



# Introduction

*A wizened warrior  
Wanders wonder wild.  
Three vultures appear  
And circle ...*

—Anonymous fragment. Possibly from Püt-Ni

**pavane:** *a slow processional dance common in  
Renaissance Europe during the 1500s*

**O**ne evening, during my doctoral fieldwork, I slept outside on an old cot in the Chadian dry season. The temperature was above 100 degrees. Lying on my back, anticipating a breath of a cooling breeze, I faced the sky: ink-blackness in which stars gleamed diamond bright, the Milky Way bisecting the darkness. Constellations arrayed in place; Orion—the Hunter—always visible; shooting stars occasionally discernible; the moon—cool, dispassionate. During the night I awoke a number of times. Stars and moon moved. Awake again. They had moved more. Awake yet again. They had moved still more: a pavane of stars, constellations, shooting stars, the moon, and galaxies in a stately dance across darkness. Here was more than just a starry night. Here was “the main” thing: a masque of being, with human being a sparkling of heavenly bodies dancing out there, somewhere in the obscure empyrean.

Consider the state of “the main” now. At the end of the Middle Ages, Immanuel Wallerstein (1974) told us that there were economic problems, terrible disease, and grim war in feudal Europe. Things seemed to be falling apart. However, there was a modern world to be won and global capitalism, sailing the good ship imperialism, won it. The high tidemark of that modern world was during the years just prior to the beginning of World War II, when the vast bulk of the globe was in some way subject to Western capitalist domination. Now, according to some, like Slavoj Žižek, we are *Living in End Times* (2011) predated by the “four horsemen of the apocalypse.” Žižek has horsemen. I have vultures, and really it only takes three to do the job: ecological calamity, economic dysfunction, and violence of global warring.

Europe's problems in late medieval times were regional. The same cannot be said of contemporary times. There is no world to be won. It was won and the circling vultures threaten it. The starry night of now is one where "the main" thing is that soon it may be lights out, creating a night sky with three vultures and no diamond-bright stars from the galaxy of human being. The topic of *Starry Nights* is to present in five essays an approach to help understand and explain the current nighttime of human being, with the goal of warding off circling vultures. This approach is termed critical structural realism (CSR). It is introduced next.

### Critical Structural Realism

First, consider what CSR is for. The speculations of nineteenth-century unilinear, cultural evolutionary anthropologists—E.B. Tylor (1871) or Lewis Henry Morgan (1877)—were largely wrong, racist, and supportive of Western imperialism. However, the goals of their analysis were attractive: to study all expressions of humanity in all places and all times. During the first half of the twentieth century Franz Boas (1940) and his followers attacked the evolutionists' empirical findings, critiqued their racism, and challenged their legitimization of imperialism. However, they did not throw the baby out with the bathwater. Even if evolutionary studies had been mistaken in their substantive conclusions, they had been right in their insistence that anthropology should be an enormous field of studies. The Boasians introduced a four-field approach in which anthropologists investigated sociocultural anthropology, archeology, human biology, and linguistics to acquire knowledge about the vastness of peoples' escapades.

Since the Boasians, different anthropological waves have risen and crested. All tend to narrow anthropological boundaries, with the biological thrown out, and restrict the discipline to analysis of social relations or to culture, conceptualized narrowly as ideas. Think of Radcliffe-Brown (1952), who made social anthropology a subfield of sociology, or componential analysts, like Ward Goodenough (1981), who reduced it to gathering a few cultural terms, especially those of kinship. The former Boasian anthropology imagined human being to be a major galaxy dancing in the night sky.

Current anthropology sees human being as a few stars, twinkling here and there. More troublesome, a postmodern anthropological wave arose and became a rave starting in the late 1970s, especially in ethnography. I argue in this text that such an anthropology labors with an oedipal epistemology. Oedipus, it will be remembered, was the mythical king of Thebes who gouged out his eyes. Postmodern anthropologists, for the most part, take a vow to abjure science and, in so doing, eliminate the strongest tool humans have developed for

knowing reality. As such, they are oedipal epistemologists, blind to the pavane of human being. It should be clear something fundamental is at issue here. Anthropology proposes to study the human condition, but if it has epistemologically blinded itself it cannot undertake this labor. CSR offers an alternative to the anthropologists riding the wave of oedipal epistemology.

CSR is for a neo-Boasian, big galaxy anthropology. It is for those who want to know about the economics, politics, social institutions, culture, and biology of humans everywhere, at all times, from the earliest homo sapiens populating Africa 300,000 years ago to the present “end times” actors doing their thing globally. “Human being,” from this standpoint, is all places, times, and ways that humans are observed being humans. Some may worry that such an anthropology hurdles boundaries into other social sciences mashing sensitive, disciplinary toes. So be it. Big galaxy anthropology is a scholarly space in which other, scope-challenged human sciences may join in an intellectual quest specializing in cross-boundary observation—of the relationships of the economic to the political or the biological to the social—to seek fuller knowledge of the starry night of human being. Why do this? First, out of sheer wonderment at the stars pinwheeling across the empyrean. Second, to help against vultures—circling.

Next consider what CSR is not, and what it is. CSR is *not* the author’s brilliant invention. It is *not* new. Numerous versions of it have existed, and continue to exist, since deep in antiquity, though it is possible that the present concatenation of it offers some novelty. Further, CSR is not a particular theory. One can imagine Marxist or Liberal theory in CSR, though my take on it is leftist. Rather, it is a tool for anthropologists, or other thinkers in the human sciences, for exploring the nature of being. In this sense, it is in Althusserian terms problematic, or in those of Kuhns a paradigm, capable of supporting a number of different theories.

For the fool who “wanders wonder wild” investigating being, CSR is their multipurpose jackknife with three blades. One blade is epistemological, the second is ontological, and the third is critical. The first blade helps intellectual workers to know *how* to go about knowing. The second helps to *define* their object of study: what is out there in the starry night of human being. The final blade, which needs to be the sharpest of all, is that of *knowing what to do* about what is. This blade is to be used against the vultures circling human being. Consider, first, epistemology.

## Epistemology

The epistemology of CSR is based upon an old ontological view, realism. Realism is the notion, according to Fetzer and Almeder:

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(1) that we inhabit a world whose nature and existence is neither logically nor causally dependent upon any mind; (2) that some of our beliefs about this world are accurate, even if incomplete, descriptions, and that thereby qualify as true; and (3) that our methods of inquiry enable us to discover that (at least) some of our beliefs about the world are true. (1993: 117).

There are many types of realism, which means that (realistically) thinkers have to make a choice. The realism I find attractive is scientific, where it is asserted that the world described by science is real—insofar as reality is knowable. What makes scientific realism interesting? Frankly, as is argued in the first chapter, it seems that there are simply no other *clearly* superior ways of knowing reality. If there were, thinkers would be utilizing them.

However, CSR's scientific realism is not that of Auguste Comte's or the Vienna Circle's positivism, though it will become clear that I both respect and utilize the latter group. In general, positivists tended to overly claim science's epistemic powers. Chapter 2 reviews postpositivist critiques of science's abilities; including issues of underdetermination, incommensurability, and theory-ladenness. While these appraisals helpfully show where the earlier positivists overly claimed science's powers, they do not argue for a rejection of science. Rather, they tend to concur with the view that there are not better alternatives for knowing human being than science.

CSR's view of science gives up knowing final truths. Rather, it understands science as the development and utilization of the most rigorous practices for knowing as truly as possible, that is, for achieving approximate truths about the starry night of being. The practice of "gaze/regard reflexivity" assists discovery of approximate truths. "Reflexivity," generally, is a person reflecting upon being. "Regard" is understood as the observer discerning some Other, with the Other broadly defined as "something observed and explained." Two sorts of regard coexist. The first concerns the nature of what is. Ontology is the study of the nature of Something Other.<sup>1</sup>

The second sort of regard is that of the scientist. It is less lofty than the first. She or he regards reality directly (or as directly as possible) and, in Kant's famous (1781) formulation, attempts to discover the truth about "the thing in itself" (*ding an sich*), that is, something. "Gaze," as understood here, pertains to some Other observing something and telling that something what they are. Scientific gaze refers to scientific Others observing a particular something, the supposed truths of another group of scientists. This means that what one group of scientists' regard as the truth about something is subjected to other scientists' gaze, with the gaze of the second group of scientists a confrontation of the first group of scientists' regard.

Science, thus, refuses to simply regard something said to be true as true but subjects it to the gaze of skeptics to validate whether something well re-

garded actually has any truth to it. What it regards as true is only as good as the last time it was subjected to scientific gaze. Because there is no final gaze, there is no final truth, which means all truths are approximate. Consequently, science, because of gaze/regard reflexivity, is skepticism.

Approximate truths involve two types of knowledge: what is and why. The first is knowledge of *istheit* (being itself), and not the nature of being, which is emergent from thinking about *istheit*.<sup>2</sup> The second knowledge is of warranted theory. Both are considered next.

### *Making Istheit Knowledge*

One cannot directly know being itself. People know sensations of reality through the organs of perception (eyes, ears, nose, etc. and their connections, especially with the posterior cerebral cortex). “*Istheit* knowledge” is re-presentation of sensation of being as quantitative or qualitative symbols (i.e., concepts). Sensation is bodily reports of being itself, which have been carried to the body in the form of light waves, sound waves, touches, smells, and so on. Light waves and so forth are not *istheit*, but they have been directly in contact with it and so come bearing information about it. They enter the body through the sense organs and are re-presented as electrochemical currents that travel along neuronal networks to the brain (largely in the posterior cortex), where they become sensation. Then they travel further different neuronal networks, being re-presented again and again, until finally they are given symbolic re-presentation.

Such re-presentation can be stored in memory neurons that can be retrieved into consciousness. Symbolic re-presentation of *istheit* may be termed “measurement.” See a big, furry something charging (sensation)! Call it a “bear” (qualitative measurement). Decide it weighs 300 kilos (quantitative measurement). One has taken the measure of an ursidae—run like hell (sensible thing to do).

*Istheit* knowledge is arrived at through the practice of “observation,” symbolic re-presentation of sensations of reality, with re-presentation understood as the taking of something and presenting it as something else. Participant observation is important because it is observation that brings ethnographers closest to the actuality of human speech and actions, allowing fuller sensing of that reality and thereby, in principle, permitting more complete re-presentation of human being. Because the starry night of reality occurs in particular places over specific intervals, it is important to observe the spatiotemporal sequencing of human being. First, in time and space, the bear is pretty far away. Second, in time and space, it is alarmingly closer. Importantly, if anthropology is to be a big galaxy discipline, it needs additional observational techniques

other than those of ethnography—especially those of history, semantics, archeology, and the life sciences. Attention turns to the question of quality. How good is *istheit* knowledge?

It is not perfect. Frailties in regard to knowing reality itself result from what can be termed “haecceity glitches.” The term “haecceity” derives from the medieval scholastic Duns Scotus (1987). There are different understandings of it (see Rosenkrantz 1993), though generally it refers to the “thisness” of things—their singular qualities, properties, or characteristics that make them this as opposed to that other thing. The haecceity of something is the degree to which concepts re-presenting it get these qualities, properties, and characteristics correct. Qualities, properties, or characteristics are symbolic re-presentations of sensations produced by being. “Haecceity glitches” are situations in which symbolic re-presentations of things do not reveal their haecceity. Problems can occur for at least two reasons. The first of these has to do with difficulties of observation, in which sensations of reality for some reason do not accurately report it. A second reason for glitches has to do with pre-existing conceptual bias, which hampers accurate sensing of reality.

Observational haecceity glitches flourish when sensation reveals too little, or too much, of something. Consider, for example, a case in which observation initially divulges too little. Lucretius, in *The Nature of Things* (2007), a century before Christ, asserted that being was composed of atoms, but he could reveal little about atomic properties because he believed they were imperceptible. Here was a situation of “conceptual thinness.” Nineteen centuries later, at the end of the nineteenth and the beginning of the twentieth century, because improved observational methods made atoms perceptible, physicists such as Ernest Rutherford and Neils Bohr sensed that atoms had a structure, whose parts they gave the symbolic status of neutrons, protons, and electrons.

A century later, at the turn of the twenty-first century, with the invention of still better sensing devices that culminated in the Large Hadron Collider, it became possible to examine what went on in the parts of an atom and elementary particles were sensed, such as quarks, photons, mesons, and finally the Higgs boson. Now more of the properties of atoms were known, meaning there was a situation of “conceptual maturity.” “Conceptual bloat” is the second observational haecceity glitch, occurring when inaccurate sensing leads to re-presenting some reality as being greater than it actually is. A god that is all things is a bloated concept. There is no way of knowing whether one has achieved complete haecceity. Reality is an infinity of space and time, and an observer simply does not know if she or he has sensed all there is to sense of what is out there pertaining to something, so it is not possible to know if all of something’s properties have been known.

Preexisting conceptual biases can provoke haecceity glitches. Observers come to reality preloaded with a stock of concepts—10,000 to 20,000 words

and numbers, variously formed into an unknown number of cultural messages, including those of her or his disciplinary specialty (Crystal 2002: 46). Different persons have different conceptual stocks. This means that an observer's sensations can be biased in favor of her or his symbolic store, especially those concepts that the observer's working memory has been primed to retrieve.

Conceptually biased haecceity glitches occur when the preexisting concepts assign properties to observations. For example, an Israeli settler in occupied territory sees a Palestinian youth throwing stones. She or he quite possibly may give this sensation the status of "terrorist," while if a Palestinian sees that same stone thrower, she or he may well place it in the category of intifada.<sup>3</sup> A second sort of conceptually biased haecceity happens when concepts are "broken," in the sense that they lack sensational hooks specifying how a concept is linked to the reality it is supposed to re-present.<sup>4</sup>

A "sensational hook" is a statement, or statements specifying properties of a concept of something so that observers may "hook" into—in the sense of make observations of—the something's reality. Elephants are defined as having tusks and a long nose. These properties are its sensational hooks. If one observes a tusked, long-nosed animal, one may additionally sense that it only eats certain vegetables, thereby discovering another property of its *istheit*. Sensationally hookless notions create "conceptual blindness," concepts unable to sense reality. Notions with too many or too few sensational hooks produced a "conceptual blur," concepts that can sense reality but in an incomplete, that is blurred, fashion.

Consider blur in a concept in which there were too few sensational hooks. Employment, for example, has often been defined as people working. The sensational hook here is "folks working." However, employment during neoliberal times has become part time, short term, and poorly paid. Just observing people employed does not catch neoliberal employment. For a while there was no term to re-present this reality, so that the instability of peoples' lives was blurred behind its non-re-presentation. Introduction of the notion of "precarity," which is concerned with the percentage of workers in part-time jobs, length of time in part-time jobs, and remuneration of these jobs, addresses the blurring of the realities of employment in neoliberal times. The sensational hooks in precarity are part-time jobs, time in these, and salary in them. Observation of them helps remove the blur obscuring growing human insecurity.

Often, conceptual blindness and blur occur in concepts high in abstraction and broad in generality, purporting to re-present vast areas of being. For example, Gilles Deleuze and Félix Guattari have a concept of a "machine" which they say, "may be defined as a system of interruptions or breaks (coupures)" (1983: 36). This definition may strike readers as gnostic. Deleuze and Guattari, perhaps to assist readers' grasp of what they meant by machine, elu-

culated the notion of “breaks” (in the sentence immediately following their formal definition of machine), stating:

These breaks should in no way be considered as a separation from reality; rather they operate along lines that vary according to whatever aspect of them we are considering. Every machine, in the first place, is related to a continual material flow (*hylé*) that it cuts into. It functions like a ham-slicing machine, removing portions from the associative flow: the anus and the flow of shit it cuts off, for instance; the mouth that cuts off not only the flow of milk but also the flow of air and sound; the penis that interrupts not only the flow of urine but also the flow of sperm. (Deleuze and Guattari 1983: 36)

So a machine is “like a ham-slicing machine” that among other things “cuts off ... the flow of shit.” Unspecified by the gentlemen are sensations that hook their machine up to reality, and the ham-slicing trope does not really help in this regard. The Deleuze–Guattari machine seems conceptually blind. The danger of such concepts is they make their users think that the starry night of being is well regarded, when they are delusional, stumbling about in a darkly clouded night.

In sum, the route to knowledge of what is (*istheit*) is through elimination of haecceity glitches due to conceptual thinness, bloat, and defective sensational hooks that produce conceptual blur or blindness. How should one proceed? Chapter 2 offers suggestions, of which, perhaps, the most useful is to be skeptical about reality. Be incredulous of those who award themselves absolute haecceity just because they have “been there.” Knowing what is depends upon achieving conceptual maturity; this depends upon a number of observers sensing something, discovering all its properties amenable to observation, and re-presenting them conceptually. Of course, once people know what is, they need to know why. This leads to discussion of explaining why what is is, which involves theorizing.

### *Making Theory*

Lamentably, some anthropologists’ understanding of theory shades toward conceptual blur because they do not bother to articulate what they mean by the term, assuming that everybody knows what it is, just as they know what a fork is. Such inarticulateness may not be harmful when practicing with a fork. It may lead to big-time grandiloquence in theoretical practice, for the reason that the practitioner does not know what she or he is talking about. Chapter 2 reviews some questionable understandings of theory in anthropology.

“Theory,” as the term is employed in CSR, takes the form of explicit generalizations that map, in the sense of stating, the relationships between abstract and general conceptual terms referring to different spaces and times of being in order to explain or understand why and how what is observed to occur



in those spaces actually occurs. The making of explicit, abstract, and general generalizations is “theorizing.” The most abstract and general generalizations are theories; less abstract and general generalizations can be hypotheses or empirical generalizations (Wallace 1971).

Theory formulation alone is only half the chore of explaining why what is is. Theory must be validated; that is, there must be news from the senses that what a theory states to go on in *istheit* is actually observed to go on. The validating of theory is science’s observational, or empirical, practice. Unvalidated theoretical statements lack truth-value. Validated ones can be said to be approximately true knowledge, at least as far as there are observations to warrant them. Empirical work for the validation of theory is hard. It can require the development of observational techniques that allow more accurate and more representative, intersubjective viewing of realities that need inspection for validation. Be very clear about it, an intellectual discipline that does not develop rigorous validation practices is in the business of producing gobbledygook. In sum, CSR’s epistemology seeks formulation of what is out there in the starry night of human being and explicit, validated theory in order to acquire an increasing fund of approximate truths concerning why it is out there. Consider next CSR’s ontology.

## Ontology

*The real: it is structured ...*  
Althusser, *Reading Capital*

The text will now turn to the nature of “the real” following some preparatory discussion of ontology. Starting in the seventeenth century, at least in England, the concept of ontology began to be used as a substitute for metaphysics. In the nineteenth century, Auguste Comte (1975) critiqued the latter term. The criticism was influential, and the term “metaphysics” was increasingly replaced by that of ontology. Heidegger became a twentieth-century ontological icon. Recently, some in anthropology have taken an “ontological turn.”<sup>5</sup> Eduardo Viveiros de Castro, a spear-carrier for this group, explains what he understands by ontology:

Ontology, as far as anthropology in our understanding is concerned, is the comparative ethnographically-grounded transcendental deduction of Being (the oxymoron is deliberate) as that which differs from itself (ditto)—being-as-other as immanent to being-as-such. The anthropology of ontology is anthropology as ontology; not the comparison of ontologies, but comparison as ontologies. (2014)

This definition seems to have thrown caution to the wind and is something of a cocktail that might have been mixed by Voltaire’s Professor Pangloss—a dol-

lop of Heidegger (the “Being”), a jigger of Kant (the “transcendental” logic), spiked with a “deliberate” oxymoron and a piquant “ditto.” What is the gentleman talking about? Who knows?

A lesson to be drawn from the above is not to simply terminate ontological inquiry as a bizarre cocktail of mind-numbing conceptual blur. Rather, a starting point of ontological inquiry might be appreciating that not all ontologies are equal. Crucially, they have different truth-values. This recognition is part of anthropology’s debt to Franz Boas. During his time racist ontologies prevailed that understood human being as essentially divided into superior and inferior races. Boas and his followers, in the early part of the twentieth century, provided evidence suggesting such an ontology to be fallacious. Ontologists, oblivious to ontologies’ truth-value, will not be disposed to distinguish Nazi from other ontologies. Anthropologists are advised to evaluate the truth claims of different ontologies, lest they careen off the ontological turn into jungles of phantasmagoria.

In order to do so, CSR favors a scientific realist approach to ontology, understanding the term as asking “questions such as ‘What is or what exists?’ ‘What kinds of thing exists primarily?’ and ‘How are different kinds of being related to each other?’” (Bunnin and Yu 2009: 491). Ontological practice involves empirical discovery of *istheit*, specifying their similarities and differences and from this generalizing about the nature of what is. So what specifically is CSR’s scientific ontology?

It is a form of “reism”: “the doctrine that only things exist” (Woleński 2012: 1), because, by definition, nothing is nonexistent. Being is things. Reism is an ancient position favored by Stoics and materialists. CSR argues a materialism, noting that even things that appear immaterial are material. Ideas, for example, are the operation of brain systems, which are material things. However, CSR is a particular type of reism based upon its understanding of the nature of things. Things do not exist alone. Rather, they “go steady,” in the sense of being connected with other things. Parts (things) connected to other parts (other things) are structures or forms or organizations or systems satisfying the condition that they exist over time. CSR’s ontology then, the starry night, is a reism of structural time-being. How does human being fit into time-being?

Marshall Sahlins threw a damper on this topic when he claimed, “We live in an anti-structural age” (2013: xii). This assertion is right and wrong. The first five decades of the twentieth century saw the rise of Parsonian and British social anthropological structural functionalisms followed by French structuralisms, of which Lévi-Strauss’s work was the crowning anthropological achievement. Then, in the 1970s these structuralisms were repudiated and poststructuralism proclaimed (Poster 1989). Thereafter, many anthropologists took the interpretive turn (Geertz 1973), declaring hostility to the notion of structure and devotion to the text, literary or other. In this sense, Sahlins is right.

But what was actually given up were the older structuralisms, in part because they seemed *istheit* challenged regarding organizational intricacies of twentieth-century human being. New structuralisms, however, immediately trooped in, conceptualized, in principle, to more truly re-present social being, especially a social being that had burst the boundaries of locality, tribe, and state and was utterly, if messily, global. By the 1990s, at least part of sociology as well as some areas of cybernetics and mathematics had taken a “complexity turn” (Urry 2005), proposing complexity theories, designed to accommodate analysis of local and global phenomena, with concepts, among other things, of fractals, black swans, chaos, and butterfly effects.

Certain geographers and sociologists by the turn of the twenty-first century had developed a “TPSN framework” to theorize sociospatial relations, especially to address questions of “polymorphy”—the organization of sociospatial structures in multiple forms (Jessop, Brenner, and Jones 2008). From postmodernism, supposedly a fortress of antistructuralism, came notions such as assemblage, rhizome, and actor networks, which au fond are structural concepts. So in this sense Sahlins is wrong. My judgment is that much as they desired it, human theorists could not completely jettison structuralism because in the end, “The real: it is structurd”(1970: 36)” What, then, distinguishes CSR’s structuralism?

It is differentiated by two features. The trope of time-being as like a starry night helps to explicate the first of these. Two broad constellations of structure can be distinguished relative to human being—E- and I-space—roughly corresponding to certain usages of the terms “objective” and “subjective.” However, these latter two terms are avoided because they are freighted with so many meanings as to invite confusion.

The “space” of E- and I-space is defined in terms of two dimensions. The first is that of structures practicing what they do in places. Places are the environment in which structures function. As such, place is a system of systems of particular structural forms. The second dimension of space is that of the time in which systems of systems operate in place. E-space in this perspective consists of all the different forms of structure external to peoples’ bodies. E-space structures include life and nonlife forms. CSR is especially interested in a type of life-form termed “social.” Social forms consist of human actors acting with other actors and things. Different social forms are connected with other social forms and, for that matter, other living and nonliving forms, which places may be thought of as the constellations in the galaxy of human being.

I-space is the constellation including structures internal to peoples’ bodies, such as the circulatory, respiratory, or reproductive systems. However, CSR has concentrated upon the I-space structure that is most directly responsible for allowing actors to choreograph connections between antecedent events in E-space with their consequents. This structure is said to be located in the brain

and is termed a “cultural neurohermeneutic system” (CNHS). The CNHS is said to generate desires or, in the case of elites, *délires* (powerful desires able to affect a lot of people). Desires and *délires*, the combinations of emotion and understandings, help choreograph social forms, especially when they become public *délires*, institutionalized directions of how to organize human being. Of course, what is of great interest is how the CNHS in I-space connects with the different social forms of E-space. This leads us to the second feature of CSR’s structuralism.

The different social forms in constellations of the E-space might be imagined as burning bright as fiery points of energy. This energy might be conceptualized as generated by “force/power dyads,” the forces that cause powers in social forms. This is a second distinguishing feature of CSR’s structuralism, its interest in the organization, function, and origin of force/power dyads. Force/power dyads connect with other force/power dyads, much as neuronal pathways link with each other and the different systems of the body. Further, just as neural networks direct the operation of the body’s complex systems in I-space, so force/power dyads direct the operation of the constellations of social forms in E-space. How do they do it?

Neuronal pathways work by neurotransmission, which involves signal molecules, neurotransmitters, being released by a neuron (the presynaptic neuron) that activates the receptors of another neuron (the post synaptic neuron). The neurotransmitters of the presynaptic neuron may be said to have the force to cause effects with certain powers in the postsynaptic neuron. Social forms may be likened to neurons. The various force resources at the disposal of a social form might be conceived of as its neurotransmitter molecules. When these are exercised they can cause effects in other social forms. These effects are the powers consequent upon the exercise of force.

Neurotransmitters have either excitatory or inhibitory powers. They cause something to occur or they prevent it. Likewise, the effects of exercises of force may have excitatory and/or inhibitory powers. Campaigns for voter rights in the United States, such as that of Martin Luther King’s marches on Selma, Alabama in 1965, involved peaceful force/power dyads exercising force to have the power of increasing the civil rights of African Americans. These campaigns had excitatory powers. President George W. Bush’s 2003 invasion of Iraq employed violent force/power dyads to have the power of eliminating Saddam Hussein’s regime and, as such, had an inhibitory power. Sometimes both exercises of force may occur concurrently. In an election campaign, for example, the competing parties marshal their forces—money, volunteers, strategy—to both have the power to win for themselves and to defeat their opponents.

Desires and *délires*, resulting in public *délires*, “choreograph”—in the sense of organizing in space and time—force resources so that they may have par-

ticular forces. Neurons are arranged in pathways. Force/power dyads are connected in strings, which exhibit “logics.” Buying marijuana and then selling it again for a profit is a string with two force/power dyads (buying and selling) that exhibits a capitalist logic. The various force/power dyads in the marches on Selma, Alabama led by Martin Luther King during 1956 were strings whose logic was that of the extension of civil rights. Of course, different strings connect and when they do they produce “webs,” strings connected with other strings. Bush’s Iraq invasion involved force/powers dyads with strings involving security, military, and intelligence institutions that were linked with strings from economic institutions that supplied the military institutions with the force resources they needed, thus weaving a web exhibiting logics of the production and reproduction of violence.

So the structural reism of CSR is about structuring of force and power, positing that different social forms are parts of force/power dyads connected in strings strung into webs. Metaphorically, the movements of the stars in the night sky are the result of these webs of force and power. So for the time being, the work to be done is to accumulate scientific knowledge to explain the forces and powers immanent in the strings and webs of stars and constellations in the dark night of actuality. Attention now turns to considering what to do with such knowledge, which is about getting critical.

## Getting Critical

The philosophers have only interpreted the world, in various ways. The point, however, is to change it.  
—Karl Marx, “Theses on Feuerbach”

Knowledge may be used to maintain existing social forms, or to change them. Much social thought has been about the problem of order: figuring out what the order is (usually some form of exploitative inequality) and devising ways of keeping it that way. Ghassan Hage has said, “Critical thought is not ‘radical’ thought” (2012: 285). He is certainly correct. Kant, for example, was a critical theorist, and for him getting critical meant analyzing the utility of a faculty of knowing or body of knowledge, by discovering for the limits imposed on it by the fundamental it employed.

However, Robert Ulin (1991) noted two traditions of critical thought co-occur in anthropology; one influenced by political economy and the other by postmodernism. CSR’s standpoint derives from the political economy position, in which getting critical is being radical. Specifically, it is influenced by Max Horkheimer and Theodor Adorno, whose position was itself an elaboration of Marx’s view expressed above. The US government budgeted about \$65

billion on military research (OMB 2014) to devise ways to defend the existing social order. Critical anthropology is applied anthropology putting science in service of acquiring knowledge to change the world. Of course, some things do not need altering, while others do. Critical anthropology's job is to help decide what needs change and how to do it.

Horkheimer helps in understanding what things in social being need alteration, with his remark, "The chief aim of" critical science "is to prevent mankind from losing itself in those ideas and activities which the existing organization of society instills into its members" (Horkheimer 1937). This is, as Adorno put it, because society is an "immense concentration of economical and administrative power [that] leaves the individual no more room to maneuver" and that leads "toward totalitarian forms of domination" (Adorno 1998: 298). Adorno and Horkheimer were writing of "society" just prior to World War II. There are those today who warn that the United States is moving toward totalitarianism (Wolin 2008) and fascism (Hedges 2006). In CSR, human being is a space-time of structures of force and power, and it is these that determine the direction of human being.

So, what Horkheimer and Adorno were saying is that the enormous concentrations of power in current capitalist and state institutions create an "elite" category of class actors, with mammoth amounts of force giving them power to make their "ideas" become public *délires* (laws, executive orders, administrative decree, etc.) to arrange the actions of ordinary persons. It is as if elites played God and arranged a slow, totalitarian pavane across the night sky. But the situation today is worse than in Adorno and Horkheimer's time, because in the sky are the vultures of economic dysfunction, ecological calamity, and global warring, born of the elite's operation of structures of force and power.

Under such a nighttime sky, critical anthropology has two chores. The first is the analysis of structures of force and power to know the points of entry in order to change them. The second concerns elites' ability to steal into peoples' brains and manipulate their minds so that they desire what is in elite interest. Such controlled desire may be said to be hermetically sealed into ordinary folks' emotions and perceptions of what is and procedures of what to do about it. Hermetic seals may not be 100 percent, but they certainly exist and are effective for many people.

Radical critical anthropology is a tool for learning where to concentrate intervention for arranging the galaxy of human being in ways that better benefit all such being. This may seem like a utopian chore. It certainly is one beyond the limited epistemic capabilities of postmodern critical anthropology, with its rejection of science. If you abjure science, your knowledge of what is will be frail, and you cannot know what to do about what is if you are ignorant of it. Time now to consider the essays and how they help make the case for a critical structural realism.

## The Essays

*Starry Night's* text is divided into three parts. The first addresses the question of epistemology, the second applies CSR's ontology, and the third offers critical judgments. The following essay (Chapter 1) is "Literary Anthropology and the Case against Science."<sup>6</sup> It opens the epistemological part and makes a case for a scientific epistemology by documenting the frailties of antiscience opposition. This opposition includes scholars, variously termed literary or postmodern anthropologists. Postmodernity repudiates grand narratives (Lyotard 1984) and is skeptical of truth-seeking practice (Rorty 1991).<sup>7</sup> Given the latter attribute of postmodern thought, how could they possibly know that all grand narratives were to be rejected? Moreover, so sweeping a generalization of rejection is, ironically, a grand narrative of antigrand narratives, placing postmodern anthropologists in the position of being a local expression of the anti-grand narrative.

Clifford Geertz might be said to have been postmodern anthropology's iconic founder, with his *Interpretation of Cultures* (1973) and *Local Knowledge* (1983) providing a doctrinal base and the articles collected in James Clifford and George Marcus's *Writing Culture* (1986) offering amplification of the original doxa. Perhaps, the postmodernists' central tenet is that a people's culture is "an ensemble of texts" (Geertz 1973: 452), which meant that their epistemological job was "penetrating" the "literary text" (ibid.: 448). Penetration was to be achieved through the observational prick of "thick description" (ibid.) (which was actually participant observation developed by Boasians and social anthropologists in the first half of the twentieth century). While thick description can be a powerful observational tool, it is not practiced in an especially scientific manner in postmodern anthropology due to indifference to truth-seeking techniques, for example seeking to ensure the representativeness of observation.

Chapter 1 contributes to this debate by exploring the grounds for taking antiscience positions. It does so by posing, and answering, two questions: first, whether there have been critiques of science so compelling as to warrant its rejection; and, second, whether more powerful modes of knowing have been revealed. Literary anthropologists', hermeneutic philosophers', and certain postpositivist philosophers' antiscience arguments are examined in the text, which concludes that none of these arguments compel the elimination of science. Further, the essay argues that the thick description alternative to science exhibits properties of gossip; and while he said, she said accounts can be entertaining, they are not especially useful for discovering the truths of things. Science, as indicated earlier, does not provide absolute, true knowledge. Far from it, investigators have to work long and hard to establish approximate truths. However, it remains the most formidable epistemological practice humans have, which justifies keeping it as the epistemological blade of CSR's jackknife.

While scientific theory has been tabooed within certain regions of anthropology, there has actually been little consideration of what has been prohibited. Chapter 2, “What Is Theory? Something, Time-Being, Art,” offers an interpretation of such theory. The approach, though using elements of thought from the Vienna Circle, is postpositivist. Science is considered an art. Art is about creation. Science creates theory. Theory creation occurs through practices of theorizing and validating.

Theorizing is the crafting of generalization necklaces that explain, and understand, the way *istheit* appears to be. There is discussion of explicitness, scope, abstraction, and relationship formation in theoretical practice. Validating is the inspection of generalization necklaces to judge whether their explanation of *istheit* can be judged to exhibit some approximate truth. Here, the discussion considers the roles of fact and observation as well as those of objectivity, representativeness, and intersubjectivity in validating. In the chapter, we understand the theorist as a hero creating re-presentations of being that have the beauty of being approximately true.

Recall that the stars, constellations, and galaxies trace a pavane across the hours of the night sky. The second part applies CSR's ontology to formulate an understanding of social dynamics—a view, if you will, that explains the dance in the night sky. The part consists of a single essay, “Dialectics of Force: Contradiction, Logics, and Conservations of *Délires*.” It considers E-space structures. Recall that these are treated ontologically as organizations of force and power. These display logics of order or disorder. This E-space ontology, then, is put in service of a new “dialectics of force” theory of change dynamics, raising the question: what is this theory? This question is answered by suggesting that a dialectical theory does the job.

Of course, if one proposes to think dialectically, one needs to appraise the desirability of employing Hegelian dialectics. The essay makes just such an assessment and concludes that Hegel's dialectics are an animistic ghost story. Two problems are signaled as problematic. First, Hegelian contradiction is judged a conceptual blur. Second, its dialectics have a realization problem, in the sense that they lack a credible theory of how the effects of contradictions are realized in structural change. Consequently, the essay offers a “gang of four” (Hobbes, Hume, Nietzsche, and Godelier) reconceptualization of contradiction. It, then, formulates a realization theory based upon notions of individual and social reflexivity, hermeneutic politics, public *délires*, and conservation of *délires*. This theory encourages the conclusion that up there in the night sky, among the constellations of human being, the stars of E-space are moved by contradiction between plays of force in logics of disorder versus those of order.

The final part of the text contributes to the critical part of CSR. It contains two essays. To set the stage for the first of these, “Right and Might” consider that Foucault, in a number of publications, made clear that humans were not



so much actors as subjects; specifically, they were subjected to the “effect” of different powers, which in modernity were often disciplinary (1977, 1982).<sup>8</sup> Foucault was saying that elites exercise their force to have the power of subjectification, transforming the many into the subjects of the mighty. What is to be done?

Many things, but critical among these is revelation, in the sense of revealing subjectification. Revelation is recommended because the elites do not send their subjects formal announcements to the effect, “Dear Sir/Madame, on Thursday last week you were subjectified.” Consequently, a condition of releasing people from elite thrall is knowing they have been enthralled. A notion of hermeneuts is helpful in producing such knowledge. Hermes was the Greek god who brought messages from the gods on high to ordinary folk. The Greek gods are gone, replaced by their brethren “hermeneuts”: (amply) rewarded media leaders (journalists, scholars, “experts”) who inject economic and political elites’ *délires* into ordinary blokes, the better to infect such subjects with elite delirium. Discovery of hermeneuts reveals those who subjectify.

“Right and Might” illustrates this point by taking up the case of one hermeneut, Professor Clifford Geertz. This might seem outrageous. He was, and remains for many, a champion who exorcised positivist demons, winning through to the bright light of cultural interpretation. “Right and Might” tells a different story of a hermeneut who brought elite *délires* from on high to anthropological subjects. Geertz’s first research had been conducted on Indonesia. Grim massacres had occurred there in 1965–1966, the work of Indonesian military elites, who butchered 500,000 persons.

Of course, the generals who did the massacring offered a moral judgment legitimating their *délire*-ious work. Geertz in his *After the Fact* (1995) presented a view of these massacres that artfully legitimated the military’s *délires*. So it might be said that he was in the business of communicating to ordinary readers the *délires* of mighty Indonesian generals. “Right and Might” makes a general point that discovering hermeneuts is an important part of a critical discipline, because it helps explain how elites transform people into their subjects. Attention now turns to the second essay in the critical part.

At least since the origin of the state, it has been a world of perpetual war. Permanent peace has seemed a dream. However, Immanuel Kant (1795) during the Enlightenment suggested that democratic states did not war with each other. The policy implications of this were immense. If all states became democratic, war would cease, making perpetual peace possible. Kant’s view, accepted by many liberal political thinkers, is today known as democratic peace theory. In contemporary times, it has formed part of the rationale for warring, with President George W. Bush making his wars to bring democracies to bring peace. The second essay in the critical part, “Perpetual Peace?” applies critical science to examine democratic peace theory.

It is established in the essay that since the end of World War II the United States has made war frequently throughout the global. This is a global warring. When the structures of force and power of US “democracy” are examined, they reveal an imperial social being, an informal one based upon capitalism. Consequently, a theory is formulated, called “global warring theory” (GWT) to explain Washington’s bellicosity. The theory explains global warring in terms of reproductive fixes, due to contradictions, that involve creation and implementation of public *délires*. The theory is validated with evidence from twenty-four US wars between 1950 and 2015. It is argued that global warring does not relax imperial contradictions and that insistence upon democratic peace theory as a way to eliminate war is dreaming—while the world marches onward to the sixth global extinction. The problem is capitalist empires.

## Vultures Again

At the beginning of this introduction, three vultures of destruction soared in the night sky—ecological calamity, economic dysfunction, and global warring. There may be others out there; who knows? But the three we know about are no joke. Can critical structural realism assist in struggling against them? CSR works with science, which, after all is said and done, is the best epistemic practice humans have for knowing realities.

It applies science in a structural realist ontology pursuing knowledge of two structural possibilities. The first knowledge is of structural disordering and involves discovering forces with powers to create the three vultures. In particular, it examines those elites who are the vultures’ myrmidons—pleasuring themselves at the expense of everyone else. It seeks to know the forces these elites have, how they exercise them, the better to know how to oppose them. The second knowledge is of structural ordering and involves learning how to organize. Its goal is information of the forces needed to articulate organizations into a complex system of systems spanning the globe satisfying human wants equally in a sustainable manner. Why not try CSR? The alternative might be that those vultures of destruction get their way, leaving starry nights with fewer stars because the galaxies of human being went missing.

## Notes

1. Hegel, for example, proclaimed all sorts of speculations upon the nature of being (being he never observed); which is, perhaps, why his *geist* is a phantasmagoric form of animism presented as modernist ontology (as argued in Chapter 5).
2. Some may find the use of a German term for “being itself” pretentious. There was an English candidate: “Is-E-Tude.” Unfortunately, it provoked in hearers the flapping of stiff upper lips indicating irrepressible guffaws.

3. Haecceity glitches due to preexisting conceptual biases are predictable when something utterly new is observed. Consider, for example, when a boy—ignorant of biological facts—performs certain manipulative acts culminating in his first seminal emission. Mazel tov! But he has no idea what he just did, though he is preloaded with concepts informing him that squirting fluids, save for urination, is not the way his penis works. Biased by this knowledge, he classifies the new pleasant sensation as the result of having “broken” something.
4. The notion of sensational hooks resembles Carnap’s concept of reduction sentences (1936–1937), which were statements containing information about how the reality referred to in a concept might be observed.
5. Holbraad, Pedersen, and Viveiros de Castro (2014) provide an introduction to the ontological turn. Descola’s *Beyond Nature and Culture* (2013) is worthy of attention.
6. This chapter was originally published in *Man* (n.s.) 29 (1994): 555–82.
7. Ward (1996) provides a useful account of postmodern, including actor-network theorists’ attempts to challenge truth seeking. Critically, these attempts do not confront, and consequently cannot refute, various epistemologists’ defenses of truth-seeking.
8. “Right and Might” was originally published in *Identities* 4–3, no. 4 (1998): 431–65.

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