

## **Tiger Stripes and Embodied Systems:**

### **Hegel on Markets and Models**

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**Abstract:** *This essay develops from Hegel's Philosophy of Nature a different critique of the ideal of a global market society inhabited by purely rational economic actors. It extends this to critique mathematical models in social philosophy. Along the way it finds a parallel argument in Wittgenstein, and argues that for Hegel the fractious European Union foreshadows the future of the United States of America.*

### **Modern Societies**

If Hegel walked the streets of today's Berlin, what would he make of modern Germany? More unified German nation, check. Professional civil servants, check. Bicameral legislature, controls on the market and corporations, social welfare system, check. But: no constitutional monarch, no Estates general, not enough farmers, either really big wars or uncivilized small wars. A mixed result, he might conclude, but moving in the right direction for a modern nation.

Then, looking around, what would he say about the European Union? Fairly democratic and rational constitutions in its members, check. Good civil rights and social protections, check. Jealous sovereignties, lots of squabbles, check. Economic and forceful violence hovering in the background, but maintaining an uneasy accommodation, check. The EU is doing about as well as he had expected in the modern international scene.

Many Americans expected more from the EU. They hoped it might turn into a United States of Europe. They presumed that American-style political institutions ought to be able to tame the national differences that keep the EU fragile. Because, after all, they *know* that the US is the first truly modern nation, leading the way to a new kind of society.

In the 1820s Hegel had declared that the US was not a nation. Because of its open frontier, it hadn't yet been forced to turn in and confront itself as a unity. In the American dawn's early light the owl of Minerva couldn't fly.

### **Clearing the Lumber Room**

But Hegel also had said:

America is therefore the land of the future, where, in the ages that line before, the burden of the world history shall reveal itself – perhaps in a contest between North and South America. It is a land of desire for all those who are weary of the historical lumber-room of old Europe.

Napoleon is reported to have said: "*Cette vieille Europe m'ennuie.*" It is for America to abandon the ground on which hitherto the history of the world has developed itself.<sup>1</sup>

Could Hegel then be recruited by those who claim that the United States is indeed *the* uniquely modern nation, leading the way into a new future by clearing out the lumber room of old traditions, memories, rivalries, aristocracies, and privileges?

In this vision, America applies the solvent of individual liberty to restrictive social roles, opening the field for free individuals to act on their own. In one story the free individual is the pioneer creating a new town, in another story the cowboy subduing untamed nature and unruly companions, or the loyal citizen battling oppressive institutions and powerful bosses.

To thoroughly clean out the lumber room a truly modern society must not later become another antique to be stored away. It must be a society that stays fresh, self-renewing, *modern* in the strongest sense of that word (which stems from a Latin word for *today*). It needs to be more than a change from one old regime to another. Like a bolt of lightning, it should divide history. The strongest claim would be that the new society has found the true essential form of social life, which can now be implemented in its purity free from historical incrustations.

This modernist dream appears from the Enlightenment through Nietzsche and Max Weber and on to today's proponents of the free economic rationality of the market. A market society of free individuals is not structured around any set of historical privileges or substantive values. Individuals are to be rational economic actors. Whether consumers or entrepreneurs, and preferably both at once, these autonomous individuals choose among possibilities guided by individual preferences within an overall market of needs and resources. Each person pursues their own welfare. No one exercises concern for the collective; the invisible hand will take care of what is common. This view provides an unusually austere version of the modernist dream. It is by no means the only version of that dream in America: both John Wayne and John Dewey would reject it. But lately this version has become very influential, often under the not too positive label *neoliberalism*. A global market society where everyone's deep identity is as an rational maximizer of individual economic welfare, with a minimal state to guarantee the market, so that substantive national and group identities become matters for personal choice.

### **Hegel versus the Market Society**

Hegel called a society organized around a free market plus a minimal government to preserve that market *bürgerliche Gesellschaft*. Literally translated his phrase is *the society of those living in cities*. In Anglophone discussions of Hegel's ideas, his phrase *bürgerliche Gesellschaft* is commonly translated as *civil society*. However, more general Anglophone political philosophy and most social sciences use the term *civil society* with a different and almost opposite meaning, to refer to a network of participatory institutions such as

bowling leagues, book groups, neighborhood improvement organizations, and other voluntary groupings that bring individuals together *in shared efforts for common goods*, helping to buffer the raw necessities and demands of the market.

For Hegel such organizations embody a form of sociality that goes beyond any pure market society toward a more basic and encompassing way of life with shared common goals and values. So, rather than employ the term *civil society* in this essay, I will translate Hegel's *bürgerliche Gesellschaft* as *market society*.

Hegel denied that a market society formed the essence of social life. Citizens, he argued, can never be reduced to purely rational individual economic agents. Shared common goals and identities are more fundamental. Modern freedoms do not reduce one's national identity to a club one might choose not to join, where being British or Japanese might be something put on or taken off, as ceremonial garments are worn on special occasions but don't affect one's basic economic and political decisions.

To strengthen his point, Hegel today might note that now the EU nations are trying to avoid splintering into smaller duchies for ethnic groups who refuse a purely economic global identity. He might point out that even the US now contains groups that refuse to melt down their divergent substantive values and historically shaped modes of life. This might lead him to conclude that rather than being a failed attempt to create a United States of Europe; the fractious European Union shows the future for the United States of America.

### **More than Markets**

For Hegel, to see a modern society as based on the primacy of individual choice through market mechanisms is to fail to understand what a society is. Any attempt to realize such a society will reveal how a market society can only exist within a more encompassing substantive community.

In his *Phenomenology of Spirit* and elsewhere Hegel contends that the freely choosing individual is a social product. Far from being the foundation of society the choices of free individuals are made possible by more fundamental levels of social interaction. Neither individual nor society dominates; they support one another in a mutually productive relation.

Then, in his *Philosophy of Right* Hegel offers an internal critique of the ideal of a market society. In such a pure market, shared values and common projects appear in the growth of substantive associations among workers, and the supposedly minimal government soon must moderate and remedy the excesses of market capitalism. Based on his logical dialectic of universal, particular, and individual identities, he argues that such tensions and developments show how the market exists only within and through the fuller shared community that he calls *der Staat*. Capitalized translations of Hegel's German word as *the State* bring an unnecessary echo of twentieth century totalitarianism, but Hegel might point to today's Holland or Sweden as examples of what he was proposing: liberal constitutions, a symbolic monarchy, a strong sense of national identity, with careful tending to both markets and social welfare.<sup>2</sup>

### **New Defenses and New Attacks**

Since Hegel's time many new proposals and defenses of the ideal of a market society have appeared. In particular, the science of economics has developed powerful techniques of mathematical modeling that are said to prove that a market society untrammelled by shared commitments can produce the most efficient welfare for all. These crystalline insights have allowed laissez-faire economics a new run.

Mathematical models promise a shaft of sunlight that illuminates the depths of economic decisions and banishes murky dialectical uncertainties. Predictably, those murky depths have reasserted themselves, as attacks on the use of mathematical models. One line of attack comes from behavioral economics, which sees the abstractions of the

economic rational individual as out of touch with our evolved patterns for measuring risk and perceiving dangers and opportunities, honed by millennia of evolution.<sup>3</sup>

My plan in this paper is to develop from Hegel a new argument against the possibility of a pure market society. After advancing that argument, I will show how it can be extended to question the current reliance on mathematical models. I will argue that just as no animal can be mobile without being both enabled and limited by its particular contingent type of mobility, so no citizen can be rational or political without being enabled and limited by its particular contingent substantive identity. It is not an unfortunate evolutionary mistake that we do not act as pure economic beings. Rational choice, economic decisions, bureaucratic procedures, game theory strategies, and the other actions of rational actors cannot be realized in their formally described purity. They will always be embodied within a particular substantive identity that focuses, enables, and limits them.

### **Being Outside**

Nature, for Hegel, is all outside. Forms and processes and laws that may be described in conceptual purity become real only when embodied in space and time, where their primary connections are external: one space next to another, one minute succeeding another. What I may describe as an internally related hierarchy of natural systems exists in reality as a set of entities scattered about in different locations and times and shapes.

In nature, things are not just outside the mind; *they have outsides*. They are plunked down in the midst of other things not intrinsically connected to them. They have relations and vulnerabilities that are not included in any pure description of what it means to be a tiger, or a piece of granite, or even a local biosphere. There is always an outside, always the contingent other, the unexpected disease, the new competitor, the moving continent, the asteroid from the heavens.<sup>4</sup>

Most importantly, to fit into that outside world, a natural thing's essential structures need to acquire huge amounts of added contingent detail. Hegel puts his point this way.

The contradiction of the Idea, arising from the fact that, as Nature, it is external to itself, is more precisely this: that on the one hand there is the necessity of its forms which is generated by the Concept, and their rational determination in the organic totality; while on the other hand, there is their indifferent contingency and indeterminable irregularity. In the sphere of Nature contingency and determination from without has its right, and this contingency is at its greatest in the realm of concrete individual forms. The immediately concrete thing is a group of properties, external to one another and more or less indifferently related to each other. For that very reason, the simple subjectivity which exists for itself is also indifferent and abandons them to contingent and external determination. This is the impotence of Nature, that it preserves the determinations of the Concept only abstractly, and leaves their detailed specification to external determination.<sup>5</sup>

The rock I use as a paperweight is not just heavy, but heavy with a particular weight, balance point, tensile strength, with a particular color and shape, location and texture. It could not exist without those contingent qualities.<sup>6</sup>

To be an animal, an organism has to possess essential systems that enable it to move about, obtain nutrition, reproduce, and so on. But an animal cannot just be "mobile." The notion of mobility does not say whether the animal creeps or crawls or flies, whether it has legs or wings or fins or treads, how many appendages, their function, number, color, size, etc. Its legs will have a certain tensile strength. Its feet will be just so big and fitted with particular styles of claws or toes or pads. For the animal to move, all those contingent details need to be realized. To be mobile is to be mobile in a particular way that gives the animal a purchase in the world, enabling motion of a specific kind in a specific environment. It's not that a tiger is mobile *and* has legs. It is mobile *through* having legs, just as it is colored through having stripes.

Embodiment brings a particular substantive identity that both opens and limits possibilities. This includes a repertory of defined skills, instincts, reactions, and sensitivities that fit it into its environment. The animal, its bodily features, its skills and instincts, and its environment (*Umwelt*) stand together in what Hegel calls an immediate unity.

### **Turning Inward**

But that immediate unity grows more complex. The tiger relates to its environment differently than does a piece of granite. The tiger acts to preserve its own identity. Hegel traces the growing ability of natural organisms to express in their actions a relation to their own existence. In the later sections of Hegel's philosophy of nature we find increasingly complex systems more and more able to act and react as whole individuals. Then in the early sections of his philosophy of spirit this self-identity becomes by degrees more and more self-referential. If nature is the sphere of outsides and contingency, then spirit is the realm of insides and freedom. But at no stage is there a sudden liberation of a soul from a body. Instead, there are ever more self-related but still embodied processes.

### **Freedom and Institutions**

A crucial step is achieved when, with the appropriate social preconditions, individuals come to care for their freedom. This brings new dilemmas, as political freedoms grow yet individuals remain frustrated by narrow possibilities. Hegel shared his generation's romantic longing for complete fulfillment in a marriage of freedom's deeper selfhood with nature's sturdy completion. But he became disillusioned with both Romantic longing (*Sehnsucht*) and Romantic ironic detachment. He strove to understand how a person's particular limited roles and finite meanings could be accepted as a fulfillment rather than a limitation.

In the introduction to his *Philosophy of Right*, Hegel says that



The will contains ( $\alpha$ ) the element of pure indeterminacy or that pure reflection of the ego into itself which involves the dissipation of every restriction and every content either immediately presented by nature, by needs, desires, and impulses, or given and determined by any means whatever. This is the unrestricted infinity of absolute abstraction or universality, the pure thought of oneself.

( $\beta$ ) At the same time, the ego is also the transition from undifferentiated indeterminacy to the differentiation, determination, and positing of a determinacy as a content and object. Now further, this content may either be given by nature or engendered by the concept of mind. Through this positing of itself as something determinate, the ego steps in principle into determinate existence. This is the absolute moment, the finitude or particularization of the ego.

( $\gamma$ ) The will is the unity of both these moments. It is particularity reflected into itself and so brought back to universality, i.e. it is individuality. It is the self-determination of the ego, which means that at one and the same time the ego posits itself as its own negative, i.e. as restricted and determinate, and yet remains by itself, i.e. in its self-identity and universality.<sup>7</sup>

This might seem just the sort of procedure that the proponents of pure economic rational agency would applaud. This free self pulls away from the external world, becoming an active potential that particularizes itself in any manner that it chooses. At the moment of freedom a self can choose rules and criteria for deciding among the options available. Pure economic maximization offers the advantage of leaving the self free to choose without substantive commitments or prior identities. Would not this be the triumph of spirit over nature?

This, however, is not at all what Hegel has in mind. When Hegel talks about negative self-withdrawal he is not describing a temporal process of decision. The three conceptual

"moments" of the will are not describing a temporal sequence. They coexist together at the same time.

A self never exists as an indeterminate possibility; it is always being determined in some way in some concrete social setting. There is no actual moment where the self knows itself as a cloud of free potentiality. To Hegel, individuals or groups who try to actualize that pure freedom either become impotent Hindu mystics or destructive agents of Robespierre's Terror.<sup>8</sup>

The second moment, determinate particularity, is always present, and the third moment describes, Hegel thinks, our concrete reality — but it is misunderstood. Our usual concept of free will oscillates uneasily between the first and second moments, forcing us to describe our situation as frustrated universality and/or oppressive particularity.<sup>9</sup>

In order to think rightly the idea of freedom we must conceive universality and particularity affirmatively together. Hegel mobilizes ideas from his logic about the relation of universal and particular, form and content to describe a self that is aware that it is *more* than its current particular situation but does not find that situation a fetter because its particular content is seen to follow from the structure or form of that *more*.

Hegel argues that the only way to feel completely at home in one's particular embodiment is to live within institutions that grant recognized social roles to all the moments of freedom in their complex interactions. A market society cannot do this because it is built on a sharp separation of universal and particular. Put in Hegel's technical terms, the problem is that the difference, but not the unity, of formally universal process and particular content has been posited in the institutions of market society.<sup>10</sup>

What is needed is a set of institutions which makes one's larger life choices feel as if they follow from and are ratified by one's freedom *and also* are objectively good and rational. History has struggled to develop such institutions.

No institution can eliminate occasional experiences of agonized freedom or imprisoned frustration, but the person living in a fully rational society can be confident that all the aspects of the process of self determination have been active in the processes that legitimate and affirm through shared values the individual's larger life choices. This confidence provides a base level of self-contentment that cannot be disturbed by agonizing episodes.

Hegel tries in his *Philosophy of Right* to describe that set of institutions. He recommends shared identities and common goal within a representative republic with a symbolic monarch, professional civil servants, an extensive welfare system and controls on the market. The details of his recommendations may seem questionable or dated but his general point remains. Those institutions cannot exist as pure instantiations of their formal descriptions. Just as spiders and fish share common systems but realize them in contingently different embodiments, scales, furry legs, number of eyes, and so on, so any modern state will have distinctive geographical, historical and emotional qualities that will contingently enable (and limit) its institutions. So each modern nation will "do" bureaucracy, or voting, or bicameral legislatures, and even "the market" in its own way.

Economic rationality and politics are realized into the external world in and through contingent qualities that enable and limit them. So much detail has to be filled in for the pure process to become real. There is geography, history, background, habits built up over long periods of time, fundamental moods and styles of acting, typical patterns of thought and valuation. For Hegel these might be French or German or Catholic or Protestant or Chinese or Indian and so on.

In Hegel's discussion of history he talks much of *Volksgeist*; the term is often translated *national spirits* but a modern nation state is only one of many kinds of groups with substantive contingent identities. Such talk frightens readers who remember all too well the 20th century attempts to enforce substantive values onto recalcitrant populations. Hegel would reply that it is a mistake to think, in Cold War terms, that we must choose between melting down our traditions into a global market society or submitting to a single

authoritative identity. There is a third option, a multitude of societies each with its own substantive identity and shared goals guiding its market.

The immediate given unity of the self and its social world appears in linked networks of practices, moods, habits, valuations, spreading in all directions, influencing every act performed within them. It is not just the people have different preferences, but that their style of having preferences, their ways of dealing with preferences and making decisions all become real within immense amounts of added detail and ongoing practical orientations and horizons.<sup>11</sup>

Hegel's studies of history are filled with examples of these group spirits. His analyses are insightful but weakened by stereotyping and lack of information. But these weaknesses do not weaken his general point that any institution will embody its formally described processes only in and through huge amounts of added contingent qualities which both enable and shape its activities.

### **Hegel, Really?**

My way of reading Hegel may sound too messy and empirical for the great absolute idealist who gathers all facts into a synoptic vision based on pure logic, and who ends his presentation of his system with a quote from Aristotle about thought thinking itself. But I am afraid that on this point Hegel does not live up to his reputation. Hegel argues in his logic for an *a priori* necessity that the realizations of spirit happen through *non a priori*, absolutely contingent factual details.<sup>12</sup>

Hegel's institutional recommendations for political and social structures occur at the end of his discussion of spirit realized objectively in the world. History and logic yield insight into the developmental pattern that has led to his proposed modern institutions for a free society, but the knowledge of the pattern does not provide a set of pure a-historical social institutions.

It is tempting to picture Hegel or his followers as philosopher gods looking down at the gyrations of thought, matter and history below. But Hegel insists that spirit's motion can be grasped only through and in its embodied particularity. The self-comprehension of spirit is happening here and now, conducted in your and my languages, with contingent enablings and limitations. Absolute knowledge is a social possession, not an individual's moment of total insight. This is why Hegel teaches many courses rather than conducting a single mystical or aesthetic initiation after the manner of Schelling.

Hegel thinks that the average citizen cannot achieve philosophy's complex historical/ontological awareness. For them, the confidence being at home in a society that supports freedom will be delivered through art and religion rather than clear conceptual analysis. This is the rock on which the Hegelian inheritance shattered into conservative theorists and radical activists. Marx criticized Hegel's settling for contemplation in his famous 11th thesis on Feuerbach: "Philosophers have hitherto only interpreted the world in various ways; the point is to change it." Marx believed that when human consciousness came to understand the formal patterns of its own self development through history it could embody them in a purely human and free social structure that would be brought into being by the lightning strike of revolution. But, as Hegel might have foretold, such revolutionary formulas became real only in and through contingent histories and cultures of the target nations. There was no escape from contingency through the realization of a pure communist structure because that structure could never be realized in its purity. The same is true for a pure market, capitalist or not.

### **A Helpful Analogy**

While writing this essay in tandem with another for a conference on Hegel and Wittgenstein, I discovered in Wittgenstein's *Remarks on the Foundations of Mathematics* a parallel to Hegel's argument about pure structures. Discussing the nature of mathematical proof, Wittgenstein shows diagrams of simple machines. Consider a diagram of a see-saw: a lever with a weight on the far end and supported on a raised pivot in the middle. It's "obvious" that if you push down on the lever the weight will rise.<sup>13</sup>

But is it so obvious? Perhaps the weight is too heavy and the lever breaks. Or the support in the middle collapses. Or the lever bends, or ties itself in knots, or the weight evaporates, or the lever liquifies. It all depends on what the materials and the laws of nature happen to be. Wittgenstein comments:

When I see the picture of the mechanism in motion; that can tell me how a part actually will move. Though if the picture represented a mechanism whose parts were composed of very soft material (dough, say), and hence bent about in various ways in the picture then the picture would perhaps again not help in making a prediction.<sup>14</sup>

Now, replace the diagram of a machine with an outline of the steps for making a decision according to a rule of formal pure economic rationality, or a mathematical model of decision processes and their results. Or the procedure for the calculation of stakes in a game, or the formula for operating a bicameral legislature. Taken as defining the process, the steps in the diagram or outline are sure and clear. But as a description of an actual existing process, what will happen depends on the contingent qualities of the parts. Taken as defining a process, an outline or a diagram shows a physical machine with infinitely strong levers and gears that have no way of breaking, and the steps of a decision process show actors being acting in clear absolutely precise ways. But describing a real instance of the process the gears may melt, and the humans who will realize the procedures will be French or German or belong to some tribe in the Borneo. They will have their own culture and attitudes, language, and values.

The notion of a purely rational economic actor is an idealized machine. The point is not that the purely rational machine may have contingent data to process, but that the actual workings of the machine will be realized through contingent embodiment which open and close off possibilities.

Now it should be clear how Hegel's argument applies to the recent reliance on mathematical economic models. It is not an aberrant result of evolution that we cannot act

as those models say we should. No one can, because the models cannot be implemented in their purity. The necessary contingencies of embodiment are not simply decoration; they shape the horizon of real possibilities.

### **A Last Objection**

But granted those contingencies, should we not be able to back off, reflect on them, and self-consciously alter them. Maybe we cannot do that all at once; Descartes and Robespierre could not succeed. But why not analyze what Hegel calls our immediate union with our social and natural world into sets of preferences, attitudes, and then into second-level preferences (preferences for ways of dealing with first order preferences) and so on? Then alter them one by one. Rely on one part of life while revising another. "We are like sailors who have to rebuild their ship on the open sea, without ever being able to dismantle it in dry-dock and reconstruct it from its best components."<sup>15</sup>

This seems plausible; we do it all the time... Or do we? Neurath's ship is another idealized diagram of a pure process. For, where is the ship going? A real ship travels with a mission. If Neurath's ship were traveling *solely for the purpose of being refitted en route*, its crew would have no way to know how to rebuild it. Once we add a contingent purpose and other details, revisions can be imagined and evaluated.

But surely the goal of the voyage can also be reflected upon and changed? True, but what guides that new self-reflection? Either we will face an infinite regress of questions about criteria, or we will accept Hegel's claim about immediately given contingency.<sup>16</sup>

What makes us modern is not that we are self-aware; artists and thinkers have been so throughout history. What's new is creating institutions that legitimate and potentiate that self-reflection and change. That helps clear the lumber room, but in fact active self-reflection and self-correction can themselves be made real only as contingently embodied. We can, indeed, take up and examine any of the contingencies of our geography, mood, values, projects, and so on. But we cannot do so pure and naked.

## Substance and Conflict

Once we understand the unavoidable role of contingent embodiments, we see that Hegel had good reason to oppose the idea of a global market society. We see the impossibility of melting away (or commodifying) any substantive identity and leaving only pure rational individual actors making social compacts.

Hegel would indeed take the current problems of the European Union as what we should expect. Hegel's insistence on the necessity of contingent community spirits means that at all levels communities will have inherent differences of approach and mood and interests. They can rationally "get along" but there's no automatic reconciliation, and no way of banishing the permanent possibility of conflict. Hegel's refuses Kant's universal peace because he sees no way for a purely formal global identity to become a concrete identity that all nations can share. That is why the fragile European Union is a better emblem of the future than any supposed market society in the United States.

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<sup>1</sup> G.W.F. Hegel, *Lectures on the Philosophy of History*. Translated by J. Sibree (1884). (New York: Dover, 1956), 86-7.

<sup>2</sup> See David Kolb, *The Critique of Pure Modernity: Hegel, Heidegger, and After*. (Chicago: University of Chicago Press, 1987). Hegel's argument rests on the analyses in his logic/ontology/metaphysics. For a critique of readings of Hegel's social and political ideas that try to bypass his logic and ontology, see David Kolb, "Beyond the Pale: The Spectre of Formal Universality." *The Owl of Minerva* 36:1 (2003-04): 15-30.

<sup>3</sup> See for instance Daniel Kahneman and Amos Tversky, *Choices, Values, And Frames*. (London Cambridge University Press, 2000); Daniel Kahneman and Paul Slovic, *Judgment Under Uncertainty Heuristics And Biases*. (London: Cambridge University Press, 1982); Daniel Kahneman, *Thinking Fast And Slow*. (New York: Farrar, Straus and Giroux, 2013).

<sup>4</sup> The Deep Mind AI that learned from repeated trials how to win at the game of Go was given the task of learning to walk. Clever programming defined the goal of the task, and the AI was fed examples of successful and unsuccessful transits of obstacle courses. It



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learned from these examples — without being programmed in detail — how to maneuver a 3D stick figure around simulated courses. (See *Producing Flexible Behaviours in Simulated Environments* -- <https://deepmind.com/blog/producing-flexible-behaviours-simulated-environments/>.) But Deep Mind has not really learned to walk *outside*. It is maneuvering where all elements are predefined and controlled. To be outside is to be exposed to what is other and unpredictable. This may not matter if the AI is doing limited tasks in a limited environment, but it brings home the point that to be real outside in an external world is more than to follow a formula with a limited number of internal and external variables. Thousands of extinct species testify that adaptation to a stable environment is not enough.

<sup>5</sup> G.W.F. Hegel, *Hegel's Philosophy of Nature*. Translated by A. V. Miller. (Oxford: Clarendon Press, 1970), par. 250.

<sup>6</sup> Our concepts of things may have complex internal relationships, but they have no outsides. The concept of lion and the concept of tiger are internally related but they are not 10 or 20 meters apart. Real cats are a certain distance from one another, have colors and smells, and might not get along. Medieval Aristotelians argued that forms such as *the human* or *the feline* could be embodied in multiple copies of the same entity only if they were combined with divided matter that was already affected by other forms, so that the resulting human or cat would have a particular shape, color, facial expressiveness, character, and so on. Hegel does not accept that hylomorphism, but he agrees for his own reasons that a form or system's realization must happen in and through myriad contingent details.

<sup>7</sup> G.W.F. Hegel, *Philosophy of Right*. Translated by T. M. Knox (London: Oxford University Press, 1952), pars 5-7.

<sup>8</sup> Hegel adds: "In Paragraph 5, it is only one side of the will which is described, namely this unrestricted possibility of abstraction from every determinate state of mind which I may find in myself or which I may have set up in myself, my flight from every content as from a restriction. When the will's self-determination consists in this alone, or when representative thinking regards this side by itself as freedom and clings fast to it, then we

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have negative freedom, or freedom as the Understanding conceives it. This is the freedom of the void which rises to a passion and takes shape in the world; while still remaining theoretical, it takes shape in religion as the Hindu fanaticism of pure contemplation, but when it turns to actual practice, it takes shape in religion and politics alike as the fanaticism of destruction—the destruction of the whole subsisting social order—as the elimination of individuals who are objects of suspicion to any social order, and the annihilation of any organization which tries to rise anew from the ruins. Only in destroying something does this negative will possess the feeling of itself as existent. Of course it imagines that it is willing some positive state of affairs, such as universal equality or universal religious life, but in fact it does not will that this shall be positively actualized, and for this reason: such actuality leads at once to some sort of order, to a particularization of organizations and individuals alike; while it is precisely out of the annihilation of particularity and objective characterization that the self-consciousness of this negative freedom proceeds. Consequently, what negative freedom intends to will can never be anything in itself but an abstract idea, and giving effect to this idea can only be the fury of destruction." (G.W.F. Hegel, *Philosophy of Right*. Translated by T. M. Knox. (London: Oxford University Press, 1952), par 5, *Zusatz*.)

<sup>9</sup> If we think the three aspects of freedom as immediately present qualities they seem to contradict one another. The true way to think them, Hegel believes, is what he calls a triple syllogistic unity, that is where each only exists as a way of holding together or mediating the other two. None is primary and none immediately present as a foundation for the others. Rather each of them exists as the intersection or the mediation of the other two. In various societies, different aspects of this complex unified process can be "posited," that is, made particularly salient in a particular set of social institutions, leading to conflicts and imbalances. In the final modern set of institutions all the elements of freedom have been explicitly posited and linked with the others so that no one of them is completely dominant.

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<sup>10</sup> Hegel describes a market society as "an association of members as self-sufficient individuals in a universality which because of their self-sufficiency is only formal" (G.W.F. Hegel, *Philosophy of Right*. Translated by T. M. Knox. (London: Oxford University Press, 1952), par. 157).

<sup>11</sup> For provocative examples of such differences, see Joseph Henrich, Robert Boyd, Samuel Bowles, Colin Camerer, Ernst Fehr, Herbert Gintis, Richard McElreath.

"In Search of Homo Economicus: Behavioral Experiments in 15 Small-Scale Societies." *AEA Papers and Proceedings, 2001*: 73ff.

<sup>12</sup> For a clear presentation of Hegel's arguments for this claim, see Stephen Houlgate, "Necessity and Contingency in Hegel's Science of Logic." *The Owl of Minerva* 27 (1) (1995): 37-49).

<sup>13</sup> Wittgenstein's actual diagrams are more complex than my description of the see-saw. His involve a long lever attached to a point on the circumference of a wheel. The lever rests on a pivot point some distance along its length. Looking at the diagrams, it seems obvious that if the wheel rotates, the end of the lever attached to its circumference will be pulled around and a chosen point further down the lever will follow a certain path in space depending on the location of the pivot.

<sup>14</sup> Ludwig Wittgenstein, *Remarks on the Foundations of Mathematics*. Translated by G. E. M. Anscombe. (Oxford: Blackwells, 1967), 123. See also pages 119-120, 195.

<sup>15</sup> Otto Neurath, "Sociology in the Framework of Physicalism" (1932). *Philosophical Papers 1913-1946*, R.S. Cohen and M. Neurath, eds., (Dordrecht: Reidel, 1983), 58-90. At issue is the interconnection of the boards forming the hull of the ship. Our web of belief and practice is not composed of individual planks that can be isolated, tested and replaced one at a time. Elaborate networks of inference and pragmatic relations tie the boards of the ship together in unexpected ways. In fact, when Neurath wrote of the ship in 1932 he was making that point against Carnapian protocol sentences. This point is more familiar these days as the Quine-Duhem thesis and Sellarsian inferential network semantics.

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<sup>16</sup> Or Wittgenstein's point that the game of providing explanation and criteria has to stop at some level where it reaches particular social practices that we just do. Those social practices are part of our contingent embodiment. See Ludwig Wittgenstein, *On Certainty*. (Oxford: Blackwell, 1969).