and element of experiential life. This is the way in which one experiences power nearly as a sensation. There is a particular feeling when our words inspire others, when another dominates us and we are powerless to fight back, when we are aware of our ability to wrong or violate others, but choose not to, etc. We experience the power of our words, the power of touch, the powerlessness we feel with lovers, and the feeling of power building up in us that we fail to exercise when calming down from a rage. There are then experiences of power as agents, and structures or forces of power in societies. Both can be the agents of power, and in fact individual agents themselves interlinked in a society produce the larger emergent forces of power.

What kinds of things can be in relationships of power? The most common discussions focus on power relationships between people

or groups. Yet only looking at the relationships between people gives an incomplete picture. We talk about the power of a politician over a country, the power of the US military to impose its will, or the power of Wall Street in Washington DC. Power is not simply a social relationship, however, because power can also exist not just in relationship to other people, but also in relation to ourselves and to the natural world, such as the power to change one's environment and oneself. We exert power on inanimate objects like lakes, trees, animals, and mountains. Our ability to impose changes on our own personality, habits, or thinking (or the inability to do so) is also a kind of potency.

Additionally, power can be abstract and exist between forces rather than people or groups of people. Emergent forces themselves (which are not people) stand in relationships of power to each other. Think about things like the stock market of futures in commodities like cattle and agencies' predictions of weather. Bad weather predictions have the power to change the price of futures markets because of the anticipation of shortages from things like drought, or good corn years making feed cheaper, and so on. The institutions generating the predictions have power that influences the market. Both the institutions and the behavior of the market are connected to real things like cows, people, weather, feed, and so on, but the relationship of power occurs at a higher level of organization between the forces of the market and the predictions (both of which can be absolutely wrong about what is actually happening). Agents of power can thus be people or emergent forces.

It's important to consider that power is not simply exercised by powerful bodies, but also linked as relationships across society. Exercising power makes good on the potentials actors have. Society is built upon powers, exercised and latent, standing between individuals and groups. The power of the police, for example, structures the behavior of individuals through existing balances of forces. Power influences society without being exercised at each

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hip, and so on) are directly related to the interventions of the industry through advertisement. Typically, people did not think they would start smoking to be cool. Unconscious elements can shift people's motivational states without their awareness. Or consider the role that the illness of a loved one plays in changing people's beliefs about right and wrong. The TV show *Breaking Bad* immortalized this example through the protagonist, who turns to the underworld of the drug economy to fund his chemotherapy when he finds no other options. Faced with utter deprivation, many people come to re-evaluate the morality of using whatever means at their disposal to help their loved ones, though this is typically not through issues so explicitly reasoned out.

In the world of politics, a riot is yet another example of these external forces apparently acting upon cognition rather than the other way around. Whatever the process is of the readiness to riot, it is largely facts about the situation and crowd that tell us about a riot, rather than the explicit conscious reasoning of individuals—though this isn't to diminish the role of the deliberate aspect of rioting. In most riots, the actions of the rioters likely go against whatever conscious political beliefs the individuals hold. Perhaps some rioters are ideologically prepared to wage urban warfare for their cause, but for the majority this is likely not the case except in exceptional historical moments of prolonged social war. For the purposes of argument, consider only those who act against their political beliefs based on the force of the moment to draw a lesson. This is where, historically, the division has been laid. Is cognition a distraction while the real forces that move political action are objective facts about societies in conflict? Without overt cognition will change forever be displaced by deception, recuperation, and inertia? *There is a parallel gap between social emergent forces and agency in the realm of political cognition, just as with power, action, and motivation.*

Thoughts

Whatever theory we desire should capture these facts then: conscious reflection *can* cause political changes in the world, and largescale forces *sometimes act against the apparent thinking of political agents*. The first piece of the puzzle is to question the conceptualization of thoughts. In much discussion of political ideas, thoughts are considered as timeless entities that can appear and disappear at will. There's a logic to this. You can think the same thing I'm thinking (more or less) and these thoughts can be thought of whenever we like. I can think, "I like kittens," a hundred times over any day of the year I like, and you can think it too.

This is a limited picture of human thinking, however. Thoughts are not only passing elements that catch our eye like magnificent clouds that blow through at random. Thoughts are more like a continuous stream, each feeding into one another, and all bound together in an enormous thread stretching back into time. Thoughts have history. My love of kittens is a complete entity, but it is tied to a number of other thoughts, experiences, and concrete physical things in the world. There are the pleasures I've experienced, thoughts I've had about myself, and the kinds of things I like, e.g. kittens, books, and so on. Thoughts themselves reflect facts about the world, my own history, and my conscious relationship to my memories/experiences/self-conceptions.

It's perceivable when we consider the difference between two people in the 1950s—a Southern white and a foreigner who think "segregation is wrong," that there is a similarity between the two thoughts, yet relevant to understanding the thoughts in the two people is an understanding of the history of the person in relation to their thought, and the relationship of that person to the history of the world they exist in. The white Southerner came to have that thought in a different way than the foreigner, and the meaning

(both in terms of significance and literal meaning) of the thought is different.

By understanding thoughts as historical entities, acted upon by physical and social forces, we begin to dissolve the apparent fork between thought and action in the political domain. This is because political cognition is an emergent product of the interaction of individuals with their political world. That is that the cognitive states of individuals emerge out of complex systemic interactions between agents, their biology, and emergent forces in the world on a number of levels (interpersonal, social, and high level emergent structures). These thoughts do not stand outside of that causal world, however. Thoughts themselves create changes within agents that then create shifts in the world.

The problem with cruder ideas about this is that it is difficult to conceive how shifts in thinking *can* have such force. Reflect on the earlier discussion of people being motivated to follow through with their ideas. It is clear that there are gaps between thought and action, internal life and weight of force on our whole beings. Recall the concepts of disproportionate causation and equilibrium from emergence. Our naive view of causality is that of billiard balls hitting each other and creating observable and measurable shifts. Most causation isn't like this, and especially not our thoughts. Throwing a ball into a hurricane produces a different trajectory of the ball than on a windless day. Thoughts likewise have different causal impact based on the total context they act upon (if they become instantiated). Anti-militarist actions during World War I had a different context than during the Vietnam War. Our thoughts are filtered through a specific social context of action (and the experiences of the agent previously), and have their effect based on their place both within us and history.

Our thoughts are then emergent products of history, and likewise history is partly an emergent product of our thoughts. Seeing this as a system that grows and adapts with emergent properties gets us out of the chicken or the egg analogy that plagued much

thinking on the matter. People fought segregation both because of changes in their political cognition and their political cognition changed because of changes within society (and later with their actions). The concept of cognition itself helps us understand this by providing a relation between thought and action. Rather than seeing them as wholly separate entities acting on each other, cognition shows us the way in which our agency and consciousness is systemic and constantly changing in parallel with and as a part of the world. We are responding to the world and at the same time creating new worlds, with our thinking and action transforming and representing these facts at the same time. We hold these relations to ourselves as well as to others and the world.

Note that power is key within this dynamic. In the last chapter, we saw that power functions as an internal experience, sets of abilities, relations between agents, and as an emergent force between groups. That form, power's ability to move between levels and spheres, is reflected in political cognition. Existing channels, networks, and transmissions of power form roads that our cognition travels down and acts upon. In many ways, power relationships are the basic building blocks of society, though fluid ones that are constantly being recreated.

Our mental life flows along these webs of power, changing them, responding to them, and recreating power both internally and in our social relations. So people do not support democracy or monarchy because of timeless abstract considerations. People come to consider such issues because there are a series of channels that they interact with in society: people discuss them; there are institutions and organs that project them; they have experiences with emergent power structures; and they reflect on the various intersections of these facts in their life. Power is at the center of political cognition, because it is a force that shapes and guides the way our thought flows and is the ultimate underlying field of struggle. There is a key to understanding political cognition in power.

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Liberatory Cognition: The Weight of the Present Against the Future

The problem of political cognition then is ill-framed, placed in a trap of false dichotomies. Armed with emergence, we see the problem is not how cognition and ideology have a role in the abstract, but rather what role? The real problem for libertarians lies in understanding *critical cognition* or political cognition applied against the existing order. Specifically, when looking at a critique not simply of elements of society, but rather a systemic critique of the fundamental socio-political order present society is founded on. How is it that such a society could be dismantled in spite of the fact that an overwhelming majority of people do not have such political cognition? With people living and thinking the way they are, how is a transformation possible? There are many aspects to these issues, but let us take them up from the perspective of the cognitive element.

It can seem unlikely that the majority of people could become consciously revolutionary in the present conditions. The world we inhabit isn't one that pushes people automatically to radically embrace a fundamentally new social order. The opposite is true. Elaborate and exhaustive resources are brought to bear on the entire population to contest and ensure the direction and habits of people's thinking and actions. The State and capital control information networks, education, and have massive resources for intervening to prevent the spread of radical ideas even without directly

dictating content or needing to coerce obedience. Foucault's later lectures tried to map out the shift towards the modern State and techniques of governance along these lines.¹ The potency of the State stretches far beyond its immediate functionaries, police, and soldiers through its adoption of large sectors of social life that previously were provided by the community or voluntary activity of organizations. State funding and carefully cultivating relationships of permission, privilege, and punishment for political opposition penetrate daily life through the organs of organized social activity. Our schools are built around their priorities. Churches are regulated and given special status for owning property and exemption from taxes in the United States, thereby creating relationships of dependency and implied consequences for opposition.² The media consistently reproduces the limits of debate in line with the interests of the powerful without needing any central censure.³ When there are breakdowns in the unity of social institutions behind the State, there is infrastructure that puts limited reforms on the table. The system can repress (and will), but it can also integrate and internalize oppositions and demands through responding to the needs of its opponents.

This may seem innocuous. Logically, any society would seek to reflect and consciously reproduce its values and structural bases. States are not different. For the critical libertarian thinker, the problem is different. In broad brush strokes, the critical thinker identifies exploitation and oppression as the core of systemic critique. Yet it is precisely authority and hierarchical relationships that are reproduced, engineered, and guarded by the forces of power act-

¹ For example, Foucault, *Security, Territory, Population: Lectures at the Collège de France 1977/1978*.

² An interesting analysis of the secular State's role in religious organization is found in Saba Mahmood, *Religious Difference in a Secular Age: A Minority Report*, (Princeton, NJ: Princeton University Press, 2015).

³ Chomsky and Herman, *Manufacturing Consent: The Political Economy of the Mass Media*, passim.

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ing on society. This occurs not only through official institutions of power like prisons, schools, military, police, and political parties, but also through other institutionalized sites of ideological reproduction like think-tanks, the institutionalized left and right, academia, hospitals and mental health facilities, workplaces, and neighborhood organizations.

Workplaces are engineered for social control not only of the behavior of workers, but also of their thoughts. Media is constructed around the ideology, finance, and control of the perspectives of the various factions of dominating power. More than institutions imposing this upon us, we see immense networks of social relationships that in subtle ways transmit and reproduce authority, hierarchy, and oppressive social relationships throughout society. Families, churches, hospitals, prisons, schools, and daily life are richly decorated with all the marks of power and ideology being transmitted through our interactions and thoughts. How we break from this, not just as individuals, but as a whole society, is a profound problem and proves even more problematic for people working towards a more libertarian society. That is, how can huge numbers of people voluntarily shift not only their thinking, but also come to act against immense powers?

Yet if a majority of people aren’t committed to liberatory struggle and society, it doesn’t seem possible (or desirable) that a minority could impose revolutionary change on an unwilling majority. It is not possible because society would not be libertarian if it were imposed, and unlikely simply because dismantling hierarchical power seems to require a component of intentional collective action. A new society must be constructed, and the freedom and equality that libertarians seek require the active creativity and effort that can only come from the dedication of countless individuals, rather than the watchful labor under gun, whip, camera, or other means of economic and political coercion. There is no trick, no institution, nor any daring act that could guarantee this.

If society must be rebuilt on a freer and more equal basis, it implies a great deal of thought and voluntary activity. This is the same voluntary activity that seems so difficult today in light of authoritarian social relations and ideology. Here we have a tension: the need for transformation and the emergent social forces working to maintain an equilibrium in society that prevents the spread of such cognition. This tension often led people to seek shortcuts through putsches, imposition of new social orders, or the magical thinking of fate. Malatesta warned against believing that a mere victory by political activists could bring about a free society.

We have undertaken the task of struggling against existing social organization, and of overcoming the obstacles to the advent of a new society in which freedom and wellbeing would be assured to everybody. To achieve this objective, we organize ourselves and seek to become as numerous and as strong as possible. But if it were only our anarchist groupings that were organized; if the workers were to remain isolated like so many units unconcerned about each other and only linked by the common chain; if we ourselves besides being organized as anarchists in a federation, were not as workers organized with other workers, we could achieve nothing at all, or at most, we might be able to impose ourselves...and then it would not be the triumph of anarchism, but our triumph. We could then go on calling ourselves anarchists, but in reality we should simply be rulers, and as impotent as all rulers are where the general good is concerned.⁴

⁴ Ericco Malatesta, *Anarchism and Organization* (1897), accessed April 26, 2016, www.marxists.org.

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Space for Criticism

One reply to that tension is to look to ruptures or extreme political events. Sometimes the course of historical events can sweep up whole societies, and changes in conditions can open up spaces. Societies in crisis lose equilibrium, disorder increases, and cognitive space is available to question fundamental elements of society that were normally assumed to be functional and necessary. Certainly, some of those environments may facilitate transformations of some sort or another. Looking for alternatives as systems lose political credibility could lead to people seeking out liberatory possibilities. This may be a partial answer to these issues as it identifies spaces where such transformations might or might not occur.

It's important to recognize other alternative courses. Similar environments, breakdowns in the ability of ruling powers to rule, also open space for deeply repressive and authoritarian potentials, or more innocuously for forms of reformism that reshape society to address immediate needs, while leaving the fundamental social ills intact. All the failures of the social struggles of the 19th and 20th centuries suggest the dangers and limits of history simply delivering liberatory cognition. Ruptures may provide some special opportunities, but also may provide dangers without guarantees. Fascism in Germany arose in the country perhaps with the largest and most organized socialist left. Likewise, the Great Depression in the United States built up a long-term momentum to save capitalism via the New Deal and the Second World War, which created one of the most sustained periods of capitalist regrowth in history. To avoid dystopian futures or getting merely channeled into new circuits for capitalism and power, we need to look further.

Reflect on what a rupture is. A rupture, in political terms, is some kind of fundamental break or explosion from the dominant order of how struggles normally happen. We could say more, but the key aspect here is that a rupture is a sharp shift. It's surprising. You go from A to Z in a sense. Ruptures exhibit emergent behavior in

which the situation is not easily traceable to the individuals in the moment or in previous moments. If it is discernible, it's only in retrospect and it is largely rough and speculative.

A political strategy that relies on waiting for such moments faces an epistemological problem brought to light by emergence. We don't have a good way of knowing what leads up to these events, knowing when they occur (except in more grand exhibitions), or even understanding the processes within them. Complexity and action at a series of different levels of analysis limit our thinking as protagonists. We're coming at political struggle as people trying to figure out what to do. Ruptures do not greet us that way. Ruptures are complex phenomena existing across different planes—political whirlwinds.

A few things can be taken from both this and the preceding discussion in this text. We don't know in what way our present actions will or won't contribute to any potential situation that might give us opportunities. This means that there is no neutral position regarding activity outside ruptures. Waiting for them, trying to create them, or step-by-step trying to walk towards liberation all have their own outcomes, though not easily predictable ones. We can make good assessments and plans as agents from our limited perspective, while recognizing we will not necessarily be in positions to understand our place in history along the way. The best way to view this scenario is that we do our best to find ways to intervene, reflect, and adjust to our environment with humility. Awaiting ruptures is one form of action; a form that may actually prevent some ruptures from occurring that might otherwise have taken place, and can impair us from responding should they occur. That is, alongside an understanding of potentials from any historical moment (ruptures or otherwise), we need an active understanding of our agency.

It's worth saying that our actions in more difficult mundane situations carry not only the potential loss of opportunities, but hidden dark alternatives as well. Failing to take the right course of action

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day-to-day may also put us into positions in which when opportunities arise, we find ourselves organized against them. This is why in many instances forces of the left, such as many unions, political parties, and NGOs, find themselves opposed to combative social movements—having rooted themselves in the power relations of existing capitalism, they become thrown off balance when the dividing lines shift. That can push forces for progress into conservative or even reactionary roles in radical political events. Indeed, the early history of fascist movements was filled with socialists, Marxists, and some anarchists forming their first militants in the face of what would become a world revolutionary wave surrounding the events of 1916–1921. History is filled with radical oppositions become ruling tyrants—a historical hangover that haunts us today in places like Cuba, South Africa, India, and China.

Next, the inherent dangers within the breakdown of social order mean that our forces are not merely up against a single unified oppositional order, but rather they are up against an infinite set of potential opposing, supporting, and overlapping forces that may or may not be generated from struggles unfolding. This is different from a conception of history in which the forces of good do battle with the forces of evil to set the stage for a new humanity. Actions produce new forces and new questions that we cannot anticipate based on our position both as sentient beings and within the complex networks of social systems that we grow and adapt to. There is not then a linear march against the present order, nor is there any safety in its destruction. Victory is uncertain (especially in an era of ecological devastation), and any belief that we can just go forward and maintain ourselves intact through small struggles is hopelessly naive. The best we can do is set out towards the libertarian alternative responding as best we can along the way.

Another way of conceiving the cognitive transformation necessary for libertarian society is through shifting conditions for the growth of libertarian thought. While we may not globally be able to dismantle the reproduction of authoritarian ideology, this does

not mean that there are not factors (nodes, points, and relationships) that we can contest and change. Ruptures are examples of largescale openings, but small-scale ones exist as well and likely are more important in creating the conditions in which libertarian forces could grow, sustain, and reproduce. Consider the “I am the 99%” meme where individuals uploaded photos of themselves with a sign describing their troubles and the phrase “I am the 99%”. People came to take up, develop, and reproduce the meme as a series of images linking their experiences with features of the system. Through relationships of art, social media, design, and sharing, new forms of cognition were being transformed and transmitted through huge numbers of people relatively rapidly. In a way, this was part of a rupture. Yet the example is tangible and proximate in a way that speaks to more run-of-the-mill questions. That reflection of others’ lives that speaks to the experiential reality of millions itself caused further thoughts and actions as people were carried into the streets. In infinite ways throughout society the transformations of ideology occur and lead to shifts that *we do have access to*.

Ruptures and these transmissions of power and thought then are on a continuum, but not a linear continuum. Ruptures are emergent out of countless contestations, reformulations, actions, and reflections. We lack the comfort of knowing the effect of our actions, and yet there is also the potential for our actions to have unknown causes, effect that is far out from where we had anticipated and has at times radical and disproportionate influence. We live in the realm of those social transmissions, and within our daily lives and struggles there are countless places where we may work as political agents to transform our situation.

Those struggles can give us space for the flourishing of a critical cognition in a number of ways. In doing so, we put into practice our politics, and we test it. Additionally, we can develop a praxis through successes and challenges. Those moments may have an indirect impact that can resonate in the lives of those involved well

and concepts of time are also emergently produced, reflecting both the dominant powers of their day and struggle against such. Connected to time is change. Our perception or ignorance of change shapes how we come to act and how we respond to the flow of time in societies marked by struggles over power and the broader human pursuit of better lives.

As with any discussion of liberation, ethics also was latent within these issues. Liberatory ethics has been underexplored sometimes with disdain from the Marxist tradition for so-called moralism and desires to keep a distance from liberal morality. Still the outlines of ethical issues that could be fruitfully explored are within the text, especially concerning how motivation connects with values, what role values have in cognition, and exploring how emergence does or doesn’t impact our values and their implementation. These are issues I’ve since begun to address in the years that followed starting my initial manuscript.

While the focus here has been on theory, its worth will only be showed through it being able to aid work by helping people to navigate the situations that unfold in coming years. The best that theory can do is give words to things that were fragmented and on the tips of the tongues of many, and in doing so deepen tendencies and give them a more coherent and organized form. The production of theory itself is emergent in the same way as other forms of human thought and activity, and defined by the debates, history, and actions of human community and those of us within it fighting for libertarian society. As we are writers stealing time away from our jobs and social obligations, the best legacy for a work such as this is to spur others to solidify their ideas and experiences within their own perspectives.

Post-script

Viewed in reverse, the arguments of this book begin with the proposal of agency that is constantly defining and defined by a complex and adaptive social system mutually constituted. Mental life is built not only out of conscious thought and reasoning, but in reference to things and forces outside us, our profound unconscious internal processes, and the back and forth between these elements. We experience this process over time as historical beings aware of our existence, and recorded in ever changing memories that are set against our identities and altered in light of our acts and thoughts. Inherently connected to the thoughts and actions of others in human societies, relationships of power permeate our mental lives and make concrete the constantly forming social order. Power bridges our cognition and the social world in action, becoming institutionalized in perpetual habits reproduced collectively. Modern forms of power are built upon this older human foundation, of which the State and capitalism represent a tiny fragment of our common history. Emergence provides a view to comprehend and strategize for action within this global system of living beings from the smallest element to the totality of social systems.

There are elements of these issues that I didn't consider until years after these arguments were already solidified. Some of them have already arisen or been hinted at in the course of the reasoning that led me down the path to more extensive consideration. Time is central to the arguments given in the book because of the role of time in the formation of cognition. Our experience of acting as creatures in time, and with time limits imposed by our mortality, underlies the discussion of cognition, for example. Social rituals

beyond the present. Society is such that seeds planted today in immediate struggles can possibly become roots that grow forests of liberation. More strongly, sometimes our contestations can have direct impact on individuals and groups, and at times facilitate the development of ruptures.

Critical cognition can be thought of as developing through the interaction

of conscious and non-conscious processes throughout society. This cognition develops in parallel to activity against the system. Evolving alongside political action, it emergently produces countless breaks, transformations, and potentials both at small-scale and large-scale levels. Thus, the roles of intervention and historical forces are inherently fused, with agents playing a special, though limited, role in realizing them. Neither the patient planner can will such changes into existence, nor can we sit back awaiting that they be inevitably carried to us.

Fundamentally organized around power as the central plain that cognition grows around; the task of the radical is to try to root their actions in their historical moment as agents, while preparing to adapt to an uncertain and unpredictable future. In this way, we can see that the problem of liberatory cognition is that of political agency navigating the tangles of our lives. This poses an alternative to views of history as being written by a divine playwright versus radicalism as a form of personal enlightenment.

Looked at this way, the field of liberatory cognition is wide open. We have much to gain from exploring spaces for the transformation of cognition. That is, what environments is it most likely to grow in? Where are places we can challenge the transmission of ideology? Which actions open up that space? What role can ideas play in interpreting events and actions?

These are not timeless or universal questions, but rather they are things to be settled in the lived political struggles of particular contexts. With an understanding of emergence and power, libertarian thinkers can set out to open up these channels and create

new thinking and practices around the possibilities for change that stand before us.

then arises out of the emergent relationship between will, context, and unconscious mental states within the agent. From a liberatory perspective, motivation to engage in radical acts does not come from indoctrination, pure reason, or generalities, but instead is a feature of different contexts and populations responding to the world they are adapting and responding within. Here the theory returns to the beginning of the arguments. Agency and action are activity shaped by the interdependence between an individual's role and social forces that are at the same time forming and formed of our actions.

can understand such situations in terms of the social relationships of the agent, their abilities and the abilities of those they stand in relation with, a physical-historical context of action, and (emergent) agency produced via the interaction of agents with the world and each other. Such events are understood in terms of agents, context, emergent properties, and power. In one way, we could question altogether why it would be that motivation would be a problem at all. If we seek motivation to act on liberatory lines, the problem is not how any such motivation is possible, but rather how motivation to do this or that act can be. Emergence and power provide maps that lead us out of determinist and reductionist thinking and that situate motivational problems within the concrete forces and moments they occur.

The solution to the role of motivation in liberatory acts is then a matter of the relation of the act to the actors in the context of the trajectory of history and struggle. We do not have abstract formulas for this. Just as with liberatory cognition, the work of the radical in terms of motivation is to look to the struggles, acts, and actors for answers. The complexity of living systems bars us from creating off-the-cuff blueprints for, say, revolutions or even post-capitalist societies. Still, looked at from this perspective, theories can be created that help us better understand how people can act against dominant orders. In what context might immigrant communities in the US take up struggle directly against immigration authorities? How could factory seizures become motivational for the mass unemployed in this country today? Can ghettoized communities repel the effects of prison society and drug organizations to create a collective neighborhood order? With a theory of motivation, the steps to take up these questions within the spaces we find ourselves in are in front of us.

These conclusions came from the investigation of motivation to act that was broken down into thought and action through cognition. Non-mental factors and unconscious mental life have a strong role in the production of motivational states of actors. Motivation

Action

Having explored the problem of what revolutionary cognition is and how it comes to be obtained, other problems present themselves. Setting aside whether or not someone is engaging in such cognition, we can ask what it looks like when it comes to have force. How does cognition translate into action? There is overt conscious cognition, and yet there are other cases that are more ambiguous— people who do not consider themselves militants who break from the inertia of the present order and take action that sets them against immense forces. There are a number of cases to consider:

1. The youth who picks up revolutionary teachings, despite a lifetime's indoctrination of the evils of such thinking.
2. The crowd that comes into the streets because of the brutality of the State, and charges into machine gun fire to bring down a regime.
3. The workers who repeatedly engage in illegal strikes against management, the State, and the union despite willingly and overwhelmingly having signed contracts not to strike.

There are certainly more examples we could consider. Yet there is a parallel here between the cases. At their core they involve a specific type of motivation in their actions. Liberatory political motivation is a motivation of a specific sort. It is not the motivation to merely act, but rather to act against the present order (and potential future orders) in spite of the weight of history, the mechanisms

of order of the present, and the ill consequences of the present towards a better potential future. In these instances, the actions of the participants also weigh against common sense of their day and even the normal reasons for acting.

Action itself seems quite simple, but explaining what exactly it is and its function has created puzzles that have sustained philosophers for millennia. To understand how it is that radical situations can come to have motivational force for actors, we need to understand both motivation and action.

The first relevant distinction is between actions and events. Consider the act of urination. On the one hand, someone getting up and urinating in a toilet is a clear action. Now consider incontinent people who urinate on themselves. This is not an action. Why is that? It may be an action in the sense that someone does it, but it is no more an action than other things that *happen to us*. No one would argue that my liver processing sugars is an action I carry out, since it happens whether or not I like it. Happenings to us may be external like rocks falling on us, or internal like losing control of our bladder muscles and having an experience of incontinence. The difference between incontinence and urinating is that someone does the latter and not the former.

What distinguishes (in part, or at its simplest) action from events is that there is someone, an agent, who intends to do something or another. A lot of ink has been spilt to distill the correct formula that captures only actions and not events, but a rough-and-ready distinction like that is fine for our purposes.

The common way of explaining actions appeals to people's intentions and things about the world. This is enshrined in the joke "Why did the chicken cross the road? To get to the other side." It is a joke because it's obvious that if the chicken crossed the road, it in some sense intended to do so. Actions have intentions and reasons to act.

Consider further distinctions. Though all action is intentional, not all action is consciously intentional. In other words, if I uncon-

Motivation then reflects both the historical context of the actor, the power relationships that the actor stands in, and the emergent forces acting upon the agent. At the same time, the agent is bound within a system with recursive feedback wherein the actions of the agent themselves can change those power relationships and the context for action. There can be said to be a complex interrelation between the motivation of agents, their actions, and the political context. Traditional political thought, including most of the historic left, tends to reduce these questions to intention, leadership, and morals, or negate them altogether. However, the social, individual, and objective context are relevant for the unconscious and conscious decisions made by political actors.

Here we can return to the fundamental question of how it is that radical acts, breaks, and ruptures can come to have motivational force for political agents. More importantly, how is it that people in general can come to act in a liberatory manner against the dominant order, whether in a rupture or otherwise? Like the answers to similar quandaries throughout the book, the framework laid out shifts the problem from universals to the specificity of our biological and historical moments.

Motivational states are relational. They reflect processes both conscious and unconscious within a broader social systemic context. As cognition is built upon the latticework of power relationships in social systems, motivation traces the curves of action through the paths of the mind of the actor, constantly redefining itself and acting within the social world. Motivation is not then a matter of raw force or raw will, but rather a matter of history.

Motivation is emergent from the mind of the agent, but comes to be so only relationally through the reference and power of forces outside the individual. These features interact, shift, and influence each other in a constant process. Motivation is not fixed then, but constantly changing us, changing our actions, and being changed by our experiences. Utilizing a theory of power and emergence, we

In the above arguments this view has been problematized, and an alternative understanding proposed.

In political thinking specifically, we see variants of these views. On the one hand, it is proposed that people act and are motivated politically by use of their reason or rationality. On the other hand, there are suppositions that base instincts and interests drive political action. Based on the above account, any such distinction should be questioned thoroughly. The division between conscious and unconscious motivations is untenable in practice from a political perspective. If it's not easily distinguishable how much rational versus arational processes motivating us contribute to action, any theory that bases a political program for action on such distinctions will be prone to getting it wrong.

Next, consider the context relativity of motivation. The death of a loved one can make some acts, self-destructive behaviors, motivational that otherwise wouldn't be. Likewise, politically, it is actually quite profound that motivations should be relative. This speaks to situations in which people become swept up into political action when they might not have otherwise, both in terms of the possibility of such acts and their limitations.

Taking a concrete example, think of popular attacks on police stations following the killing of a community member. While conscious reason may play some role, the interplay between perception, conditioned experiences with power and police, reactions to the responses of others, and the scope of political participation all interact to produce a complex (emergent) situation. Here group agency, emergent behavior, novel forms of power, and cognition interact to produce situations that may not have existed earlier and that are not reducible to any of the individual components. Such examples illustrate the insufficiency of the intuitive account, and the role of power, emergence, and an emergent approach to cognition and motivation in helping us to make sense of the intervention of political forces within concrete circumstances.

sciously increase my speed on a bicycle in the rain, the fact that I was not aware that I did so does not change the fact that I, as an agent, intentionally did so. By accelerating in the rain, I sought to get to my destination and out of the rain more quickly, and the acceleration brought me my aim. Conscious awareness of action then is not necessary for us to act.

Similarly, it's possible for us to act against our conscious reasons for acting, and to do so intentionally. Think about the weak-willed cheater who wishes to remain faithful to a partner, but sleeps with someone in spite of consciously willing instead to go home. The act of infidelity exhibits the agent's intention to have sex, in spite of consciously willing otherwise. Conscious intentional action is then only a smaller subset of action, and many psychologists believe it is perhaps even a small minority.

There are a number of problems that contradict the intuitive idea of action. First, consider groups. If we understand action via the intention and reasons of an individual, then how do we understand groups? Groups carrying out acts together would have to be understood in some way as the product of the intentions of individuals in combination. The problem becomes that there is no distinction between a group, as in a cohesive band of individuals acting in concert, and a collection of individuals who happen to share an intention.

Take the example of a group stuck in traffic after an interminable wreck. Imagine one scenario in which there is a group of drivers who all decide to honk in unison and express their collective rage. Now think of another scenario in which the same drivers independently honk, and happen to honk in unison. What are the differences between these two in terms of agency? One could say that part of the difference is that groups intend to act together. You could try to stipulate that intentions involve the method by which they're achieved. Still this fails to capture the difference between a group of drivers who honk together, and a collection of individuals honking. An organized honking group is one thing. Individuals

who happen to honk together or who join in honking out of anger are different. That is, the group agency has different forms, and those forms are not just facts about each individual's intentions. There seems to be something more to being a group than the sum of intentions of individuals. Group agency is emergent and takes different forms based on different processes.

Taking the point further, reflect on the fact that group agency is supposed to derive from the intention of individuals since this is what agency is supposed to be about. Yet, often, groups acting consciously in concert have contradictory intentions. People in the course of the group act come to take part in a group action, but contradict the group intention in the midst, and yet remain a part of the group and the act. For example, consider a band of kidnapers who set forth to hold some unlucky person ransom. Different members of the band have their respective roles, but one kidnapper gets cold feet and questions his role. He is assigned to shoot the bodyguard to facilitate the grab. The kidnapper then fails to shoot the bodyguard and laments his role in the act, vowing to have no part of the bounty or take any part in the aftermath. The robber still engaged in the kidnapping with the band, and though he lost his intention to hold the person ransom, ended up being a part of a kidnapping. Setting aside the judgment of the kidnapper (who would be culpable nonetheless for the crime), we see that it is still the case that this band, of which the kidnapper was a part, did in fact take such an action. This shows that group agency can permit contradictory intentions. This is true to some extent, though we can imagine that if enough individuals fail to intend to complete the act, such actions would fail. Still, this case shows how group agency is not a matter of simply the collection of individual intentions, since contradictory intentions are permissible. Group agency is an emergent force that is greater than the sum of individual intentions, and takes on its own behavior beyond the intentionality of its constituting members.

sions. It feels as though we arrive at decisions and act on our own somehow. Of course, there are counterexamples, such as when we fail ourselves by doing against our best intentions what we decided not to. Emergence gives us an out though, because at the level of organization of an agent, it may be true that our experience of mental life is valid as such, while likewise being constituted by external factors that mutually produce those experiences. Emergence should be taken not just in terms of levels, but also as showing that particular decisions of individuals, motivations, or courses of action coevolve in the environment in which they occur and in the relative context leading up to that event.

Such a discussion clearly parallels concepts of free will. While getting into that mire would take us far afield, it's worth recognizing that however we understand it, similar concepts are involved. There does appear to be on some level a will that has causal power. People have a mental life that, for all intents and purposes, does seem capable of causing actions to occur. Likewise, those actions are understandable in terms of some complicated account of the total of causes that made any particular action occur. And with emergence those causes must be understood as producing novel properties, such as wills that are both causally bound by the world, and containing an experience of what it is like to be an agent. This debate can become torturous and ultimately a distraction. The argument here merely requires acceptance of both will and the causal chain that determines our actions.

A Metapolitics of Motivation

Let us summarize then. Typically, we think of motivation as largely a conscious reasoned process determined by our mental lives. Our decisions based on motivations are thought to be relatively context neutral, arising from our decisions and dispositions.

tion about conscious thoughts and intentions versus unconscious ones? Our conscious ideas about someone else influence our perception of their sensuality. That appeal becomes an unconscious force, which in turn can influence our thinking and motivation about that person. The line in practice is quite fluid.

Or take a more mundane example: do depressed people who binge on ice cream do so by unconscious or conscious motivation? From the conscious side, depressed people likely do have the thought, "I want to eat ice cream," and are motivated by its pleasing aspects in some broad sense or another. Yet, surely unconscious elements are at play here as well. Depressed people seeking gratification have connections to such activity through socialization related to food and eating, advertising and group behavior associated with ice cream and sweets, and even chemical processes perhaps incentivizing behavior on some level. In practice the gap between the thoughts that motivate eating the ice cream and unconscious forces that push the agent towards the thoughts are hard to pull apart. This is because those unconscious forces are the kinds of things that make us who we are.

Our dispositions and motivations as agents are clearly shaped by our own internal mental processes. Yet at the same time, it is our relationship and reaction to the world that intrinsically shapes those thoughts in a feedback cycle. This is true first because the nature of our thoughts refer to and are partly defined by external things and relations. It is also true because unconscious elements in our mind may influence conscious elements, and vice versa. The causal chains between conscious mental activity, unconscious mental activity, and the world are complex. They exhibit, in sum, emergent properties that produce motivations and actions of the individual in a complex and adaptive manner.

This bucks how we normally think about our actions. We don't think about the sum context upon which our decisions and drives are produced. One could speculate this is largely connected to our awareness of our experiences as agents having made such deci-

The second problem with the intuitive account understanding of action arises from our understanding of our mental states. Remember that action was proposed to be about beliefs, desires, and intentions—mental states of an agent.

There are clear supporting reasons for this. When grabbing a glass of water, we do need to understand a desire to drink, beliefs about what it would take to drink such water, and facts about beings that can will something to be so and carry it out. Part of what group agency raises points to another lingering issue though: the way in which things outside ourselves, external matters, relate to our intentions. Take the cases of the two groups of honking people. Relevant to understanding the differences between an individual intending to honk, a collection of individuals honking, and a group honking in concert are not merely facts about the internal mental life of the individuals, but also occurrences and context in the world outside those individuals.

If group agency is in fact more than the simple sum of the intentions of the individuals contained in the group, then likewise the account of the actions of such groups is more than the sum of their mental states. At the very least we can say that in some instances we must appeal to external context as an explanation of action in order to make sense of it. Or in other words, the mental states of individuals are incomplete (though necessary). Part of the content of the individual's mental states are things in the world. This was indicated by the account of cognition in the previous chapter. Thoughts are mutually constitutive states of mental states, relationships, and features of the objective context that make up the world of the agent. In group agency, the states of the individuals define the action of the group in a complex and dynamic fashion not wholly understandable in terms of facts about the individual alone. Thoughts themselves are emergent, and the feedback between agency and action in societies produces new emergent forms of agency.

To clarify we can introduce a number of distinctions to clarify the cases. Imagine that the same group of people honking in traffic

instead happen to accidentally honk at the same time. We might call this an unintentional group event, as it is not an action in the sense that no one intended to do anything as a group. In the situation in which individuals honk together intentionally out of frustration, the group action is done unconsciously (without identification with the group). This would be a form of unconscious intentional group action. When the honkers act as a group, perhaps a coordinated honking flash mob of rage, this could be called conscious intentional group action.

In summary, intuitive ideas about action fall short on a few accounts: mental states are insufficient to explain actions, and understanding agency requires looking not only at individuals, but also at more complex configurations such as groups. Recognizing the shortcomings of the intuitive account yields some points to reflect on. First, action concerns agents and their mental states, but is not reducible to those facts. Second, groups can have agency that is greater than the agency of the individuals. Third, the relationship between awareness, intention, and successfully completing an action depends greatly on the situation (the agent, context, and other agents). Without proposing a theory of action itself, which would take us far from our task, we can assert that agency is relative, that there are emergent products of the interaction of individual agents with the world and other agents, and that nonmental facts are necessary to understanding the actions of agents.

Motivation

Now let us return to motivation. Given a rough sense of action, what bearing do these issues have on motivation? Like the intuitive account of action, the intuitive understanding of motivation runs into some problems. Similarly, we typically think of motivation as being a product of reasoning and determined by our mental lives. We can contemplate this as part of a naive psychology of our lives as subjects, wherein the conscious mind is the driver and our mental life is the core of our personhood, actions, and decisions. These ideas are not totally crazy. Many of the most important things that happen in one's life do fit this picture. Yet with motivation there are again some key things missing.

Unconscious motivations are fairly obvious. Advertising certainly uses techniques aimed at motivating agents to act without their awareness of having been motivated by outside forces. Indeed, when we are so moved, we feel as though we motivated ourselves to seek out whatever they are trying to sell us.

In fact, the problem is deeper. The line between what is a conscious and unconscious motivation to act is extremely blurry. For instance, sex is one area where such forces are notorious difficult to pull apart. There are clear cases of unconscious motivation towards sex, such as people being manipulated into acts because of instinctual sexual desires they are unaware of. People use flirting to influence decisions in unrelated matters like when people dress sexy and flirt to land jobs or seek non-sexual favors from people they know are susceptible. Likewise, there are conscious sexual motivations in which agents think to themselves that they ought to do some act in order to attain sex. At what stage is sexual motiva-