Handbook for a Phase Transition

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Table of Contents

Part III: Toward a Solution

Introduction:

A Daunting Mess

Change involves risk. The greater the change, the greater the risk. We often tolerate undesirable conditions for a long time before we jeopardize what we've got. Knowing we can get things wrong possibly explains why we, as a species, are inclined to wait until the last minute. But when imminent danger no longer permits inaction, hesitancy gives way to solutions.

Few of us doubt that we've arrived at an edge. Nuclear arsenals are capable of annihilating millions, obliterating life on Earth as we know it. International terrorism, recurring episodes of mass murder, incursions on privacy and civil rights play into dystopian and doomsday scenarios. Atmospheric pollution, oceanic degradation, deforestation, loss of insect populations and species diversity, water crises, are not what any of us would wish to pass to our children. The gap between those who have and those who have nothing threatens to rip our planetary heart apart.

People across the political spectrum agree we've got problems, but when it comes to what is to be done, discord stretches to the horizon. Not many can still trust our troubles will simply resolve themselves. A few resort to theological narrative, interpreting these as the "Last Days," fulfilling prophecies predicting inevitable destruction. Some believe that human nature is at fault and conclude that nothing can be done. Others who would wish to do something recoil at the challenge. Hesitant voices question the problems — and the solutions. Isn't climate change already beyond our ability to turn back? Hasn't a stronger military satisfied our need for security in the past? Is it the institutions or individuals? The obstacles appear overwhelming, with no clear path forward. Without a common goal, we pull apart.

Imagine stepping from this vortex and toward the world all of us desire. A new respect for Life and one another; the wealthy and powerful dispersing their advantage — feeding the hungry, building homes for the homeless, caring for those in need; our systems protecting and healing the planet; nations turning their swords into plowshares — every change a world of Love could bring. Such a transformation would compare in magnitude to the major phase transitions science has come to recognize — at the beginning of the Universe, the passage from chemical synthesis to biological relationship, the shift from single-cell bacteria to multi-organed creatures.

Improbable, yet we have reason to believe it's possible. Searching through the array of our cultural legacies, we find visions of a promised and hoped for Earthly paradise. Utopian dreams reach back to the cradles of our civilizations. A desire for world peace fills our sacred texts and the speech of our revered leaders past and present. No matter how varied the literature, how different the forms of our religions, arts, philosophies, legends, fairytales, myths, folk wisdom... a consistent guiding principle of how to get from here to there emerges. Shining through the diversity of solutions, we recognize, "Love."

Scholars, writers, scientists, artists, friends, teachers, individuals from every field of human endeavor inform the pages of this Handbook. It makes no claim of breaking new ground, but would rather express gratitude and acknowledge dependence on the bits and pieces that it attempts to bring together into a single mosaic, sense-making picture. If successful, it will trace a pathway to the goal; and in so doing, make it possible for each of us to see how our own way leads there.

Part I seeks to unravel key assumptions underlying our problems. An "algorithm" represents a formula for doing things — such as a recipe for baking bread, directions to get from one place to another, the steps a computer takes to sort through gigabits of data and find what you're looking for. The algorithm that interests us here orders our thinking, our behavior, even our perception of things, often without coming to our awareness. Our aim will be to unfold the algorithm that's responsible for our situation in such a way as to silhouette a set of solutions, a way forward. Part II explores some of the reasons we have to believe a phase transition is possible. It draws on alternative approaches that may have been with us all along, some just now coming to light. Discourse and practice that engender the world we've always longed for. Part III works toward a solution based on what we uncovered at the root of our problems, the understandings envisioned by the alternatives and insights from Complexity Theory about how change can happen.

The premise of *Handbook for a Phase Transition* is that we can begin making the changes we need without have to agree on everything. We can agree on rather little — just enough to do what needs to be done.

Part I:
Unfolding the algorithm

Most of us would prefer a world of harmony, where there would be no poverty, no worries about the environment. At issue is whether such a world is possible and how to get there. Before all else, we need to truly believe that we are able — that we have the freedom — to transform our world.

We all want to be free. And those of us fortunate enough to grow up in democracies like to think that we already are relatively free. Free to think for ourselves. Free to choose our friends. Free to make judgments and decisions that affect our lives. We celebrate the freedom to go where we wish, decide the course of our lives, change our minds. No one likes being told what to do. Even in hierarchical workplaces, we desire to belong and participate. Human history shows us again and again, even if we're not encouraged to talk and think about freedom, even if we're enslaved, we resist. We rebel against anything that feels like tyranny — inwardly, often unconsciously, if not permitted to do so outwardly.

Why then would we doubt that we have the freedom to create a new world? In part, because we're talking about a world and a way there that we've never seen. Other complications arise from the standard ways we understand ourselves and the world. Among those ideas, assumptions that may not be serving our best intentions. Notions that may be the obstacles. And since we've internalized them, it's not easy to recognize that we may be acting on received ideas. It's one thing to bring down walls that we can get our hands on, but quite another to overcome obstacles in our own minds.

Compounding our problems, we interpret our experiences along lines that buttress rather than undermine our beliefs. In conflict, we tend not to hear what the other side is saying. No matter how obvious it is to others that we are doing harm, we don't like to think of ourselves as wrong. We bend over backwards to tell positive stories about our decisions, our lives — even if it involves self-deception.

We cannot expect to get beyond this impasse without unfolding the algorithm, the set of rules keeping us from the world we wish. The mind is obviously central here, for it is there that the algorithm for our thinking and practice must in some way reside and operate. For our first step, we need to consider briefly what we know about our minds.

Chapter One:
A Place to Start

Consciousness: What is it? How Does it work?

Our day to day lives seldom require a full stop to our activities and an investigation into what's going on beneath the surface. Whether reading these word, speaking with one another or driving a car, we simply and directly perform the task. We do what we do without needing to tell ourselves that we're aware of what we're doing. Occasionally, we do find the need to remind ourselves to pay attention (adjusting for a mountain curve, checking heavy traffic for a lane change, for instance). But even then, we assume — rather than bring to mind — awareness itself. As Sartre put it, Consciousness is "pre-reflective." It is the immediately *given* state of our being in the world. We can become aware that we are aware; but we do so by constructing an idea. And Consciousness does not depend on that idea.

Our minds are a perpetual center of infinite possibility. Consciousness is always aware of something; yet never stuck on the same thing forever. Bergson describes Consciousness as 'a continuous series of successive and flowing inter-permeating states... a *qualitative* multiplicity...' Not a *quantity* of something that we can put away for safe keeping somewhere. Not something we can bottle up, or contain in a concept. Our minds are not analogous to someone at a control panel or in a receding chamber of mirrors. Consciousness resides outside every conception of it. We are not what Consciousness delivers — a what-we-have-done, what-we-own, what-we-are-doing or can-do. We're freer than that. Or could be.

Nor is Consciousness quite like a computer. Although computers with their storage solutions and adherence to the rules of their algorithms exhibit elements of mentality (learning and beating us at our own games, even adapting code to new information), their performance is incapable of the same interior relationships we know as Consciousness. Artificial intelligence will always "think" according to the fixed design of its architecture and programming. No matter how complex the aggregate of chips and their calculations, the algorithm at the root of a computer does not represent the free choice that produces compassion or a smile.

Consciousness is not a thing. Not an assemblage of replaceable parts. Our thinking is not confined to a series of mechanical connections. Life (as we will explore in Chapter Five) arose from choices made by complex molecules. Our minds are the lived experience of being a unified body, a subject center. Self-determining. We are each able to refine, transform, create new goals for ourselves. We each have the freedom to make decisions, adapt, grow. We are alive with possibility.

We owe our meaning to the choices we make and the choices made by our ancestors: the quarks / metabolizing polymers / eukaryotic cells. Theirs and ours is a story of Relationship — inextricably mixed with mystery.

These observations about our mind and Consciousness are important for our overall project because they establish that ideas we may have about ourselves are not primary. Our presence in the world is not dependent on a biologically programmed concept of self, nor a culturally constructed identity. We exist independent of the algorithm we need to unfold. If we want to realize our freedom from its rules, it helps to understand how our minds engage with it.

We know that our mind emerges from a network of billions of interacting living neurons. Each neuron itself composed of trillions of molecules and atoms. Similar to the specialized organs cooperating together to keep our bodies alive, our brains perform like an immense unified symphony of myriad free agents doing together what none could do alone — an interiority of potentially infinite composition. Vast, complex, chaotic with creativity; yet patterned. We observe, for example, that our Consciousness engages the world along at least four widely recognized avenues.

Perception, sensate information, streams through our bodies. At any moment, we may turn our attention to any of the phenomena delivered by our five senses. The arts pay homage to the living landscapes, songs of the forest, fragrance of flowers, touch of silk, tastes that Life offers — the dance of Nature. There seems no limit to the beauty of the flora and fauna. No edge to the subatomic nor intergalactic. Perception clings to the moment and vanishes with the stimulation, but can have lasting effects.

Another current of Consciousness is emotion. Our emotional life informs us in particular ways about the meaning of moments in our relationship with others and the world. The range of feelings from good to unpleasant runs endlessly wide and deep. Emotions assist memory, charging some events so profoundly as to make them nearly indelible. Other times, emotions can drive us to bury a memory. We all know emotions can sometimes be difficult to control. They can linger, change into moods. Feelings flow, without any effort, from one moment to the next.

Intuition, a third channel of Consciousness, often comes in a flash. A dream or thought somehow clicks with something and we're suddenly aware of more than we were the moment before. Intuition happens. "Aha!" — and then the event is over, though its insight usually stays with us. You have a bit of new knowledge. Sometimes a key piece. Like apps that we call "intuitive," the new understanding doesn't require lengthy explanation. We know exactly what it means, or what to do — by what's given. We grasp the picture straightaway.

A fourth avenue, intellectual activity or reason, refers to our minds' representational skills. Cognition not only makes fantasy and imagination possible; it produced language, logic and mathematics. Literature, history, philosophy and such are called the "humanities" because they

explore what it means to be human. We know reason is manipulable. Where it takes us most often depends on the premises with which we start. But we couldn't create a better world without imagination, reasoning and communication.

Although we can identify sensation, emotion, intuition and cognition as distinct avenues or fields of Consciousness, we don't experience them in isolation. Whether the mind-work is memory, fantasy or projection, it's usually associated with a sensate experience. The interior chatter that we can sometimes carry on, for instance. The telling ourselves this about that, interpreting or producing a "take" on what's going on, what went down. The imagining, re-playing or rehearsing of scenes. Most hold an emotional charge, often wanting an insight. Advertisers, PR groups and organizations interested in getting us to act in certain ways regularly exploit this interplay of states. Images, words, music carry emotional power. Subtly evoking a feeling can resurrect an attitude and thereby sway opinion, produce motivation. If we recognize it, we don't have to fall for it. We're that free.

Growing up and maturing, we learn to navigate the perceptual, emotional, intuitive and intellectual dimensions of our lives. As children, we often express our emotions with total disregard for others' feelings or needs. As we mature, we learn to control outbursts by redirecting feelings, finding more appropriate outlets. With the acquisition of language, we discover that the emotional charge associated with a situation can change according to the story attached to it. We slowly learn how emotions can be replaced with stronger feelings and how feelings fade with time. We come to know that just because we feel something doesn't make it true. And that no matter how many times you read or hear something, that doesn't make it true either.

We also become aware that we can get caught up in mental fetters. Our preoccupation with words can overrun our senses altogether. We may not even notice the wondrous music playing in the background because we're absorbed in a problem we're trying to solve, or a story we're telling ourselves. Yet, we find that Consciousness always retains its freedom. We can free ourselves of any mental state by moving our minds onto one or another of the avenues. Leave behind the inner storytelling by choosing to focus on the music, for example. As we improve our ability to concentrate and exercise our will, our Consciousness expands into ever widening horizons.

Exploring how our minds work establishes the first requirement for creating the world we desire. We have the freedom to do it. Freedom characterizes our Consciousness, our being here. We can and do change our minds all the time. From the array of possibilities before us, we think and choose what we will. We decide how we will spend our time. What and who we take seriously. Who will be our friends. Our choices and decisions develop and express our individual personalities. We act according to our own volition. Only the mind limits the mind. On one level...

Starting with our radical freedom, our discussion has so far overlooked the other salient feature of Consciousness. Our minds don't appear separate from the world. We're not independent of the world and the culture around us that assign the world its meaning.

Meaning

We're born into a world already fully assigned with meaning. As infants, we take our first baby steps by learning how to negotiate spatial dimensions of floor, walls, doorways, stairs. Likewise, we learn to think as we acquire the information and logic to navigate the world in terms of its meanings. Parents and caregivers initiate the acquisition of this skill, showing and explaining how to sort the significant from inconsequential. How to see things in categories. Their lessons, however, are soon augmented by those of siblings, friends, media, objects, and — most importantly, performance. Performance we see, performance we imitate, performance we do.

Learning the cultural meanings of things and ourselves, we progress into ever widening horizons of cooperation and responsibility. Once we master the lesser and larger priorities enough — so that we have some grasp of reality — we start school. Already by that time we've experienced how meanings can clash. How meaning can be re-thought; threads accepted or rejected; whole configurations re-constructed. We eventually become capable of metaphor, irony... We learn that we play a role in creating and altering meaning. What things mean emerges as much from our interaction with others as it does from individual experience and reflection.

Well before our teens, we're producing our own micro-priorities. Establishing our own relationships. Choosing our own meanings. Fitting the unique pieces of our experience together into an ever changing picture. We may not be conscious of it, but we've probably sensed how meanings can bind; or create distance. How friendships form from meaning; how from it heartbreak, too.

By the time we graduate, we may already have found that meaning can lead to great depths of happiness, or of sorrow. When we look back over our lives, we see how our knowledge and information has grown. How meaning we once attached to ourselves, one another, Nature, or the importance of various activities and places has changed; sometimes making dramatic shifts. Meaning is in constant flux.

Meaning serves as the stepping stone between us. The in-between our minds — one another and the world. Meaning traverses time and space, faster than the speed of light. It creates priorities. Gets us out of bed in the morning. Urges us to apply ourselves / or not. It motivates us to work our jobs. Meaning answers the big questions: *Who am I? What am I doing here? What could I be to others in this time?* Only meaning can answer the problems we need to solve.

Meaning generates a unique dynamic. We don't easily abandon one meaning for another. We cling with great emotional tenacity to what things mean to us. The patterns of our individual personality and sanity depend on it. Consistency reflects on the integrity of our values, and thereby our dignity and worth. Whether or not we put our beliefs into words, choosing what we believe gives purest expression to our individuality. We each see what we see. None can force another into changing what they believe. We can change our minds, but no one can change them for us — nor can

anyone make us change them. Because meaning justifies everything we do, changing what things mean can be world changing.

We know that anything can't mean anything — no matter how seemingly attractive, logical or apparent that might be. The present and future possible can't just be whatever imagination suggests. As interdependent social / biological beings, we have certain requirements. Our survival depends on a correct relationship with our bodies, the world, one another. There is truth.

We also know that we can get things wrong. And sometimes for a long time. This brings the situation we're facing back into focus. While our literature and art provides ample evidence that we've been wanting a world of love; our history is replete with — and what we've got is war. The pathway we're on appears to be in error

We need to interrogate the meaning that informs our institutions and systems. Because the flowers. Because the wonder. Because our minds. How did we come by these roots for our actions? What is our Universe like?

Consciousness and the World

Every civilization has some form of religion or philosophy that answers that question. Since ancient Greek philosophy provides the foundation for our contemporary worldview, we need to touch on those underpinnings.

Ancient Greek philosophers studied the world by focusing almost entirely on discovering what it might be made of. Was it water? Fire? Idea? How might it all be categorized? The world and Nature served as location, the setting where gods and mythical characters played out dramas depicting human experience. Man with his mind was separate, distinct, as if a part of something else. The little evidence we have suggests to some scholars that this detached approach to our world, Earth devoid of personal relationship, displaced earlier conceptions of the Universe as living Mother.

Medieval philosophy deepened the rift between Consciousness and the world. The Church developed a metaphysics in which an omnipotent God created and ruled over the Universe. Earth the sphere where human souls, housed in material bodies, passed through as they made their way back to their eternal abode — heaven if they'd been good / hell if they'd lived a life of sin. Although Nature was bereft of Consciousness, God maintained his Divine Order on the planet by way of papal authority, a hierarchy of kings and aristocrats. Medievals saw the hand of God in everything, including military victory; and therefore believed quite literally that "might makes right." As for the world, few doubted the label — a "valley of tears."

Descartes marks the beginning of Modern thinking. In search of an indubitable foundation for knowledge, he found that the only thing he could not doubt was that he himself was thinking. His famous, "I think, therefore I am," took the focus away from the world and placed it almost

exclusively on Consciousness. Because perception itself is a kind of thinking — happening inside our heads, in our minds — philosophy found itself asking if there really is a world 'out there' at all. Such doubting and questioning helped to give rise to the Enlightenment and the political revolutions that overthrew kingships and conceived of democracy. But the eighteenth century did not displace the old worldview's irreconcilable divisions between body and mind, heaven and earth, time and eternity.

With the Scientific Revolution, the effort to establish new criteria for research and knowledge sealed the estrangement between Consciousness and world. Substance, that which exists, would henceforth be understood as matter alone — its essence, physical only. Measurement and description, reproducible by others and limited to identifying mechanical relationships of cause and effect, became the criteria for truth. Modernity allowed for belief to exist alongside scientific understandings; but Nature itself, without an interior or mentality, could have no meaning.

The belief in a divide between spirit and matter, Consciousness and the world, continued to inform conventional scholarship, ethics, morality and culture. Mainstream science still assumes that matter is strictly physical; our own minds reducible to cause and effect mechanical explanations (brain wave patterns and cerebral locations). We continue to probe the Universe as though it were an object, a place, a thing. And although some theologians explore the meaning of the immanence of God in creation, most maintain the Medieval worldview with little or no modification. Left unresolved, the mind/body problem followed us into the third millennium.

A recent development, however, finds scholars in several fields of philosophy and science taking a second look at panpsychism. (A development which we will examine in Chapter Five.) A way to bridge the gap between our ideas of mind and body. To explain how material/physical brains can produce phenomenal/mental experience — or in other words, where does Consciousness come from — panpsychism attributes a mental quality to all of matter. It advocates the inclusion of conscious experience, some kind of mentality all through the Universe — from galactic down to the subatomic and quark level. An interiority to all of being, all of Life.

In the context of anthropological studies, such a worldview is not so radical. Numerous indigenous peoples and cultures long maintained just such a regard for Nature. For Western Civilization, however, this point of view represents a radical departure — a paradigm shift.

Exploring the relation between Consciousness and the world, we've uncovered a key component to the algorithm that keeps us from our dreams. Our tradition teaches us that the Universe exists without mentality or Consciousness. This understanding of matter deprives Earth of the sacred, curdles our relationships with the other life forms and obscures the discovery of our place within Nature. Panpsychism suggests another possible interpretation of the world. Whether we agree or disagree, it's something to keep in mind as we continue to unfold the algorithm underlying our desperately troubled world.

During the late twentieth century, in the Post-Modern epoch, numerous scholars turned their attention to the construction of meaning, itself. The tools we use for cognition and communication — language. Post-modernists observed how words, grammar rules, sign systems in general, and their elaboration into narratives, affect what we are able to perceive, feel, imagine, even think. This key set of understandings provides a crucial set of tools for our unfolding of the algorithm.

Chapter Two:
Storytelling

Before we say more about Post-Modernists, we need to acknowledge questions that they might raise about what we've so far said. When we talk about 'how our minds work,' aren't we using words and culturally constructed notions? Our thinking is so dependent on the structures of language and cultural practice, some scholars would challenge the idea that we can think free of them at all. Let alone change the world.

Paradoxically, that same scholarship will prove extremely helpful for our project. Its descriptions — locating and deconstructing the cultural and linguistic patterns — contribute much to unfolding the algorithm underlying our problems.

Microtheatres of Power

The late twentieth century movement called postmodernism took a changed point of view on what history calls modernity. Europe became "modern" as it shifted from domination by kings, aristocrats and the church; through the Age of Reason and the Enlightenment; and into the Age of Democracy and the emergence of the capitalist economic system. Eventually, European/American history and culture came to celebrate this transformation as a great liberation. By the 1960s however, work such as that of Michel Foucault called into question the idea that modernity had only liberated us.

Foucault was asking questions about issues of power, knowledge and the subject self — that is, as an intentional doer of thoughts, words, actions. He reached the conclusion that buried historical moments forged the ways we think, feel and act — who we've become. The cultural landscape we now accept as natural emerged in the transition to modernity. Prior to this shift, rulers subjugated the inhabitants of their lands through public display of punishment. Examples of what happened if you broke the landowner's rules served to control the peasantry. The gallows, the whip, the stocks, the severed head on the spike at the outskirts of town left little to the imagination. Fear of reprisal enforced the social hierarchy; but repulsively so, even to those who benefited. And not as effectively as new forms of social control would be.

Increased population and movement to the cities encouraged change as well. Sanitation problems, disease and fear for safety threatened all levels of society. With industrialization, the changing character of the workplace called for a new kind of worker. Increasingly, capitalism depended on laborers producing profits using the tools, machinery and factories belonging to the owner. Maximizing productivity required workers who were careful, consistent, reliably present and on time. Old methods of control by force lacked the necessary efficiency.

Foucault asserts that no particular class or group consciously directed the change to a more modern kind of social control. Rather than focusing on the bloody revolutions that redistributed political power during the same period, he preferred to investigate how coercive power survived by changing location. Moving from concentrations at the top of society, power dispersed into a dense web-like network, where it endured in smaller theatres.

Prisons, schools and hospitals came into existence and served both to quarantine the dangerous and create conceptions of the normal. Power pressed architecture into its service, too. Prison buildings, for example, with see-through front walls of cells, made prisoners their own guards — for never knowing whether or not they were being watched. Schools put students in lines, seated them according to rank or size. Institutions evolved systems to keep track of patients, students and inmates. People became their record, their progress, their diagnosis.

Power increasingly involved individuals policing themselves and each other. Schools set up hierarchies of students, each level responsible for those below. Power became ever more effective as it moved to microtheatres of the everyday — workplace, market, family, circles of friends — where reward for compliance plays as important a role as fear of punishment.

As power "modernized," it relied less on exterior force and increasingly worked within each individual. Decrees and proclamations gave way to reasoned explanations of actions taken by the government and other institutions. Appeal to scientific authority certified discourses about intimate matters — from sexuality to health/illness, sanity and deviance. Power, concealing itself in knowledge, constructed notions of who we are, how we "normally" act and think. People internalized such narratives and became self-monitoring.

The power Foucault uncovered does not only deny, repress or say, "No," to us. On the contrary, power is at its most powerful when it says, "Yes;" gives permission, constructs our desires, saturates our pleasure and happiness. Power can thus claim to produce freedom even as it limits the possibilities of our conduct. We don't just acquiesce, we fully embrace it. Indeed, power inserts itself into the very make-up of our Self.

"Modern" power does not rest simply in the hands of ruling classes, using it to control other classes. All groups serve power — whether they enjoy the advantages and privileges it maintains, or suffer the injustices and violence it permits. Certainly this power does not affect all groups in the same way, even though it represents itself as available to everyone. Those at the bottom of the social hierarchy remain closest to less "modern" violence such as getting fired from their job, arrested by the police, shot on the street. One might argue that such power holds the privileged more effectively in mental bondage than the disadvantaged. But power inhabits all modern minds, shaping attitudes, informing what we tell ourselves about ourselves and our world. It sets us, "all against all."

Modern power so pervades our world, we take it for granted. In the hierarchies of our families, workplaces, schools, churches, government, college and university systems — the exception is the "higher-up" who doesn't require deference or flattery from those "down below." Power enables sexual harassment. It keeps women deferring to men, the employee to the boss, all of us divided between haves and have-nots. We vie with each other for jobs, positions, raises, awards, admission — for power. Advertising sells us symbols associated with power — clothes, cars, devices, etc. Apps and computer games engage us in exercising power. Sports celebrate power.

Given the power to do so by voters, city hall, courtrooms, state and federal government exert power over the individual. Lobbyists wield power to influence legislation. Political parties compete for power.

To be sure, modern power is preferable to public torture, decapitation and such. But modern power remains coercive. Coercive power — not power shared, nor power in the service of one another — characterizes our world. What else could enable us to let people go hungry, even risk the life of the planet, rather than re-think the economic system that power put in place?

Foucault didn't think that modern power permitted individuals to act freely at all. But we don't have to agree with him on everything to use his insights. He showed us how power, as a dynamic within the algorithm, holds us in its grip. That awareness is a good preliminary step. To get free enough to create the kind of world we'd rather have, however; we need to go further, move to a deeper understanding.

Language and the Sign System

Language. We human beings use words and language to spin threads of thought into meaning. Then weave these meanings into understandings of ourselves and the world. Understandings we learn and share with one another. We live language. It even affects what we perceive, since we can't register, can't "grasp" what we're perceiving without words for it. Words inhabit us. Whether we're talking about God, the Universe, our minds, bodies, our everyday lives, the past, the future… we're using words.

One of Foucault's former students, Jacques Derrida, contributed to the understanding we need by delving into language and how it effects the way we see the world. He based his work on predecessors, such as linguist Ferdinand de Saussure.

Saussure called words, "signs." Each sign, he explained, has two sides, like a sheet of paper. On one side, the sign is a sound or a mark — a "signifier." On the other side, the sign has a meaning, carries an idea — a "signified." Signs function by differing from one another. Floor is floor and not door because the signifiers differ ("fl" and not "d"). They also differ as signifieds. Floor referring to the lower horizontal plane of a room; door to the opening for entering or exiting. The point is that signs function by virtue of what they are *not*.

Most important to our purposes here, Saussure observed that the signifier and signified are only arbitrarily connected. In other words, 'door' means 'the entranceway or exit to a room,' only as long we say it does. The same signified, (entranceway or exit) is also connected to 'la porte' and a host of other signifiers in other languages. The linkage between signifier and signified is an agreement, a construction — a convention in a particular cultural, historical context. Additionally, the signified (the concept, meaning) is also arbitrary, changing, mobile. Many signifiers have multiple meanings that differ greatly. "Host," for instance. Instability of meaning so pervades our writing, speech and thinking, that we depend on context to anchor meaning.

Day to day experience provides ample evidence. Recall the occasions when someone says something that someone else completely misconstrues. Many jokes, especially children's jokes, play on words with similar sounds but different meanings. Listening to a popular song, two people might hear different lyrics or take the same lyrics to mean different things. We also learn to "read between the lines." Decoding a poem, novel or political speech with understandings of metaphor, irony, subtext, etc. can completely change the apparent meaning.

We are less aware of another problem Saussure pointed out. That the sign has no necessary relationship with anything outside the sign system. The thing to which it supposedly refers. Saussure set this referent issue aside. But for us, on the brink of destroying our planet, it warrants further consideration.

Consider the word, "leaf." As a signifier, leaf may refer to an abstract idea of leaves in general, or to one of the innumerable actual leaves on a tree. With the individual leaves, we have another problem. Imagine for a moment how many leaves there are (or clouds, or rocks, flowers)… No sign system could carry enough signs to refer to each one individually. And if it could, it would be too complicated to work for communication.

Derrida picked up where Saussure left off, highlighting this referent problem. If we look up "leaf" in a dictionary, we find a definition made up of words. There may be a picture, but no actual leaf. He observed that the words that make up any word's definition are themselves defined by other words, which are defined by other words defined by other words... They point to each other, but never get beyond themselves. Words are bound together in closed chains of signifiers and signifieds.

Derrida also noted that what a sign means, often depends on a relationship of binary opposition to another term. Male/female. Good/bad. Light/dark. Oppositions that typically have an embedded hierarchical relationship. One of the terms carrying a cultural preference over the other. Such dimensions of meaning are usually left under the surface. Whether spoken or written, texts can be "deconstructed," to reveal something that language is concealing.

Derrida, too, speculated that we can never be free; yet, as with Foucault, we need not agree with that conclusion to make use of his work. He and Saussure help unfold additional creases of

information making up the algorithm. The disconnect between sign and referent. How language separates and hierarchicalizes. The constraints that words and language can place even on our perception and, of course, on our sense of possibility.

Narratives and the Narrative Field

Primatologist Donna Haraway observed that the Referent disconnect holds true even for scientific discourse about Nature. She borrows the term "narrative" from literary studies to emphasize the fictive element in all discourse. The point is, whether we (or our scientists and professors) are describing some sociological or anthropological phenomenon; depicting history; presenting philosophical, theological, biological or political theory; or elaborating some physical, chemical or cosmological hypothesis — we are using language and therefore, always storytelling.

Haraway uses the word "narrative field," to represent "a dynamic web of meanings including the many complex spaces where meanings are contested…" She offered the expression in order to speak of the totality of discourses in any discipline. Her insights suggest we might envision the entire world of narratives — every kind of writing, speaking, word-work; the underlying messages in cinema, music, photography, architecture; narrative in whatever conceivable media — as existing in a great planetary narrative field.

We can make the idea of a narrative field less abstract by imagining narratives as colorful looping lines. The entire field a fractal drawn by the myriad of swirling narratives. Narratives most often repeated, re-enforced or re-iterated, produce emergent patterns. It's a bit trickier perhaps to picture the "complex spaces" of contestation. Yet, such an image can still help us understand the state of our world. Both chaotic and orderly, the lines portray patterns of information we aspire to, as well as patterns of obstacles to the world we desire.

So how does change in the narrative field happen? Haraway observes that each new narrative introduced into the field affects the plausibility of narratives already present. A new narrative may (or may not) raise questions about others already in the field. We abandon older narratives as new ones raise the cost of defending them. And conflict may not be the means by which this is most likely to occur.

Narratives meet in the field, not only "out there" in-between us, but also within our own minds. We find ourselves weighing the value of one narrative against another. We staunchly defend those on which we regularly rely. We create value by choosing and adopting those we deem "better." Ignoring, discarding; and when necessary, openly discrediting those that become less believable, less valuable. Because our health, happiness, our survival depend on basing those judgments on solid criteria, we've always needed to — and now, perhaps, more than ever before — need to ask ourselves: *What are the consequences of embracing this or that narrative? What would my world, my*

life, informed by an alternative story look like? Certain events in history, such as the Holocaust, have compellingly taught us that not all narratives are equivalent. Some are clearly better than others.

Storytelling often remains unconscious, yet the role it plays in our lives can't be overstated. Story gives meaning a place to emerge and reside. We use stories to organize what otherwise might appear a patternless chaos. Stories maintain our understandings of the world, one another, ourselves. They make sense of the stream of our days, our years. They inform the decisions we make, how we judge behavior, define success and failure. We fit our individual story into ever larger stories of the world. We find joy in listening to other people's stories. Like meaning, story is a social activity. We live story.

But how does this help unfold the algorithm? Stories don't wage war. Narratives don't feed the hungry. Discourse doesn't destroy the environment. Words alone will never bring Peace on Earth. And it's true — words will never be enough. We, the active agents in our societies are responsible. But our storytelling underpins what we do. Cultural traditions inform and produce our institutions. Our narratives express and uphold what we believe to be the moral and ethical. They give permission / they excuse. We live our stories every day — individually in care for our selves and in our personal interactions with others; collectively in our political systems, from social programs to international relations.

Keeping in mind the many ways that coercive power operates on the deepest levels of our Consciousness, we're in a better position to examine the stories we're telling. Wherever non-egalitarian, asymmetrical relations are enacted, power is served. As long as we think of domination over others as "natural," power is upheld. Wherever or whenever we are powering over others, we are not being truly fair or loving. We are that far from the world we desire.

Similarly, awareness of the workings of language can deliver us from its limitations. Language signifies by opposition, difference. Grammatical structures assume and produce relationships of Subject >< Object. (Doer of the action >< thing acted upon). Whatever language represents, it represents as an object. Without awareness of this, we might never question the meaning of the world that history has passed down to us. We might never rise above seeing each other, all of existence, as things or competitors.

Chapter Three:
A Destructive Master Narrative

Within the narrative field, "master" narratives serve as organizing principles. They provide a template for whole systems of thought, constitute global understandings, maintain mentalities. A master narrative confers legitimacy on minor narratives that branch from and depend on it. Minor narratives, in turn, elaborate and support the master narrative. We tend to assume the truth of master narratives because their many connections make them seem obvious, fundamental, complete, without alternative.

At the core of the algorithm we're unfolding lies a mistaken master narrative about who we are, our identity.

Self as Separate

As humans, we learn to think of ourselves through language and cultural practice. Even in a culture that teaches us to prize individual creativity and autonomy, we receive — rather than invent — much of what we come to see as our identity. The process begins with the moment of birth. The words, "It's a boy!" or "It's a girl!" greet the new arrival. From that moment on, parents, siblings, caregivers, friends, relatives and the larger society supply narratives shaping our sense of Self. Later, usually by the time we reach adolescence, we begin to claim our own identity. As individual subject centers, we braid strands of memory, experience and dream into what we think of as our life story. We identify with the central actor we see moving through our past, immersed in the present, engaging possibility. We evaluate events, respond to others, create values, establish priorities according to how we understand ourselves, as well as how we wish others would understand us. But before we begin making such choices, we spend years listening, learning, performing what our world tells us about ourselves.

That received identity — that set of narratives about who we are — because formulated with language, emerges from the logic of difference. Using words, we easily fall prey to the idea of a separate self with separate self-interest. Separateness goes unquestioned because it only "makes sense." In addition to the effects of language and culture on our perception, the limitations of our senses prevent us from seeing the actual biological connectedness that electron microscopy now makes visible; the physical entanglement quantum mechanics reveals. We wrongly see ourselves as fully enclosed in our skin. And language reinforces that perception. The boundaries denoted by the personal pronouns "I," "me," and "mine," are clearly not "you," and "yours." This self-as-separate mistake grounds the algorithm blocking our way to the world we desire.

This master narrative of the separate self/ego is much more than what we call "egoism." Its influence within the entire narrative field can make egoism seem a necessary ingredient for achievement. But we don't love egoism. Few of us would identify as an egoist, egotistical, or egocentric. Unless we recognize and constantly question our underlying identification with the mistaken notion of a separate/ego self, however, it retains its hold on us, regardless of our conscious attitude toward egoism.

Nor should this problematic identity be confused with the healthy individual sense of self we develop as babies, when we come to recognize the existence of our individual self amid other subject centers whose wishes might differ from our own. Or with the individuality we hold dear for historical reasons. In Western Civilization, respect for individuality is linked historically with the Enlightenment, the advent of democracy and free societies. Before these changes, the culture of pre-modern Europe gave almost no value to the individual. The Medieval world of kings, feudal lords and the Church portrayed its social hierarchy as ordained by God. This worldview, enforced by violence, blocked individual ambition, even discouraged an individualized sense of moral integrity. You did as you were told. You were born to what your life would be.

In the eighteenth century, Enlightenment writers confronted the old order with the authority of reasoned thought. Ideas of human rights comprised notions with undeniable appeal, such as the pursuit of happiness. A beginning. The Age of Democracy had arrived, but it did not go deep enough. It did not eradicate elements of the underlying master narrative, powering over and "might makes right." Yet, the new, more democratic societies would bring a great awakening of freedom. And modern notions of individualism would allow us to add unexplored dimensions of personality, creativity and autonomy.

Now that we know what freedom is, we want more of it, not less. We hear much talk about our liberty. But most of us do not feel free enough, even if we enjoy the privilege of living in democracies. We live daily with social hierarchies that squelch creativity, limit individual opportunity, permit out-and-out tyranny in the workplace. A master narrative with roots in our pre-modern past allows money politics to make a mockery of democracy. Forged by language and played out in microtheatres, the self-as-separate narrative prompts us to limit our freedom, constrain our possibility, works against our pursuit of happiness. Instead of celebrating the joy we find in connection with one another, Nature, our creativity — the separate self/ego sees others as rivals, winners or losers, measuring everyone according to their position in whatever competitive field.

We learn and enact this narrative of identity in microtheatres of power. As children, many of the games we play teach us that life is an "Every man for himself" proposition. Winning the game almost always requires that someone else lose. You win by taking more, gaining at the other's expense, getting what you want by controlling the game board, the field. Other players are

competitors. And although older children often help younger ones, everyone knows that helping the competitor is a ridiculous violation of the rules. We have a saying, "It's not whether you win or lose, but how you play the game." Yet, we learn in practice, winning is what counts. Our parents may try to teach us other values; but we watch TV and otherwise come under the influence of a larger society where winners are celebrated, losers eliminated. Success is defined in terms of power, fame and fortune, rank in the various micro- and macro-theatrical hierarchies that structure our lives. Well before we leave childhood, we have learned the lesson (consciously and/or unconsciously) that our value depends on competition.

The master narrative not only poisons our relationships, but also makes us anxious. If our worth is defined by competition, we can never feel we are good enough. Never highly ranked enough in the hierarchies we inhabit. Never able to feel satisfied or comfortable in our position, no matter how high it might be.

We become susceptible to sophisticated marketing techniques. We mistake constructed desires for expressions of spontaneous free will. The ego identity opens us to manipulation, facilitating a constant infringement on our freedom to think for ourselves, shape our lives, make informed and well-considered choices. More importantly, the master narrative makes us susceptible to the kind of negative construction of the Other that has led to such enormous evils as slavery and the Holocaust.

The separate self/ego narrative interprets perceived differences as separation. Seeing other people, other subject centers, through the lens of the separate self/ego identity predisposes us to objectification of one another. The not oneself, not subject, unconsciously becomes object. We do not attribute to objects the same freedom we know as subject centers. Objects don't choose or initiate action. Things are fixed. We assign things their meaning. Objects don't have feelings. They do not call to us. They are indifferent, serve, or obstruct. We make every effort to control objects. From everyday elbowing in competition and powering over to acts of inhumanity. Although the separate-self identity is nothing more than an idea, the harm causes is concrete and real.

Modalities of the Master Narrative

While pitting us against one another on the individual level, the underlying notion of self as separate turns group similarities and differences into criteria for larger scale antagonism and competition. Wherever a "we" appears, the logic of the separate self/ego produces a "they" — a not-us, an Other. The master narrative permits individuals to associate in groups and imagine themselves superior to those who do not belong. These narratives of group identity — ranging from families and social cliques, to social class, nations and larger groupings such as race and gender — constitute modalities of the ego narrative.

History has led many of us to recognize that it is not only unintelligent but morally unacceptable to harbor pre-judgments of superiority/inferiority about whole groups of individuals. Not many of us would embrace group hatreds consciously. Unconsciously, however, a powerful master narrative can keep us anxiously clinging to anything that makes us feel better than someone else. Remnants of group identities and hostilities can stay with us long after we've chosen to shed them. Effect us unless we become aware and constantly on the lookout.

Gender

Of the several modalities of the ego narrative, gender is perhaps the most fundamental. Our first lessons in identity have to do with whether we happen to be male or female. The reproductive organs of the newborn carry great significance for parents, siblings, caregivers, friends and relatives. Gender evokes a set of pre-figured, often unconscious, responses. Studies have shown that, regardless of our views on gender, we treat boys and girls differently even as infants. Pink blankets and blue blankets give way to gender oriented toys. Dolls, make-up kits and pretend jewelry for girls; toy cars, trucks, guns, tools and footballs for boys. We speak differently to and about girls and boys. Children quickly grasp that they are supposed to aspire to their society's notions of masculinity and femininity. Even parents who don't believe in emphasizing gender often find themselves responding to the child's enthusiastic embrace of gender identity — and perhaps wondering if gender isn't more biological than they thought.

Many parents today don't want their child's horizons arbitrarily limited by society's ideas about gender roles. Women are now admitted to professions and careers previously closed to them. Girls can dream of becoming doctors, dentists, lawyers, scientists, mathematicians, CEOs, senators, secretaries of state and presidents. Access to sports programs allows women to continue making breakthroughs in athletic achievement. School administrators, business managers and the courts are aware of sexual harassment. Police departments enforce stricter laws and have better understandings about criminal behavior such as domestic violence and date rape.

Yet, streets, alleys, parking ramps, even homes remain unsafe — especially at night — for women. Almost one in five women will experience rape or sexual assault in their lifetime. One in three women between the ages of 18-34 has been sexually harassed at work or in educational institutions. And these are only the most blatant forms of gender-based mistreatment that plague even societies that have seen many barriers fall.

We continue to face such problems in large part because this modality of the master narrative generates many supporting discourses such as the one telling us that gender is biological. Certainly male and female are biologically distinct. Yet culture constructs much of gender identity and gender-related behaviors. We know that masculinity and femininity are sets of ideas, in part

because cultures differ in their gender definitions and roles. Moreover, most cultures put a great deal of energy into gender socialization, far more than would be necessary if gender were simply "natural." All of this effort makes it difficult to sort out biological dimensions untouched by cultural notions. While individuals receive somewhat different versions of their culture's gender formation, and respond differently, social pressure urges all to aspire to the norm.

In our culture, masculinity epitomizes the master narrative of the competitive ego. Males are socialized to assume the role of dominance over women, Nature, their own bodies — and other men. From the start, adults tolerate, even encourage, aggressiveness in boys; as well as varying degrees of destructiveness. Although "Boys will be boys" permits only a certain range of behaviors, asserting power and control proves manliness. Boys establish hierarchies in playground fistfights. Adult males emulate the alpha-male by aggressively battling for position and possession. Masculinity drives the popularity of sports such as football, hockey, soccer, even baseball. And spurs the consumption of violent movies, computer and video games, military histories and sensationalized press coverage of war. Compounding the problem, punitive curbing of conduct such as crying or otherwise being a "sissy" produces anxiety about gender identity. Insufficient attention from adult males can also leave boys clinging to a theoretical masculinity.

In addition to embedding a strain of violence in the male psyche, this version of masculinity fails men in other profoundly important ways. Since humans are social animals, males need companionship and love as much as females. The masculine mythology of the great individual, warrior, quiet and mysterious lone hero, obstructs relationships. Fear of being effeminate checks feelings of tenderness, dependence, vulnerability, compassion and belonging. Men have difficulty establishing and maintaining close bonds with anyone, especially other men. The expression "male bonding" has no female counterpart; it goes without saying that the feminine will bond.

Women, like men, are shaped by a larger culture, saturated with the ego narrative. In the abstract, in order to attract and complement the male ego, the feminine ideal would be the opposite of egoism. Beneath a surface of personal beauty, delight in pleasure and appreciation of pretty things, femininity is supposed to be about service, cooperation and communication. As little girls learn to speak, we accustom them to accepting interruptions and teach them a special, cheerful intonation. We encourage them as they play dress-up and practice mothering skills with their dolls. Movies, books, cartoons and toys teach girls that the goal of their lives is romance, living "happily ever after" with a "prince charming" husband. Modeled all around them, from magazine covers at supermarket checkout lines to animated fairytales, girls see the purported means to that end. A woman, they learn, must make herself the object of desire, the thing to be looked at. From mothers, sisters and friends, girls learn how to put on make-up and select clothing designed to titillate. By the time women are ready to marry, they're supposed to have mastered the skills of psychological, domestic and sexual service that men expect.

However, girls also learn from the larger culture that winning is what counts. Women are less likely to resort to violence than men, since direct forms of aggression overstep the bounds of femininity. But women can be fierce competitors. In the feminine sphere, titles of success include most desirable sex object, most successful mother and variations on the money theme from most fashionable clothes to most lavish dwelling. Or everyday power-tripping among co-workers. Women compete with men, too, in any realm permitted: academic/professional achievement, or the workplace where employees vie for the boss's favor. "Playing the game" easily overrides non-egoistic feminine values.

Our culture's gender roles represent longstanding historical traditions that favor males, but do harm to both sexes. Masculinity's obsession with control produced the Victorian morality that still distorts our sexuality today. This code of sexual behavior linked sex, Nature and women with uncontrollables — therefore evil, forbidden, dirty. In the twentieth century, we came to recognize that repressed sexuality is unhealthy for the individual and society at large. Yet some people still find it difficult to accept same sex love — and not only because of programming to heterosexuality. Men loving men or women loving women so blatantly violates the gender codes that the whole edifice appears threatened. We cannot fully liberate ourselves from such prejudices, as long as we cling to traditions that empower one person over the other.

The construct of gender inequality leaves us unsatisfied because it is out of touch with the Referent. Narratives of dominance / subordination ill serve relationship, intimacy and eroticism — the celebration of the joy, the wonder and beauty of our bodies, our selves. The ego identity frustrates the need for love, a need inherent in our physical being.

The importance attached to gender reaches beyond the production of antagonistic relationships between men and women, however. Gender attunes us from infancy to the notion underlying all the modalities of the separate self/ego narrative: that of defining self in terms of who or what we are not. The underlying notion that sets us over and against the Other.

Race

Race itself is a master narrative construct. On average, human DNA is approximately 99% the same. Over millions of years, human groups living in widely separate geographical locations developed slight variations, some affecting appearance. The master narrative of self-as-separate turns such perceived differences into negatively charged Otherness. Exacerbating this problem, language, and therefore the narrative field tends to retain vocabulary and discourses that have been discredited. Altogether, these dynamics translate certain physical and cultural aspects of human diversity into "race."

Most historians would agree that the trade in black African slaves increased the force of existent racist narratives. Before maritime technology made intercontinental slavery possible,

Europeans had a long history of enslaving other Europeans; and Africans other Africans. European trade in African slaves took off and boomed with exploitation of colonies in the New World. The Atlantic slave trade lasted well into a time when European/American culture found enslavement of one human being by another morally unacceptable. Under the influence of the Enlightenment, defenders of slavery garbed their attempted justification in scientific-sounding language. Discourse rampant with falsehoods about genetic differences that denied the humanity of the captive.

Brought across the Atlantic in chains, millions of people spent more than two centuries under the brutal institution of slavery. After the Civil War in the United States, the auction block and bullwhips gave way to share-cropping, segregation and lynching in the South. In other regions, African Americans encountered both blatant and hidden forms of racial hatred. Racism restricted black people to impoverished neighborhoods, as well as the lowest paying and least desirable jobs. The Civil Rights movement of the 1950s and 1960s overturned segregation laws, affirmed everyone's right to vote and made overt job and housing discrimination illegal. Yet, racism persists.

Many African American children still grow up in ghettos — surrounded by poverty, hopelessness and the violence that desperation brings. We still have enormous disparities in school funding, quality of education and employment opportunities between the white wealthy suburbs and the predominantly black inner cities. Middle-class, even wealthy African Americans also experience the pain of both conscious and unconscious negative attitudes kept active by narratives of race. Employers still find reasons not to hire; bankers not to give loans; realtors not to show homes. Racial profiling and disparity in numbers of police killings affect not just the lower classes, but also professionals and celebrities.

The modality of race harms other groups of people, as well. It permitted pogroms and the Holocaust. It allowed the genocide of Native Americans and usurpation of their lands. Today it motivates those seeking to build a wall to keep Mexican immigrants out and laws to ban Muslims or deprive them of free travel. It authorizes paying immigrants minimum wage or less. It subjects whole groups of people to discrimination and racist rhetoric — Hispanic Americans, Asian Americans, Arab Americans and so on. The ego narrative divides us into a "we" and "they." It adds new others to the list as contact increases with people who don't speak the predominant language, share mainstream customs, religion or look the same. Instead of appreciating each other's beauty, cultural and religious traditions, the ego narrative has us turning differences into pretexts for hatred and powering over.

The underlying notion of self as separate impedes our efforts to deal with the terrible history of racism. Ego narratives tell us we have no responsibility for the misfortune of others. That we can ignore the role of colonialism and economic imperialism in producing the poverty and enmities that still plague our world. It has us ignore the debt owed African Americans for the millions killed in the

Middle Passage, the brutal treatment of those who made it across, and the 250 years of unpaid labor and subsequent discrimination. It denies any obligation to Native Americans for the loss of entire nations, the usurpation of lands and efforts to eradicate their cultures. Hatred of the "Other" permitted the systematic murder of six million Jews. We see the force of the master narrative in that even those who committed or accepted these unthinkable abominations didn't see themselves as choosing evil. And the persistence of Nazi identified white-supremacist groups in our society today.

Class

Another fundamental modality of the master narrative naturalizes the idea that the strong take from the weak. This formula defines "survival of the fittest" in popular culture. Biologists, however, increasingly see cooperation as key to fitness for survival. As we will explore further in Chapter Five, life would never have emerged on this planet if complex proteins hadn't begun sharing molecules. And we wouldn't be here if biological life hadn't shown an amazing talent for cooperative organization throughout its evolution. Our bodies couldn't function without the organelles within every cell giving more than taking, working for the common good. Yet, altruistic behavior in our world has been sidelined as idealistic, foolish, or at least extraordinary in the eyes of the master narrative. We humans have been persuaded to believe that Nature defines success almost exclusively according to motifs of taking as much as you can get.

The mistaken separate self/ego narrative makes it imaginable that some hoard far more than they need or use, while others die for lack of resources; go homeless and hungry. A world where money determines whether people receive adequate health care; whether they have quality education and meaningful employment opportunities; whether they can travel, enjoy entertainment and so forth. The master narrative creates a moral climate that does not require the privileged to concern themselves with others. An economic system requiring people to look out for themselves — because no one else will.

We can try to change our economic systems but unless we change the underlying master narrative, the effort will end in failure. Communism, for example, had high ideals — that each should 'give according to their ability and receive according to their need.' When revolutionaries attempted to impose these principles through violence, however, they aroused fierce resistance and felt forced to suspend basic civil liberties, crush opposition with brutality. And since the leaders lacked the analytical tools to interrogate and alter their own relationship to the narrative, they ended up reproducing a hierarchy characterized by corruption, and unequal distribution of wealth. But that does not mean that what we call "free enterprise" is the best we can do.

The "free market" economic system that dominates our world rests on the belief that people are inherently lazy and selfish. Operates on the principle that greed is good. Its less-touted motivating force is fear. Lower and middle-class workers fear for their livelihood and the welfare of their families; the middle and upper classes for the maintenance of their position.

In our democratic political culture, popular sayings and hallowed texts reiterate the theme that no one is better than anyone else. “We hold these truths to be self-evident…” On a most fundamental level, we believe that everyone should count equally. In theory, we don’t recognize birthright. That's not, however, what goes on in our government and in our workplaces.

At work, the owners, their surrogates and favorites take up positions of power over others. Workplace culture scoffs at democratic decision-making. Bosses expect deference. Those lower down usually have only two options: acquiesce or quit. We endure the situation because, no matter how skilled, sincere or willing to work we are, the free market economic system does not guarantee you a job — unless you were born to a social position that gives you “connections.” In politics, the master narrative modality of class justifies unfairly influencing legislation, manipulating the outcome of elections, appointing partisan judges, doing whatever one can to protect and further self-interest — including overt forms of corruption, such as bribery. Undermines government “of the people, by the people and for the people.”

When it comes to global relations, this modality of the master narrative excludes masses of people from the security and well-being that better-off classes in the most developed economies enjoy. In what we’ve come to call, “Third World” countries, governments have been forced to borrow money and pay it back with interest, making it impossible to provide services and ease the poverty of their own people. Trade policies, exploitative business practices and corruption also prevent hard working people from feeding their families. Multi-national corporations treat the developing world as a source of raw materials, cheap labor, even dumping grounds for toxic waste. The drive for profit overlooks nightmare scenarios of sweatshop production, child labor, shantytowns and environmental catastrophe. A child dies of hunger every seven seconds. Someone dies of the effects of poverty every three seconds.

We more easily ignore, accept and perpetrate mistreatment of one group by another when multiple modalities of the master narrative can overlap and mutually reinforce each other. To make the exploited multiply Other, as where our ego-based classism melds with racism and/or sexism.

Conclusion

A destructive master narrative, not “human nature” or individual malice, lies at the core of our complicated tangle of problems. Narrative, however, even a master narrative, is only made of words. This understanding permits us to grasp and address our situation. To find a more effective solution, without endless recrimination.

The separate self/ego identity is a cultural phenomenon. It is a way of thinking of ourselves. The ego, in itself, does not exist. We now have the cultural analysis to understand what the master narrative is and where it comes from. How its power over us works through words and cultural systems that we create. And we can change. If we recognize the illusion, we can break the spell.

We have more resources in this endeavor than we may at first recognize. The narrative field itself has always retained alternative ideas of where we came from, who we are, what we're doing here. Human beings have formed many kinds of communities, large and small. We've developed a variety of cultures — some of them less ego-identified. Less removed from the Referent. We need to investigate such alternatives. Narratives more and less relegated to the sidelines that may hold keys to the gate to the loving world all of us wish.

Part II:
Elements of an Alternative

Before looking into Religion, Science, the Arts and Stars for alternative narrative, we need to acknowledge certain difficulties. First, the limitations of single chapters make it necessary to reduce and simplify. Second, since all narratives are found within a larger cultural setting, all have been susceptible to contamination by the master narrative. Each in its own way compromised.

Consider religion. Almost all religions and spiritual traditions condemn hatred, violence and selfishness. Yet, human history abounds with stories of wars, crusades, inquisitions, massacres, riots pogroms, terrorist acts and less-dramatic forms of intolerance perpetrated in the name of religion. Nazi SS belt-buckles carried the inscription, "God with us." Suicide bombers believe they will be rewarded for their martyrdom. More commonly, theological explanation and words can divert attention away from our responsibility for the evils the master narrative is causing.

In the case of science, although technology and recent scholarship are leaning ever closer to discrediting our inherited notions of self-as-separate, scientists face daunting challenges in shifting to alternative paradigms. The master narrative meddles with how scientists approach their subject matter, as well as the vocabulary used to talk about and present their conclusions. Research for weaponry receives virtually unlimited funding. Peace Studies, not so much. And science remains largely bound to seeing the Universe as purely physical, driven by mechanical relationships, all determined by the laws of cause and effect.

When it comes to the arts and the master narrative, history records a sometimes oppositional, sometimes complicit, always complicated relationship. Although art offers alternatives and can do so even if the artist hadn't intended it, artists certainly have historically served power. What more blatant example than the Nazi party employing artists? In less stark moments, the ego culture supports those artists who serve the marketplace — service that can include the celebration of wealth and power, the glorification of war, representation of women as sex objects, normalization of violence and so forth. As well as more alternative messages.

Similarly, the Stars. With its pre-scientific roots and undisciplined tradition, astrology understandably evokes a chorus of skepticism. Some astrologers claim to predict the future, or at least allude to force fields affecting the probability of particular events. Astrological descriptions of personality may make so generalized a sweep, they could fit almost anyone. Others steep in blatant flattery. Disagreements abound among astrologers. Factors that make it difficult to discern uncontaminated narrative. Yet connecting personal identity with the larger Universe, the Heavens, represents a real alternative.

Nevertheless, something has helped us survive from before campfire storytelling to our present day social networking. If the separate self/ego idea were the only narrative informing our identity, we would have destroyed ourselves long ago. Within each of the narrative fields we'll be exploring, we find carefully preserved threads, perhaps kept to the periphery; but nonetheless, instrumental in producing some of the best ideas and understandings of who we are and what we're doing here. Such narrative elements may now represent our survival, the key to creating the bifurcation we need at this pathway's end.

Chapter Four:
Alternative Narratives in Religious and Spiritual Traditions

Any discussion of religion, whether or not that religion is one's own, opens the prospect of conflict with someone else's understanding. We can only hope that our considerations here communicate a heartfelt respect and ring true for adherents and non-adherents alike.

Although the social sciences are far from agreeing on its significance, anthropology recognizes that some form of religion appears in all human societies. Most religious systems include a description of paradise. And we generally find ideals of compassion, sharing, community there — ideas about where we'd like to be, hints of how to get there from where we are.

Religion calls the master narrative of separate self-interest into question with some of the strongest discourse available. From the earliest texts, we find religious and spiritual traditions telling us there is *another way.* Teachings, prayer services, spiritual reading, meditation, yoga, acts of compassion... all can cultivate a sense of connection and responsibility for our bodies, one another, and the world. An awareness of belonging, of our relationship with Mystery, the Sacred —

Religious Reunion

While the ego narrative would lead to complete social disintegration, religion aims at community. The very word religion comes from the Latin, *'religio,'* "to bind together." Although religions have often divided us, their common opposition to the ego idea of self could help us come together and save our world.

Although major world religions such as Judaism, Christianity and Islam might sometimes appear irreconcilable, they share common ground in that each offers elements of an alternative to the master narrative's model of "every man for himself." Notwithstanding ego-bound interpretations of selected passages in the Talmud, Bible and Koran, the overwhelming character and direction of these Holy Books calls for the creation of a world where coercive-power, dominance-submission, separate self-interest have no place. Love, as the most important commandment, threads its way through each of these religions.

If that love were to bring respect for others, equality, real fairness, justice; everyone with a home; not a single child hungry, Peace — it would be Heaven on Earth, paradise. Which many theologians wouldn't believe could happen. But few would go so far as to say what God can and cannot do.

The promise of paradise has roots in Judaism. The covenant formed between G-d and the People of Israel choreographs their relationship in the on-going process of Creation. G-d remains ever present as Protector; while the People are to take care of one another and look after the world. The Hebrew word "mitzvah" is crucial for fulfilling the human side of the covenant. Originally

referring to the commandments enumerated in the Torah (the five books of Moses), Mitzvah now commonly refers to all acts of human kindness. The evolution of its meaning followed from the purpose of Jewish Law itself — the creation of a just and loving society. Jews are commanded to help the poor and needy. Jewish Law forbids taking advantage of others. In Judaism, what one *does* matters more than what one says. The community envisioned is one in which members respond to one another's needs, a model far from the separate self/ego idea. Jewish scholars originally anticipated that an individual Messiah would bring deliverance from captivity and human suffering. Many Jews today understand those scriptures as possibly intending a Messianic Age — one in which everyone participates in the role of Savior.

Approximately two thousand years ago, a community of Jews gathered around one of their own, Jesus Christ, whose teachings led them to believe he was the Promised Messiah. "Forgive your enemies." "Feed the hungry." "Shelter the homeless." "Sell what you have and give to the poor." "Love one another." Predictably, the colonial authorities crucified the preacher of so radical a counter narrative. What Christ said his followers should do, the ethical imperatives he taught, utterly contradict the get-for-yourself ethics of the master narrative. Christians believe that Christ will one day return to bring the promise of paradise. If that Second Coming were to begin in each and every believer's heart and then manifest in the world in acts of altruism — every Christian uncompromisingly putting His loving words into action — the Heavens might verily seem to break open, the prophecy be fulfilled.

Around fourteen hundred years ago, significant social change was occurring in what is now called Saudi Arabia. Many people were abandoning nomadic patterns in favor of settlements. As local commerce and the caravan trade grew, a business mentality — motivated by separate self-interest took hold. Get-for-yourself began displacing former loyalties and sensitivities, pushing aside peoples' concern for each other, weakening the social fabric, corrupting spiritual life. In this context, the Prophet Muhammad was inspired to begin a new religion drawing on all the prophets God had sent humankind. The teachings of Abraham, Moses and Jesus contribute significantly to Islam.

Mohammed emphasized that God (Allah) is One; and the Universe Allah created has a purpose. The Prophet taught that each human being has the responsibility of taking care of others and working for peace and justice. "He is not a perfect believer, who goes to bed full and knows that his neighbor is hungry." "Do not let your hatred of a people incite you to aggression." And, "do not let ill-will towards any folk incite you so that you swerve from dealing justly." Islam encourages a remarkable degree of religious mindfulness. Adherents are required to pray five times daily, make a yearly fast and undertake a pilgrimage to Mecca at least once during their lifetime.

All three of these religions share a belief that the world and time itself, will some day come to an end. The metaphors vary, but the message is much the same. Terrible events will precede a Last

Judgment. God will call all of creation together and require the living and the dead to account for how they lived their lives. Goodness will be rewarded. Evil punished. For all Eternity.

Many believers feel that scriptural descriptions of the End Times sound much like the conditions we're presently facing. One could argue that we need no more nightmare scenarios to satisfy the apocalyptic passages — two World Wars, the Holocaust, deployment of nuclear weapons, worldwide terrorism, episodes of mass hunger and disease, climate change... And if we continue polluting the air, depleting the oceans, cutting down the forests, poisoning the environment, we will in effect, have rendered a final judgment on our species.

Given the force that the master narrative exerts on all narratives in the narrative field, everyone is subject to its pressure — including rabbis, priests, mullahs, theologians, pastors, ministers, preachers, as well as their followers. If we can become aware and recognize the equally powerful, even more persuasive alternatives in our religious traditions, however; we can take hold of the lifelines they represent, and begin to solve our problems. We have the intelligence and means to meet the needs of everyone. With a new awareness of how sign systems and narratives can have us working against our best intentions, we might be better able to realize the promise in our religious texts and spiritual practices. On our way to fulfilling the dream of paradise that they all have kept alive. A world of love and joy.

The Heart of the Matter

Whatever our beliefs, most of us would agree that we don't much like isolation, loneliness, alienation. Certainly, we sometimes like to be alone; but solitary confinement and exclusion are considered harsh punishments. Being-with is probably written in our genes. Our greatest pleasures derive from love. We find joy in shared experiences. Gift-giving and helping in times of need bring out a spirit in us that we wish would last forever. We risk and sacrifice our very lives for one another. Work transforms when love and meaning engage our will. We have similar experiences with Nature — time spent with our pets, creating art, engaging land and seascapes, appreciating art performance and so on. Our most treasured moments are those in which we feel we belong and participate as full human beings. Conflict, stress, meaninglessness, boredom, even pain fall away — replaced by a sense of wonder, relationship, fulfillment, delight.

Jewish theologian philosopher Martin Buber found a place for these moments in his early twentieth century vision of existence. Buber sees the world as two-fold, according to the attitude we bring to it. The world of I-You (or as some have translated it, "I-Thou") — unified through personal presence. And the world of I-It — fragmented by objectification.

For Buber, we are truly ourselves only when we enter relationships of reciprocity. We reach beyond the categories of culture, causal explanation of who we are, even time and space — when we

connect with one another as a "You," who is as fully a subject-center as the "I." Although we easily slip back into the attitude of I-it, objectifying others and ourselves, we're drawn to You-saying, its freedom and possibility. This same You-saying Presence rests at the heart of our relationships with Nature, in moments of spiritual quietude, in the space inspired by art. The lines of these I-You relationships intersect as radii of a central, Absolute You (Thou). For Buber, "Person" is a fundamental attribute of the Universe.

Elaborating this vision of Love, Emmanuel Levinas wrote that our very faces call to one another; and that we hold the Infinite in our hands by virtue of our capacity to choose how we will respond. "Person," an attribute of the world. The Sacred, present everywhere and with everyone. Our possibility opening to the Infinite. These are elements of alternative narrative.

Paleontologist and Catholic theologian Teilhard de Chardin moved in this personalizing direction with, *The Human Phenomenon*. He reached the conclusion that insofar as we humans are made of matter and are conscious, all of matter must also have an interior. Tracing an evolution in which matter complexifies from Earth's earliest stages, through the appearance of Life, to the thought-work of the humans, he foresees humanity arriving at an Omega point, which may emerge in peace as we eliminate disease, hunger and evil itself. Or the Omega may arrive amidst a terrible tension during which we choose between Universal Love and brute force. In either case, he sees humanity in context of a living planet unfolding a profound interpersonalism.

Comprehending the Universe as subject center, endowed with some kind of mentality — similar, but not exactly like our own Consciousness — does not represent mainstream discourse of Judaism, Islam or Christianity. But neither is it utterly foreign to their theological canons. Humans have always created non-objectifying narratives about Nature, many located within their religions.

While diverse in expression, Native American traditions generally relate to Nature as living, conscious and Sacred. In some spiritual practices, prayer is begun by calling upon the four directions (or quarters), the heavens and the Earth, asking the entire Universe to join. Most common is the request for help to live in reverent awareness. "With great happiness I walk upon the Sacred Earth, Our Mother. May generations to come also walk in this sacred manner."

Living in a "sacred manner" includes perceiving events that unfold each day as invitation for engagement. Meeting any creature along the path may be an encounter with a cosmic messenger, an opportunity to prove oneself by honoring or helping a fellow being. Additionally, Native American religious ritual — drumming, dancing, singing, storytelling, feasting — express a worldview emphasizing community and the interpersonal. "The two-leggeds, the four-leggeds, the wingeds and all that move upon You are Your children. With all beings and all things we shall be as relatives." What could be more counter to the master narrative?

Coming from the other side of the globe, the ancient Chinese *Book of Changes* or *I-Ching* assumes we're capable of interactive dialogue with the Universe at large. The *I-Ching* locates the "random" as a place where that communion can occur. With a mathematically complex, but simple to use method, one consults the book by focusing on a particular circumstance, question, problem or idea, while letting chance affect the drop of coins or the shuffle of a small bundle of sticks. The coins or sticks connect with the text by way of a binary based system of open and closed lines. Using poetry, metaphor and images drawn from Nature, the *I-Ching* offers insight into the query or the direction events are taking, often suggesting a course of action. Resonant with this enactment of a personal engagement with the Universe, the *I-Ching* explicitly guides the reader away from egoism and toward community.

Ideas gathered from the *I-Ching* contributed to the philosophy of Taoism, formulated by Lao-Tse. We see strong elements of counter narrative in what Lao-Tse called the "three treasures." The first treasure is Benevolence; the second, Frugality; the third, Non-competitiveness. "Tao" means a small road, path or "the way." It is the force, the origin, the energy that sustains and informs the Universe. Taoism sees Nature as coherent and inherently good. Following the "way" means living in harmony with that Cosmic order. Lao-Tse envisioned Earth as a sacred vessel. "If you try to own it," he warned, "you will lose it." In its entirety, the Tao is said to exist beyond human comprehension; yet, the effort to grasp and live by its principles promises peace and happiness.

Recognizing our connection with Nature and one another not only brings a sense of belonging, but also motivates to develop horizons of responsibility closed off by the idea of separate self-interest. Being in dialogue with the Universe runs fundamentally counter to the master narrative. But surrounded by words, structures, institutions and microtheatres of power, we can find ourselves pressed into its service. Easy to fall back into the I-It attitude. But with greater awareness, we can constantly return to the way we choose.

Tools of Consciousness

Religious and spiritual traditions remind us that it is as essential to care for the mental dimensions of our lives as it is to care for our bodily needs. Critical thinking, quietude, cultivation of love, forgiveness, courage, mercy and so forth are as important to the health of our minds as eating healthy foods, exercise and getting the proper amount of sleep are to our bodies. The ability to respond to one another and our world depends on having knowledge about perspectives other than our own, and on seeing ourselves as beloved members of a larger community. Emotional stability, logical reasoning, sufficient self-control to hold to our choices and compassion are only a few of the parameters that define mental health. Personal happiness hinges on the mind skills we develop, beginning in childhood and throughout our lives.

Most religions include practices that help adherents navigate states of mind. Prayer turns attention to what is greater than the self and engages the mind with the Sacred. Retreats provide a special time and place for cultivating states of quietude, reflection and renewal. Fasting requires one to exercise control over impulses and, in some religious traditions, has the express purpose of encouraging compassion by increasing awareness of how it feels to be deprived.

Religious or not, people all over the world now benefit from recent adaptations of spiritual traditions such as Yoga and Zen. This story from the folklore of India illustrates the importance of methods that can help us control our psychic states. Long ago, people discovered that elephants, with their incredible strength, remarkable intelligence and cooperative spirit, could assist humans with heavy and difficult tasks. But when elephants passed through a village on their way to work, their swaying trunks could wreak havoc in the marketplace, overturning tables, upsetting everything. The people solved this problem by giving the elephants something to carry with their trunks. Our minds, too, can swing destructively this way and that, unless we give them something to carry.

A mantra can serve this purpose. Originating in the Hindu tradition, passed on to Buddhists and later to people everywhere, mantras provide a place to focus attention, an idea to occupy the mind. Mantras can include poems, prayers, lines of prose, quotes, maxims, song lyrics, aphorisms, motivational sayings… Something to hold onto. They can vary in length from a single syllable or word to several sentences. Throughout the day, recourse to the mantra can help us break free of emotionally charged narratives that can pull us into endless loops of negativity, help us return the mind to a more desirable state. A mantra, however, only works if you have the will to use it.

We may have mixed feelings about exercising our will. When practiced as power-over the self, will-power can become a form of unhealthy and unpleasant self-coercion. It is possible, however, to exercise one's will as power-with the Self. In dealing with mental states, we can cooperate with the way our minds work. Letting go of an unproductive line of thinking, for example, need not mean blocking or suppressing unwanted thoughts. You can turn your mind from one avenue to another without trying to destroy or deny the state you'd prefer to leave. And you can do this most effectively by creating positive energy in the new direction. But to accomplish this reliably, you need to develop your will.

Meditation can aid in exercising and building up will-power muscles. Most approaches suggest practicing once or twice daily for about twenty minutes each session. Some traditions advocate short meditative moments throughout the day. Techniques include paying attention to one's breathing, posing a series of questions, focusing on a candle flame, even trying to empty the mind — as in thinking of "nothing" each time you become aware that you're thinking of something. An easier version employs imagery and symbol-making. You imagine some scene, object, or event which you choose to associate with a particular state or process such as vibrant health, relaxing the body,

quieting the mind, calming the emotions. Or visualizing the resolution a difficult situation. During the meditative session, you elaborate on your symbols in ever greater detail, tightening the connection between the symbol and its signification. Soon you are able to retrieve that meaning by bringing the symbol to mind. Whatever method you use, the essential exercise consists of returning your mind to the focal point of the meditation each time you drift away. And you will drift away. If you drift frequently, that too can help. Every time you repeat the action of returning your mind, you grow stronger.

Self-directed exploration of inner space has many benefits. Meditation opens the possibility of investigating and rewriting narratives about oneself, one's relationship with others and the World. In a kind of self-hypnosis, you can sculpt the future by rehearsing responses and imagining desired outcomes. Meditation opens a space to engage the You at the Center of our lives — the You waiting in every encounter.

All these alternative elements stand in stark contrast to the master narrative's microtheaters of coercive power and separate self/ego identity. Going as far back as our history records, we've been following the ego narrative's pathway, only to arrive now at its unholy end. Our religions and spiritual traditions have left us with the resources to help find our way beyond this impasse to the world — the paradise, the Heaven on Earth, we've always desired.

Chapter Five:
Alternative Narratives in Contemporary Science

Preface

The history of modern science begins with quasi-heroic opposition to institutionalized hierarchy and unquestioned tradition. While the Inquisition was still burning people at the stake for heresy, science had begun developing methods for distinguishing knowledge from belief. The authority of science grew as society moved toward recognizing that an appeal to tradition, political power or birth to a particular family doesn't add value to ideas. Given education, any individual could contribute to the collective conversation that generates human knowledge.

Most would agree that humanity has greatly benefitted from science. But when science cut its ties with unquestioned belief, it didn't do the same with the strain of Ancient Greek metaphysics that had come to underlie the prevailing conception of the world. Though Earth was no longer seen as the center of the Universe, it remained an object all the same. Holding to the view that the Universe has no subjectivity, no "interior," or meaning is somewhat understandable. There was little desire to fall back into the pre-Enlightenment abyss of anything goes.

Without the tools for interrogating the master narrative, the separate self/ego idea endured, became the lens through which scientists would view the world. Science found itself then, and still finds itself today, in the service of coercive-power, producing ever more powerful weaponry for war. In its most popular version, science sees all beings as separate mechanisms: atoms the effects of senseless forces, cells egocentric, human behavior determined by antecedent causes.

Reducing our actions to the obedience of discoverable laws and suggesting that a good biological reproductive partner is the best we might be for one another, however, just doesn't sit quite right with the freedom we feel when we make choices and decisions. Nor does it summarize the wonder and possibility we experience in our You-saying with one another. The good news is that scientists in every field are beginning to move in directions that might do better.

The body (and brain) one thing / the mind something else, has always been a problem. *How can the mental phenomenon happen? Where does it come from?* Motivated by progress in neurophysiology; information emerging from research in quantum mechanics; and serious soul searching regarding our moral and ethical situation — scholars are taking up the issue anew, questioning the metaphysical packaging that wrapped the original gift of science.

Re-thinking this issue brings into focus the theory of "panpsychism," a narrative which reaches back to several ancient Greek traditions and into the present. To the question, "How can our physical brains produce the phenomenal experience we've been calling Consciousness?"

Panpsychism answers: "The ultimate particles that make up the neurons themselves must possess these phenomenal properties."

As its name implies — *"pan"* (all, every); *"psyche"* (soul, mind) — panpsychism theorizes that matter has an interiority. That some kind of mentality is fundamental, intrinsic to all of matter. An idea we encountered in the last chapter. The point of view that Consciousness informs the matrix of the Universe will infuse the story we will follow. But even without this contemporary approach, science in its own unique way has been steadily eroding the master narrative.

Our Everyday World

Today, the scientific method remains much the same as at it was at its inception. Those who wish to contribute to the endeavor submit their findings to the community at large. The evidence supporting their theory must be available to everyone, whether found in data from distant galaxies, layers of rock, fossils, particle accelerators, living organisms... Whatever the scientific field, it comes down to measurement and description. Building on earlier understandings, narratives constantly undergo refinement and revision.

The information science generates sometimes turns out confusing, even illogical — for the scientists themselves. As technology develops and permits more extensive exploration of our Universe, ever deeper mysteries appear. Scientists live with paradox. Despite the fact that science prides itself on reaching conclusions based on evidence, they almost never achieve absolute consensus. The story science tells remains open ended — and thus, on a most fundamental level, works against the master narrative's insistence that the case is closed.

Common sense is often cited as the basis for the ego identity. We look around — at our world, at one another — we perceive our body's boundaries; we acknowledge that we can't read each other's minds. We draw the conclusion that we're separate selves. Science has long challenged us to re-think what our limited perception reports, however. Centuries ago we stopped believing that the Earth is flat, or that it's the Sun's movement we observe as it crosses the sky.

During the 20th century, an array of discoveries and studies — in physics, astronomy, biology, anthropology, etc. — provided striking evidence that we are part of a world more interwoven than common sense reports. Electron microscopy now allows us to see that our skin is not the barrier we once thought it was. Biological disciplines contribute to our understanding of the many ways our bodies connect, engage and exchange with our surroundings — from hourly cell replacement to breathing. Zoologist and anthropologists, in turn, have made it clear that human beings have always lived in communities and done best when cooperating. Like other species, we depend on others all the more as our communities become larger and more complex. Science has done much to debunk the "common sense" underlying the separate self/ego idea.

We assume, for instance, that we live in time. When we question what time actually is, we might reply that it's something intuitive. Difficult to describe / define. Something independent of us, out there; yet that we find ourselves in. We might appreciate the idea that time is a dimension. One continuously forward moving, opening a space for events to occur. Or, we might agree with the explanation furnished by Kant that time is a category of the mind. Some of us might not care what it is.

Whatever our common sense understanding of time, it probably entails some sort of structure — a past that doesn't remain in the present, a future that doesn't occur before the present or the past. The discovery that the speed of light is unchanging, however, required that we radically revise our concept of time. A long distance space traveler could return to Earth to find that thousands, perhaps millions of years have passed. Time is not the structure we once thought it was. In the world Einstein invited us to understand, time is nothing like our everyday view of it.

Einstein's friend, Kurt Gödel, took it a step further. He asserted that Special Relativity renders clocks irrelevant. If time is relative, he reasoned, then there can be no clock anywhere in the Universe with which to "set" our own. Known to scientists for the rigorous logic he employed in his exploration of the foundations of mathematics, Gödel drew the additional conclusion that General Relativity makes traveling backward in time a real possibility. More than undermining our faith in common sense, these understandings of time represent elements of an alternative narrative.

Turning to the ultimately small, sub-atomic particles led scientists to equally revolutionary insights. Research into the indistinguishable particle-wave behavior of matter at the quantum level disclosed that two or more particles, if once together, remain connected even if later separated by great distances. Most physicists now accept the idea that because of the original connectedness of all particles at the beginning, everything in the Universe is somehow "entangled" with everything else. The notion flies in the face of separation.

When it became apparent that there were irreconcilable contradictions between the math for relativity theory (equations for studying the ultimately large) and the math for quantum mechanics (equations for studying the ultimately small), string and superstring theory emerged. Rather than imagining the smallest building blocks of the Universe as particles, string theory suggests that the smallest possible units be thought of as tiny vibrating strings. The solution solved the math incongruity issue, but required the possibility of more than four, perhaps eleven dimensions to the Universe. Everywhere physics looks, it returns with the information that we're living in a world much more complex than the master narrative would have us believe.

The same holds true in the life sciences. Early efforts to understand evolution explained the appearance of new species as the effect of chance and natural selection in a competition for survival. Later theory shifted the locus from chance at the level of the creatures involved to chance at the level

of the genes. Both approaches assumed a fixed, mechanical environment into which organisms inserted themselves, the luckiest proving the most fit. In the late 20th century, complexity theory emerged; and when that came together with the new science of ecology, evolutionary theory was altogether rewritten.

Even before the renewed interest in panpsychism, complexity theory was partly explaining change in ecosystems through the phenomenon of "self-organization." The agents of complex dynamic adaptive systems, researchers observed, have no predetermined blueprint, yet spontaneously generate ordered patterns and structure from apparent chaos. As for the initiation of evolutionary change, they sited the micro-interactions of cells at the level where organisms entwine with the larger environment. Communication and choice made by the organisms produce the adaptations with which each climbs peaks in their constantly changing fitness landscapes.

Complexity theory heralded a radical upgrade for all the sciences. When its principles were found to yield valuable insights across numerous fields of study, a feat once considered impossible, scientific vocabularies expanded. Diverse disciplines ranging from medicine and electrical engineering through schools of business and economics made unexpected progress sharing the same concepts. Emergence: the parts effect the whole as the whole effects the parts. Sensitive dependence on initial conditions: the smallest action by the smallest part can have a system-wide effects. Phase transitions: change in which the entire system moves from one state to another. Water to ice. The beginning of the Universe. The appearance of Life. The transformation of the Eukaryotes.

Complexity theory suggests that systems produce identity and retain their continuity by repetition of successful patterns. Such pathways become deeply embedded. A systems never departs entirely from the recurring patterns by which it came into existence. When threatened with destruction, a successful system begins searching through its possibilities for a solution. Often the answer contradicts present practice to such a degree that the alternative is deemed unbelievable, impossible, at the least, improbable. We will be revisiting complexity theory in Part III, "Working toward a solution."

For now, an attempt at the alternative picture that contemporary science offers.

Matter / Life / Multicellulars

Based on the observed outward movement of the galaxies, the omnipresent field of background radiation, the abundance of helium in interstellar space and the laws that describe how matter behaves, scientists believe that the Universe had a beginning, probably around 13.7 billion years ago. Scientists do not completely agree about the timeline nor the details of how the Universe unfolded. Some doubt that time as we know it could even have existed at the beginning. Most concur, however, the evidence points to a starting point.

Before the beginning, before space and time existed — remains hidden. Does some-thing come from no-thing? Is the Universe a bud of a larger Cosmos? Does the Ground of Being go on forever, without Beginning? Although science has no hard answers for these questions, that doesn't prevent cosmologists, like theologians, from speculation.

Without some kind of mentality associated with physical matter, cosmologists are challenged to conceive of how the Universe could have begun. Many believe the crossing into existence is made by chance. Some explain the improbability by supposing a multi-verse idea. An infinity of possible universes somehow randomly happen. Most fail; but some might exist, right alongside our own.

Based on what science knows about the Universe, several narratives feature a roiling chaos preceding the start of it all. In this scenario, as the tiniest possible particles appear, they meet with mirror image of themselves and are annihilated. Particles forever eliciting their anti-particles and together dropping back into the frothing chaos. Matter being extinguished by anti-matter.

Particle accelerators mimic what is thought to have been the conditions during those first infinitesimal micro-seconds. The "Top" and the "Bottom" quarks may have played central roles in the opening scene, since reproducing them requires amounts of energy similar to what theory indicates were available at the Beginning. Top and Bottom quarks, however, do not last long. The Top quark massively overpowers the Bottom quark with which it attempts to pair. It is unlikely that any information moves between them at all. Nothing holds the two together. The Top quark rapidly decays. In less than a nanosecond, they disappear.

Almost immediately, a second generation of quarks appear. This time, however, they are closer to each other in size. The so-called "Charmed" quark is only about ten times the mass of its partner, the "Strange." Briefly, the two engage. When they do, a legion of new entities, "mesons," emerge. But the bonding between the Strange and the Charmed also proves unstable. We can reproduce such pairs in high energy laboratories — but only fleetingly before they fall back into non- being, as they did before the first nanosecond of the Universe had passed. The second attempt at existence by way of relationship, like the first, also ends in failure.

As the Universe approaches the first ten thousand millionth of a second, another set of quarks appear. This time they're of nearly equal size and —most significantly, we find them in triune relationships, passing a quantum of energy, the "gluon" particle, among them. With each exchange, the quarks transform their color charge into one another's — red, green, blue. Sharing the energy field of the "Strong Force." Two "Down" quarks are holding together with an "Up" quark. Or two Ups are bonding with a Down. As their dance endures, they draw mass. Their sharing represents the foundation of the Universe. Something matters.

The sea of symmetry, equal amounts of matter and anti-matter, remained unbroken — until these quarks emerged. And they did so, not as separate objects, but by creating *relationship* with one

another — expressing identity on the basis of Belonging. A transition we might characterize as a turning away from the matter/anti-matter go-round of being a this-thing or a that-thing. A move from a "what" to "who." A Ground of Being that could matter.

The difference between the random and choice is meaning. The choice by the quarks to recognize one another as equals, share energy and thus create relationship, represents invested meaning, information. We find, at the most fundamental level of existence, a pattern totally opposed to the ego idea — a pattern of sharing. The paradigm of Belonging.

The story goes on. We jump to about 400,000 years later. At this point, the Universe exists as a hot dense plasma. As the earlier enormous energy levels begin to subside, free-floating electrons find they can enter into relationships with the quark collectives (which we now call neutrons and protons). The first atoms appear. Until this development, ambient photons were colliding with the electrons and constrained to the plasma. Now they stream out across the Universe as light, creating the cosmic background radiation.

Between a 100 million and 200 million years after the Beginning, hydrogen, helium and lithium atoms have materialized. Re-creating pathways self-similar to their ancestors, they begin drawing themselves together as well. As their masses increase, they move into ever deeper gravitational relationships. Network of filaments with tiny, dense clumps of matter thicken and tighten until hydrogen nuclei begin fusing into helium. Stars are born.

Depending on the pathway individual stars take, their lifetimes give rise to other expressions of belonging. Large stars explode toward the end of their lives in supernova events, and in their wake, produce and send out a range of more composite elements. These, in turn, lead to ever more complex organizations. Molecules form as atoms exchange or share the electrons in their outermost shells. By about 1 billion years, stars are gathering into galaxies.

It may have been a star going supernova about 4.6 billion years ago that woke a nearby sleeping interstellar cloud. The stir changed the cloud's internal pressures, condensing vapors and upsetting its delicate equilibrium. Gas and dust began to coalesce. As the particles draw closer, their individual momentums mesh and the cloud at large begins to slowly spin. As its outmost reaches pull inward — like a ballerina bringing in her arms — the cloud spins faster. Soon a disk-like whorl takes shape, thick and hot at the core, thinner and cooler along the edges. The center will become our sun. Large clumps of matter will coagulate into planets. Smaller pieces become comets and asteroids.

To reconstruct the story of Earth, nuclear physics and astronomy step aside as chemistry, geology, paleontology, microbiology, botany and zoology take center stage. Piecing together the geologic record, astronomical observation and basic principles of chemistry, scientists generally agree that our Mother Planet — like the Universe — was born amidst chaos. Earth's erratic orbit reflected a larger solar system in complete disarray. Planets whirl in unsettled forms and rhythms. A

huge asteroid collides, tilting Earth and becomes our moon. Falling meteorites and crashing comets rock the molten planet. The surface is a crucible of unimaginable heat. A magma ocean. Shock waves. Ultraviolet radiation.

Yet, as complexity theory sees in states of chaos, self-organizing processes are at work. In prebiotic material however, possibilities are limited to physical and chemical horizons. Heavier elements such as molten metal sink to the center of the sphere; lighter elements and molecules float to the surface. As Earth's rotation swirls the hot liquid iron, it begins to generate a magnetic field. A protective envelope that will prove critical in a future part of the story.

About a half-billion years after coalescing from stardust, Earth has formed a skin or crust. Although volcanoes are still spewing clouds of steam, ammonia, carbon dioxide and sulfides into the air, meteorite showers are beginning to subside. In what will prove a fortuitous development, Earth's nascent atmosphere and moderating temperature permit water to liquefy. These conditions distinguish our planet in a solar system where water elsewhere exists only as gas or ice. As temperatures slowly fall, clouds condense into rain, creating lakes and oceans. And the precious liquid increases.

Where exactly Life began here remains in contention. Most of Earth, around 4 billion years ago, is a steaming caldron of elements and complex organic chemicals. Some of the molecules were produced in supernova, delivered by asteroids and comets. Others are local creations, resulting from the spontaneous response of atoms that chance happened to bring together. All the compounds in the turbulent, chaotic soup are using electron bonding. None are what we yet call living.

It may have been in Earth's oceans near hot lava vents, or in the shallow waters of lakes or ponds, or in soft clay along river banks. Wherever Life began, one likely scenario suggests it got its start inside spherical globules. Evidence supports the idea that tiny oily droplets could have provided a space where a semblance of calm might prevail. Acting as protective domes, the bubble-like structures create an environment where molecules and macromolecules find a place to complexify. Eventually, elaborate long chain polymers evolve. And after hundreds of millions of years, these mega-molecule polymers develop the ability to recognize and engage with one another.

At the outset, the long chain molecules simply pass smaller molecules back and forth with each other, in a kind of playful interaction. Not all polymers can participate, however; the skill requires particular strings of information. As more complex chains develop, some learn the molecules required for the activity. Soon the polymers are passing the missing strings to those chains in need. An energizing activity that exemplifies metabolism.

Knowingly or not, the playful polymers have opened the gateway to Life. The pathway which will ultimately lead to the planetary miracle we see all around us, including ourselves. This shift from the chemical realm into the biosphere — made by going beyond sharing or exchanging;

that is, by moving into giving, doing good for another — represents a second great phase transition. In a powerful counterpoint to the ego narrative, Life begins with altruism.

Within the protective walls of the droplets activities intensify. More and more complex varieties of metabolizers evolve. From early possible means of replication (such as droplets smashing on rocks and splitting apart) RNA strands begin memorizing and repeating the required molecular structures and their sequences. Some strings learn the skill of repair. There's constant invention, improvement and refinement. But all this work requires energy.

For the longest time the proto-cells meet their energy needs by consuming the sugars that happen to pass through their walls. After about a billion years of this, however, the food supply begins to dwindle. Life faces a crisis. Without the needed segments that have now become integral parts of other living beings, the larger living network will die — beginning with its starving agents.

The existent life forms face a crisis. Can a unified subject center held together by the innovative bonding encompass destroying that bonding in another? Wouldn't the taking of another's life violate the quarks' sharing of energy; the trust inherent in electron exchange; the altruism of the long chain polymers — the very pathways of equality and giving that brought Life into being?

Three billion years ago, with no more free floating food, the living have few options. We may never know the part individuals played in contributing to the decision — one which required the preservation of those pathways on which Life depends. We do know the solution. Taking the lives of others in order to preserve one's own would, in turn, include becoming food — or perhaps, serving the larger network in some other equally valuable way. The pathway resonates, gains traction, cascades. Life turns to communion, enabling the living psychophysical unity of Earth to survive.

At the beginning, most cells probably maintained patterns similar to their original food gathering techniques. But gradually, the exchange of whole bodies of information brings unexpected adaptations. A sea of variation on the food/service theme follows — not only with the emergence of diverse forms more suitable to the new tasks; but also in the development unpredicted behaviors.

Exploitative cells appear, invading and living at the expense of others. A method that can work, but poses problems; if the parasites go too far in harming or consuming their hosts, the tactic proves fatal. Some parasites learn they can increase their chances for survival, even improve their lives, by serving their host cell. Symbiotic relationships proliferate.

One ingenious strain of bacteria turns to the sun. Using light for energy, they find they can obtain hydrogen by breaking down water. They also learn how to extract carbon from the carbon dioxide which was abundant in the atmosphere at the time. Photosynthesizers of all sorts evolve and flourish. Some cells acquire the skill of packaging and storing energy in molecules called ATP. Once these new ways take hold, heat loving cyanobacteria bloom. New skills materialize and are

reproduced. One group learns to swim. Red, blue, green, purple, orange microbial life forms soon blanket the planet.

But too soon this bloom of cells has taken so much carbon from the carbon dioxide and released so much oxygen (the residue of the process) that they've changed the dynamic between the atmosphere and the ocean, reducing global temperatures. Additionally, ozone (a by-product of the oxygen) has so accumulated in the upper atmosphere that it's added a new layer all around the planet. A shield that's beginning to protect the ever more delicate gene sequencing from damage by solar radiation. Both beneficial developments. But the bacteria depend on the carbon dioxide. And oxygen is toxic to them. Around 2.5 billion years ago, Life again faces a global crisis.

The very life processes supporting the matured bacterial cells are now destroying them. Where yellow, red, blue, black, green, orange celebrations once stretched across seas and crawled up mountainsides — death now spreads. Entire genealogical families are being wiped out. Either the bacteria create a bifurcation, open a path to a new way of being; or they and the wonder that took over billions of years to evolve will fall back into chaos.

Among the life forms that existed at the time, one group of bacteria had developed the rather peculiar behavior of playing with the toxic oxygen molecules. After hundreds of millions of years of this dangerous activity, the cells of this species were no longer poisoned by the oxygen; but rather had learned to use it. The larger living network had tolerated these Purple Oxygen Breathers, but no doubt at the periphery. Now the strange creatures hold the answer.

It was the mobility of another species that would bring the solution forward. Millions of years earlier, an ancient family of Thermoplasts (heat lovers) had merged with Spirochetes (eel-tailed swimmers) in a process of consuming without digesting the other. The result was a heat loving mobile bacteria with an innovative reproductive process — passing on genetic information through daughter cells that split into new cells carrying the entire sets of genes.

When the two families first encounter each other, it's likely they saw one another as a potential food source. Both groups were under the pressure of dwindling resources. It's also possible that they may have recognized that each had something to offer the other. The one could use oxygen instead of being poisoned by it; the other had mobility and an intriguing reproductive system. It may also have quickly become apparent that eating the other did not transfer the survival strategies each had developed.

However the Purple Oxygen Breathers and the Mobile Heat Lovers negotiate crossing the threshold, they emerge with a solution to the crises by coming together to form an entirely new creature. And the novel being does much more than combine the abilities of the two species. Beyond all patterns Earth had ever seen before, the innovative cell has a nucleus. Intelligence, instead of being chaotically dispersed throughout the cell, is now organized and coordinated. The nucleus

serves the cell at large by processing and responding to information coming from all parts and locations. At the same time, with a double-wall membrane, it's able to better protect the precious DNA — the patterns for the protein structures that give the cell its form and function.

The shift from the non-nucleated or "prokaryotic" cell to the nucleated or "eukaryotic" cell represents another great phase transition. And again, it runs counter to the master narrative. Two independent species sacrifice their former identities in order to come together in the form of a new unity. And one that, ironically, will allow for a future in which unique species of cells will be able to retain their individual identities while becoming integral parts of larger multi-celled beings; and from them, complex multi-organed life forms, such as ourselves. The episode begins a whole new chapter of Life on Earth. Inconceivable before it happened; and in complete defiance of expectation.

Exponentially better-suited for adapting to changing needs, the eukaryotes rapidly evolve. Within about a billion years, more elaborate and sophisticated nucleated cells are appearing everywhere. Unexpected inventive shapes. Innovative reproductive methods. Intelligence and information improvements.

As flotillas of these independent, super-minded cells begin meeting up, they bring together a diversity of unique forms and skills. A long quiet period follows. Perhaps it's the time the cells needed to work out the details of how they might live together — share and distribute food, carry out necessary labors, how to reproduce, and so forth. After the pause, communities consisting of multiple kinds of cells have appeared. For almost a billion and a half years, these loosely knit colonies flourish; until an ice age envelops the planet.

Earth will endure four more such ice ages. Each time waking from the long winters with greater wonder. If for a moment we would allow our alternative narrative to postulate, perhaps the role of the humans might some day be to care for Earth as her gardener. Even help regulate her temperature. But back to the story.

With warming temperatures, Earth recovers from the snowball conditions. Thick layers of cells are now metamorphosing into tissue. Segments of tissue are recasting themselves to meet other needs. Cell groups performing specialized tasks are acting as primitive organs of singular creatures. Colonies are transforming into organisms. When a group learns to make use of calcium, shells and skeletal structures appear. As these activities spread, ever more complex bodies emerge.

On the way to these developments, Life overcame a significant obstacle. Cells that formed the original alliances were potentially immortal. They could die; but only accidentally — by being dashed on rocks, poisoned, starved for food, dried up, consumed by someone or the like. But in themselves, as off-spring of the prokaryotes, they live forever. As the first cell groupings were meeting up, they were all but locked into their existent states. To get beyond the impasse, our ancestors programmed aging and death into their DNA.

What stronger evidence against the ego narrative than an adaptation that can only benefit future generations?

Around 540 million years ago, Earth bursts open with Life. Some paleontologists call the period the "Cambrian Explosion." Trilobites swim about on the ocean floor. Boned and sharp-teethed sea creatures elaborate on patterns of eating and being food for one another. Everywhere hearts beat. Algae and insects leave the sea and begin living on the land.

Toward the end of this miraculous period, a mass extinction occurs — one of four major setbacks for Earth. While scientists do not know the exact reasons for these catastrophic events, they suggest possibilities such as climate change, abrupt habitat destruction, meteorite collision. Associated with the third mass extinction, some 245 million years ago, Earth's previously unified landmass, "Pangaea," breaks into continents. The fourth such event wiped out the dinosaurs along with 85% of all other living species. In each instance, it takes Earth at least 25 million years to recover.

By 400 million years ago, marine life populates the seas. The first forests cover the land. Ferns grow beneath the trees. Plants with seeds have appeared. Insects and spiders crawl about.

Around 360 million years ago, using fins for limbs, the tetrapods crawled from the sea. For 100 million years these vertebrate amphibians linger on the shoreline, slowly metamorphosing with the world they've entered. Salamanders, frogs, turtles, crocodiles, lizards, dinosaurs and mammals will all evolve from the tetrapods.

During the Jurassic Period, 208 million to 146 millions years ago, huge plant-eating dinosaurs roam the land. Carnivores feed on the herbivores. Later, birds appear. The land hosts flowering plants. Mammals continue to diversify.

Crocodiles, turtles, lizards, birds and several mammals number among the species that survive the dinosaur extinction. From the mammals, two groups emerge. Marsupials, who give birth to offspring with a short gestation period, their young living in pouches. Placental mammals, who give birth to young after a long gestation period, their babies fully developed. This latter method proves so successful that within 25 million years, Earth abounds with animals that run, leap, walk, trot, jump, glide, soar, burrow, creep, climb, crawl, graze, grasp… A continuum of individuation with ever deepening brain power.

Around 8 million years ago, ape-like animals appear. Approximately 5 million years after that, some of them free their hands by standing up on their hind legs and develop a distinctively brainy relationship with one another. Our sign systems enable whole new levels of communication — ultimately leading to civilizations, refined art forms, institutions, learning, science, medicine, technology.

In a short 100,000 years, we've completely transformed the appearance of our planet. City lights turn night into day. Satellite systems weave the continents together. Pipelines, cables, power towers, expressways and autobahns crisscross the lands. Skyscrapers and high rise dwellings reach upward. At the same time, we've brought ourselves to this crisis point.

We've been using the term phase transition to describe the profound changes that have occurred in the story of Earth. Starting with the beginning of the Universe, through the entry into the biosphere, to the emergence of the eukaryotes. When we take into consideration, the pathway's end at which we've arrived; and the kinds of changes it's going to take to get to where we'd like to be, there is perhaps no better description than that of a phase transition.

Chapter Six
Alternative Narratives in the Arts

Prelude

We're each in our own way artists. Born with a love of beauty. A desire to create. We're drawn to moments that offer a glimpse of what makes us who we are. An astonishing sunset, a starry night, a perfect flower... art taps into something deeper about us. A place that feels outside time and space. Where the master narrative doesn't go.

For artists, going to that place is their life, their work. Yet, so fragile, so precious the gift to get there, even to talk about it can impede. In a world where microtheatrical power chains us, many artists develop a reflex of side-stepping any words one might use to describe them or their work. None of us like being labeled, told what to do, or how to do it. Least of all artists, for whom listening to such talk could mean interference in the mysterious and elusive process of creation.

Spanning from the earliest human societies to the post-modern present, the sheer volume of artistic production sets limits on what one chapter can do. Experts have dedicated their entire lives to subdivisions within art history, music history and literature. Merely to sketch an outline requires so great a reduction of the materials that we greatly oversimplify and leave out important names and work. We can only mention a few, as we trace the development of alternative narrative in this important dimension of human life.

Art Connects

The arts, with creativity and innovation at their core, have developed a multiplicity of ways to counter the master narrative. Artists may twist a sign system's rules, making sense only if the separation narrative doesn't. Or open cracks in the sign system that allow us to see more than the ego narrative admits. Or make us aware of the sign system itself, as when painters call attention to paint and the act of painting rather than the subject matter. Or create out-of-sign-system experiences by setting up narrative or melodic expectations and then thwarting them. Artists can undermine the mistaken foundations of the master narrative by challenging our sense of perception, so that we ask, *"What am I really seeing? What am I hearing?"* Even supremely skillful application of the sign system rules can bring moments of deliverance through sheer beauty. Art engages another way of relating with one another and our world. Finds ways to connect Consciousness with the Referent.

Artists have proven able to break through the most formidable array of cultural, social, economic and political obstacles. This has sometimes meant courageous and direct confrontation — stubborn integrity in the face of beatings, jailings, exile, death threats. However, art can also subvert

the sign system, break free of the microtheatres, counter the master narrative, create alternative narrative without anyone, including the artist, becoming aware of that challenge to the status quo.

We hardly need to search the archives of poetry, classical music, popular song, dance, theatre and film to know that Love outnumbers other artistic themes. Love longed for, dreamed of — a love greater than the ego narrative permits. Whether explicitly talked about or not, love nourishes the dedication and sacrifice required to be an artist. Art actively engages the I-You. Attending a concert, going to a museum, or reading poetry does more than stretch our world by changing our habitual frame of reference. It brings us into relationship with the artist and all who share the moment. Performance art can leave both audience and artists stunned, moved to tears, shouts and wild applause. Art calls to the You. To our interior.

In ballet, opera, orchestral performance and theatre, artists strive for a perfection the master narrative would have us believe unattainable. Musicians press the edge of harmonic possibility. Dancers defy the laws of gravity. Actors transport us to other worlds. Feats so challenging that they require a concentration that momentarily eludes master narrative chains. The multi-layered cooperation necessitated by such creations suggest that we are at least as hard-wired to work together as separately.

Notions of who an artist is can also work against the master narrative. In a Medieval world that placed little value on individuality, artists belonged to the social category of workers, artisans whose work remains anonymous. Today, we make some artists celebrities, even superstars. And we see artists' work as qualitatively different from the tasks we perform in factories, offices, restaurants and such. We take for granted that the artist must be free. And artists do rely on free thinking, experimentation. As they venture beyond established borders, they move into a position to say what's not been said before.

While we highly value originality and see individuality as central to an artist's creativity, art takes root and comes to fruition in Relationship. And not just because the meaning of an artist's work depends upon others and changes with different audiences at different times. Artistic genius derives from inspiration — a calling from the center of one's being. Which many artists do not locate in a separated self, since they cannot bring themselves to take full credit. Carl Jung theorized that all of humankind participates in a collective unconscious. Artists delving into this shared underground river may surface with connections to the Referent that they themselves do not fully recognize. A timeless and shared psyche might help explain why art holds so much potential for moving us away from the master narrative of separation.

Historical Perspective

Art comes entwined with a context of geography, culture and politics. Artists work and live during specific historical periods, marked by events, characterized by particular mentalities and an

imaginary — making it virtually impossible to understand how art acts as an alternative narrative without including a minimum of that history.

We will limit our outline here to artistic developments in the culture that originated in Europe, spread to the Americas and has come to dominate the world. To be sure, the art of other civilizations has offered a wealth of counter narrative. The artistry of Native American and African peoples, for example, bespeaks a deep I-You relationship with Nature. And people cast as Other by the Western world have always enriched the dominant culture with their art.

It's in "Western Civilization," however, that the master narrative informed by the coercive power of the ego idea has attained its most overwhelming force and influence. The point from which we must bridge. For similar reasons, we will focus more on art supported by the empowered classes. It was not until the 20th century that this so-called "high culture" truly opened itself to the counter narrative energy coming from popular culture and colonized people. Yet, throughout the history we track here, artists have created work that formidably challenges the master narrative.

Early Art

The story of the dialectic between art and the master narrative fades into pre-history. Art we know only as archeological evidence suggests that a goddess religion and societies ruled by women may have preceded the patriarchy of Western civilization. We know more about the context of Mesopotamian and Egyptian art. A master narrative of a separate self is evident in the slavery, social hierarchy and militarism that characterized both civilizations. Yet, even in art serving to chronicle wars and celebrate power, we see the counter force of beauty — exquisitely skilled and careful work tapping a deeper human capacity shine through in sculptures, mosaics, writing and painting. The structure and orientation of the pyramids signaling connection with the larger Universe. Depictions of the heavens suggesting engagement with the stars, a sense of sacred origin and purpose.

Jumping to Ancient Greece and Rome, we again see military conquest, slavery and class hierarchy. The Greeks take the power of sign systems and the master narrative to a new level. Their refinements of language, geometry, mathematics and physics bring new knowledge to the making of art. Literature sets down enduring human themes. The hero who grapples with moral dilemma, perseveres through ordeals. Sculptors' graceful flowing lines evoke Nature's wonders, even as they abstract idealized beauty from Referential irregularities.

The conquering Romans borrow much from Greek culture and society, adding innovations in architecture and other areas. Beautifying their private villas and pubic buildings with distinctive mosaics. Even with a more powerful master narrative, beauty and supremely concentrated work carry another message. Counter narrative peeks through more directly, too. An annual Saturnalian festival

affords a brief performance moment when hierarchies are inverted, slaves freed, everything turned upside down. Cicero writes against the corruption that makes it easy for warrior tribes to overrun Rome.

The Middle Ages

In the centuries following the fall of Rome, violence reigns. Warlords sack one another's holdings — enslaving, raping, murdering. Monasteries and convents become a refuge for people, for piety, for art. And for literacy as well, at a time when even those at the top of the social hierarchy can't read. Eventually, men who command the largest forces in feudal alliances become kings and nobles.

Meanwhile, the religion that grew from Christ's message, *"love one another... feed the hungry... shelter the homeless... turn the other cheek,"* has been turned into an institution with its own rigid hierarchy and strong links with secular powers. Social inequality receives theological justification as divinely ordained.

Art takes on importance as a display of wealth in the status competition among lords and high ranked clergy. Precious metals and gemstones are worked into jewelry, chalices, swords, armor, and such. Religion the subject matter of mosaics, statuary and manuscript paintings. Biblical scenes with iconic faces convey spiritual universality. Architects take the not-of-this-world message to new heights. Slender pillars supporting vaulted ceilings attract the eye upward and permit stained glass windows to replace stone walls. Gothic cathedrals exemplify transcendence, yet their sculptural adornment includes real individualized faces looking out at us — sometimes with irreverent expressions. Images of animals and plants also find their way into artworks.

Although Church doctrine devalues Nature, *The Canticle of the Sun*, a 13th century prayer attributed to Francis of Assisi, sings the wonder of a Nature reconnected with God. Overall however, in a period when communities of heretics are massacred by papal armies and individuals burned at the stake, beauty and feats of artisanship alone carry the counter narrative. In the early 14th century, Dante's *Divine Comedy* sums up the theology and cosmology of the Medieval world. More importantly, its beautiful poetry, written in vernacular Italian rather than Church Latin, expresses one human being's love for another

By now, the growth of cities and increased trade are beginning to effect a transition from the feudal system to a money economy — with a nascent middle class. But in the mid-14th century, a plague wipes out as much as 50% of the European population, perhaps as many as 38 million people. The Medieval world comes crashing down in pestilence, famine, war and a crisis of authority in the Church.

Renaissance Means Rebirth

Europe comes alive again in the 15th century as population and the economy recover. Mediterranean ports of Italy and the fast sailing ships of Flanders contribute to a slight expansion of the wealthy classes. People who can read pursue intellectual activities and pleasures including enjoyment of the arts. More urban than the rest of Europe, Italy, with its historical and archeological links to ancient Rome and Greece, opens the Renaissance period.

A new "Humanism," largely inspired by the 14th century Italian poet Petrarch, reaffirms human dignity and reconnects with the culture of classical antiquity. The enthusiasm spurs searches of monastic libraries for lost Roman texts and Greek philosophical fragments preserved and commented on by Arab scholars. Painters depict scenes from classical mythology.

Renaissance artists turn to Nature with renewed interest in what real trees, real flowers, real people's faces look like. In the Netherlands, Jan Van Eyck reproduces the smallest details in his paintings. In Italy, painters use mathematical formulae to perfect their representation of natural phenomena. Leonardo da Vinci investigates mechanics, optics, the behavior of light and the movement of water. He gives his *Mona Lisa* a face that seems to move. Her smile will have people talking for centuries. Michelangelo celebrates the beauty of the human body. His eighteen-foot marble sculpture of *David* stands emblematic of the re-awakening. Commissioned by the pope to paint the ceiling of the Sistine Chapel, he creates a monument to human capability. Some twenty years later when he returns to the chapel and paints *The Last Judgment,* the extravagance and corruption of the Renaissance papacy is provoking a reaction that will change the Western world.

Reformation

The cultural milieu in which European artists work changes dramatically after the publication of Martin Luther's *95 Theses* in 1517. Many followers of the new Protestantism reject even destroy religious art, diminish decoration in every aspect of their lives. Europe moves from a single, highly controlled version of Christianity to multiple interpretations, opening previously unthinkable possibilities of cultural pluralism. The shift brings more than a century of massacres, heretic and witch burnings, wars of religion.

Western Civilization seems completely submerged in a master narrative that demonizes the Other. While Europeans kill each other over differing religious views, voyages of discovery will carry enslavement, genocide and pillage to distant shores. Art, however, proves capable of countering. In Thomas More's *Utopia*, a fictive explorer reports finding a happy and prosperous people who share everything they have. They elect a governing council that provides health care, education, sanitation and a degree of religious freedom — all of which is unheard of and sounds impossible at the time.

In the 16th century, the literary arts flourish. In Spain, Cervantes' novel, *Don Quixote,* makes fun of the old order of European society, while inviting the reader to love the crazy, ridiculous dreamer. In England, William Shakespeare uses language itself to lift us over sign-system walls and undermine the master narrative, as he celebrates Nature, love, integrity — and condemns greed, duplicity and ruthless ambition.

As the century turns, more people can read, thanks in part to Protestantism's encouragement of Bible study. The printing press has made books less expensive and more available. Peddlers carry books into the countryside, where communities gather around a single hearth to hear someone read.

Among the most educated, international dialogue leads to what has been called the Scientific Revolution. In Poland, Copernicus formulates his theory that the earth moves around the sun — directly conflicting with tradition and the Church. In Italy, Galileo with his telescope, publishes observations that support heliocentricity. Although the Inquisition can still force him to recant, a profound change has occurred. Narrative about the Universe has become open to inquiry, less controlled by a single institution. Francis Bacon expounds the scientific method. Descartes argues against believing anything before subjecting it to rigorous methodical examination. Newton introduces a mathematical system to describe the laws of gravity and motions of the planets. Challenging the master narrative's idea that there is only one story.

As 17th-century monarchs consolidate their power, artists make a living by entertaining and glorifying. Architects and artisans build and furnish palaces. Painters and sculptors decorate. Musicians, dancers and artists create elaborate courtly spectacles. Some artists manage to insert counter narrative. Molière writes comedies to amuse Louis XIV and his court, but makes the point that young people should be permitted to marry for love. Bolder criticism appears in the highly popular German novel by Von Grimmelshausen, *The Adventures of Simplicius Simplicissimus,* where the narrator's comically exaggerated naïveté covers a scathing critique of the Thirty Year's War. In the Netherlands, where it's no longer kings but wealth that rules, Rembrandt shows us faces of greed and corruption, as well as those that radiate goodness from the human heart.

Enlightenment

As the 18th century begins, better instruments, orchestras and choruses help music ascend to new heights. In the work of Bach and Handel, composition reaches a peak of elaborate complexity. Following sign system rules and serving the monarchical élan of its time, this art works against the master narrative by touching us with a sense of awe. Antonio Vivaldi connects with Nature's sounds in works such as his *Four Seasons.* Later, Mozart pares away decoration and expresses feelings with mathematical perfection. One of his operas, based on the play, *The Marriage of Figaro*, questions the social order by depicting a servant with greater personal merit than his master.

By mid-century, the literary arts have entered into an openly conflictual relationship with the coercive power of the day. Writers such as Voltaire and Diderot spend time in jail for their words. Their books become all the more popular for being banned. Calling — often in humorous ways — for reason, education, tolerance and more humane values, Enlightenment literature sweeps Europe and ultimately the world. Refuting narratives of a fallen and corrupt human nature, the Enlightenment asserts that human beings have a natural goodness, an innate sense of justice.

Montesquieu imagines two Persians traveling through Europe, commenting on what they find. In an emblematic moment, one worries that humanity might invent something more lethal than gunpowder; the other responds that unanimous consent would immediately prohibit such weaponry. Voltaire uses the power of laughter to attack the madness of war, slavery, colonial exploitation and religious intolerance. Rousseau invites the reader to consider how many horrors would have been avoided if people would have responded to the very first attempt to fence land as private property by tearing up the stake and insisting, "The fruits of the earth belong to everyone and the earth itself to no one." In Germany, Emmanuel Kant writes, "What is Enlightenment?" His answer, "Dare to know... have the courage to use your own understanding." In England, Mary Wollstonecraft uses Enlightenment reasoning to make the case for women's education and equal rights.

By century's end, as the new ideas contribute to the outbreak of revolutions, the monarchs and aristocrats who had enthusiastically embraced the Enlightenment change their tune. In the "New World," the British colonies declare themselves independent, with the assertion that "all men are created equal," and have "inalienable rights," such as "liberty and the pursuit of happiness." The writers of the new nation's Constitution draw upon Montesquieu's ideas for ensuring the future of democratic government. They make an inspiring example for the Old World, although they disregard the humanity of Native Americans, retain slavery and establish voting rights for property-owning white males only.

In France, during the Revolution of 1789, the king refuses to cooperate in creating a constitutional monarchy, provoking the overthrow of monarchy and his own execution. As the monarchs and aristocrats of Europe gather military forces against the new republic, moderation gives way to riot-driven popular democracy and the "Terror." Artists such as Jacques-Louis David heroicize revolutionary moments. Neo-classical motifs connect with Athenian and Roman roots of democracy.

The General Napoleon starts out saving the Revolution from its exterior enemies and extends French control across Europe. He raises hopes, especially among young Europeans, that he will liberate their countries. But bitterly disappoints with dictatorship and overblown imperial ambitions. Goya paints mass firing-squad executions and such, documents his attempt to conquer Spain. Napoleon prolongs — and loses — the war to defend the Revolution. Nonetheless, his rise

from the lowest ranks of the aristocracy to a world-transforming role takes on an archetypal significance in Western culture, representing the importance one individual can have in history.

Romanticism

The fall of Napoleon highlights a growing movement in reaction against the Enlightenment. Romanticism asserts the importance of a kind of knowledge that rises from feelings. "I am certain of nothing," says John Keats, "except the holiness of the heart's affections and the truth of the imagination."

Emerson, Hopkins, Emily Dickenson and others emphasize our inseparability from the whole of Living Nature. Women writers — some hiding behind male-identified pen-names — offer an alternative point of view. Jane Austen, George Sand, George Eliot, Charlotte and Emily Brontë provide narratives of humanity and human metamorphosis. Love is paramount. Whether written by women or men such as Herman Melville, Victor Hugo and Alexander Dumas, stories spun by Romanticism celebrate poetic justice.

Beethoven bridges from Mozart's perfected classism to the emotional power of Romanticism. Chopin brings listeners to tears. Tchaikovsky and Verdi combine evocative music with storyline. A love story. In operas and ballets, performing artists take human capability to astonishing heights as they develop their technical repertoire. In painting, Joseph Turner foregrounds the background — skies, mists, seas, landscapes. His moody canvases draw our attention to the features we're missing in our ordinary ways of seeing things. Edward Hicks counters the master narrative by painting more than a hundred versions of the *Peaceable Kingdom,* where the lion lays down with the lamb.

The era's tumultuous political history, of course affects Romanticism. Many of these artists are anti-Revolution as well as anti-rationalism. Romanticization of the Medieval period proves useful to conservatives calling for a return to unquestioned authority in religion, politics, society and the family. Yet this movement of the heart conflicts with the old order too, beginning with its opposition to arranged marriages. Some translate the Revolution's liberty into a demand for unlimited artistic freedom. The Napoleonic legend feeds notions of artistic genius at odds with the world. Many young people feel dissatisfied with easy comforts in a life without greatness. Some dedicate themselves to the grand project of changing the social and political order.

Individuals and groups develop plans for creating a humane and intelligently organized society that will bring happiness to everyone. Privileged themselves, these early socialists believe that better-off people can and will choose to redistribute their wealth. They form experimental communities throughout Europe and the United States. Karl Marx scornfully dubs them "utopians,"

for thinking that anything but force can stop the upper classes from taking more than their share. His *Communist Manifesto* calls on workers everywhere to unite and throw off their chains.

In 1848, pro-democratic revolutions erupt in France, Germany, Austria and Italy — none of them successful. In response, a reinvigorated authoritarian rule will now make outright dissent far more difficult for decades in most European countries.

The tremendous failure of 1848 pushes artists in various directions. After siding with the revolutionaries, poet Charles Baudelaire now asserts that art should serve no cause or purpose whatsoever. Yet his *Flowers of Evil* flies in the face of the master narrative's hypocritical morality and shocks readers with its unconventional sexuality. Other writers and painters turn toward a more realistic portrayal of the problems they see around them.

The Industrial Revolution, begun in 18th century England, is by now transforming life in continental Europe and America. While new technologies — such as the steam engine, precision machinery, superior methods of mining and smelting — hold the promise of improving daily life, its immediate effect reduces many to misery. People move from countryside to city as factory production replaces rural cottage industry. Underpaid laborers, with no regulations yet protecting them, struggle to survive in horrendous living conditions.

Charles Dickens, Emile Zola and others carefully detail the suffering of the poor and working classes. Gustave Courbet shocks the art establishment by painting scenes from peasant life and depicting the ugliness of impoverishment. Courbet, a socialist, will be jailed and exiled for his convictions. Marx makes no exception for such artists, however; he insists that culture only serves and perpetuates the socio-economic system. Art will disprove so narrow an assessment.

Modern Art

In 1860s Paris, a group of young artists including Monet, Renoir, Pissarro and Degas take painting in a new direction that will powerfully, if indirectly, challenge the master narrative. Struck by Manet's assertion that he sees no lines in nature and therefore uses color only to define images, the Impressionists rethink and strive to paint what they see. They often work outdoors rather than in studios, putting color on canvas quickly; because what they see is changing. Monet does multiple paintings of the same scene in order to capture the effects of weather and light. Trying to remain true to Nature and to paint just what they see, the Impressionists perforate realism's real.

On another level, they seem to address the viewer by embedding images and meanings in work that spills over with coincidence. 'What is that swirling in the smoke of Claude Monet's pipe?' 'Dancing in that curl of hair? 'In that person's eye?' A playful interactivity engages the You. The best known Impressionists do not take a stand on the misery of the lower classes, even the brutal crushing of the last Paris revolution, the socialist Commune. Nor do they adopt the Bohemian lifestyle that will soon become a stereotype.

Yet the Impressionists paint in ways that subvert. By trying to capture a moment in Nature, they grapple with the problematic relationship between sign system and Referent. Reminding us that ordinary perception does not deliver reality as simply as we assume. Their techniques invite the viewer to respond, not just to the content, but to the paint and the act of painting itself. And any increased awareness of sign systems weakens their power over our minds. Equally important, Impressionism opens the door to Modern Art by making it conceivable for later artists to go further in disrupting processes of representation — and the workings of the master narrative.

By the 1880s, Western civilization's view of itself clashes significantly with actual behavior. Most European countries have at least quasi-democratic political institutions. Life has improved slightly for the lower classes. Labor unions have begun winning reforms such as child-labor laws. To lessen the appeal of socialism, a few countries have even established rudimentary social welfare systems. The ruling classes see themselves as humane, enlightened, refined and civilized. Yet the contrast between middle-class and working-class living conditions remains stark. And the scramble to colonize the rest of the world has intensified, driven by competition for power; as well as the lure of gold, diamonds and other natural resources. Advanced military technology makes conquest easy. European heads of state meet in 1884 to carve up what King Leopold of Belgium calls, "that magnificent African cake." The United States ruthlessly seizes Native American lands in the push West. In the name of "civilization," men everywhere carry out acts of brutality and treachery.

Some artists directly oppose these crimes against people designated "Other." Joseph Conrad's novel, *Heart of Darkness,* exposes atrocities the author witnessed in Africa. Conrad, Mark Twain and Arthur Conan Doyle join the Congo Reform Association founded in 1904. Photographers record the historical moment. Its hideousness in images such as the well-known U.S. War Department photo of a slave's whipping scars. Criticized later for not showing the mistreatment of Native Americans, Edward Curtis chooses instead to emphasize their dignity and beauty.

Paul Gauguin's paintings of Polynesian Islanders, enhanced by his handling of color and perspective, communicate a similar message. The title of one of his most famous works interrogates the foundations of the master narrative: *"Where do we come from? What are we? Where are we going?"*

Before turning to painting, Vincent Van Gogh anguishes over the poverty he witnesses in London. Gives all he owns to the poor while working as a lay preacher among Belgian mineworkers. After losing that job, he paints like a madman — some 800 canvases in the ten years before his suicide. His work releases the writhing movement of the Referent that the sign system would tame and still.

Teenaged poet, Arthur Rimbaud, describes the poetic process as a "rational derangement." His genius goes deeper than free verse, sensing the expectations a word or phrase sets up, then

turning them into sign-system-shaking surprise. With outrageously non-conformist behavior, Rimbaud enacts the modern artist's absolute rebellion against the microtheatrical occupation of the mind that would interfere with the creative process itself.

As the 19th century comes to a close, many artists and intellectuals signal disenchantment with narratives of enlightened civilization. Nietzsche drops all pretense and frankly calls for "great" men to wield all the power they can get and cease weakening themselves with moral scruples. In contrast, playwright Alfred Jarry rips off the mask without embracing what lies underneath. His King Ubu personifies the exercise of power over others as abusive. Scatological, sexual and deliberately repugnant to middle-class sensibilities, the play stands in definitive opposition to the dominant culture.

The 20th century brings automobiles, electric lights, radio, telephone, new architectural materials, a quickened pace of life — at least to the cities. Modern art explodes in a variety of new approaches. Artists encourage each other as the art establishment at first rejects each innovation. Movements branch out.

Labeled "savage beasts" by art critics, Fauvism works with thick, wild brush strokes. Rouault deepens Fauve, while Matisse moves on. Picasso and Braque develop Cubism from Cezanne's subtle geometrics, illustrating how the sign system works at simplifying the world into straight lines and right angles. And how everything can be seen from multiple points of view. Duchamp's *Nude Descending a Staircase* takes on motion in time. Picasso, whose career will span seven decades and multiple movements, infuses his work with borrowings from African art. The uncategorizable Chagall brings us worlds where things are upside down, animals play musical instruments, the cellist is his cello.

Expressionists use paint to represent states of mind. Munch leads the way with his famous painting, *The Scream.* Kandinsky highlights the un-said with shifting shapes, geometric confetti and chaotic mixes of squiggles, lines, spirals. Moving completely away from representation, abstract art further distances itself from the sign system, drawing our attention to its problematic relationship with the Referent.

In 1909, Sergei Diaghilev's *Ballets Russes* opens in Paris and causes a sensation with stars Anna Pavlova and Vaslav Nijinsky. This new ballet company engages Picasso, Matisse, Braque, Rouault and others to create sets. They dance to music composed for their productions by Debussy, Ravel, Satie and Stravinsky. New tonalities, unexpected turns, dissonances and energies of modernity. Meanwhile, Isadora Duncan's "free dance" lays groundwork for modern dance.

Despite artistic subversion, the master narrative rules the moment. Driven by competition, the logic of military buildup and nationalism, the rulers of Europe declare war in 1914. Cheering crowds send off the troops as if to a sporting event. Expected to last just a few weeks, World War I

drags on four years, leaves some 10 million people dead. Millions more are maimed and sickened by the insanity of modern warfare: chemical weapons, machine guns, hellish trenches, and on and on. The treaty that ends the war perpetuates enmity with vengeful demands on the economy of Germany, where people are already starving to death.

In response to all this, some artists generate anti-war narratives. Novelist Erich Maria Remarque recounts the cruel absurdities suffered by ordinary soldiers in *All Quiet on the Western Front*. Painter Georges Rouault combines images of war with moments in the passion of Christ. The Dadaists, a group of artists from all over Europe, express absolute disgust with their culture and society. Announcing, "the great rebellion of artistic movements," in the *Berlin Manifesto* of 1918, Dadaism declares itself "against everything."

Other artists speak more by the form of their work than its content. Poets such as Apollinaire have their words running in circles, up and down hills, even the shape of the Eiffel Tower. James Joyce turns prose writing inside out with his stream of consciousness technique.

Surrealists delve beneath the surface and expose the violence upon which Western civilization's master narrative depends. Poets such as André Breton try to draw forth subconscious material by means of automatic writing. Painters depict ordinary reality's unreal as real and vice versa. In a painstakingly representational style, Magritte's painting *The Human Condition* subverts the sign system by having us looking out a window at a landscape, the view mostly blocked by a barely discernable canvas representing that same landscape. Jean Cocteau and Luis Bunuel make dreamlike, often nightmarish, films. The Surrealist movement aligns with the Left in the growing political crisis in Europe. The group expels perhaps the best known Surrealist painter, Salvador Dali, for supporting Fascism in the Spanish Civil War.

In the years between the world wars, totalitarianism threatens to extinguish democracy. In Russia, the communist revolution sets up a dictatorial hierarchy that uses brutal force against resistance to its ideal of sharing the national wealth. Men at the top indulge in sumptuous feasting — while millions die in Stalin's famines. In Italy, Mussolini plays on middle- and upper-class fears of communism, using electoral politics, violent thugs and dirty tricks to establish himself dictator. Hitler follows suit in 1930s Germany. General Francisco Franco turns his army against the left-leaning democratically elected government of Spain, and with help from Hitler and Mussolini, wins the Civil War.

Even in established democracies, totalitarian ideology thrives. Hundreds of thousands join fascist and other right-wing groups in France. But their violent riot in 1934, seen as an attempt to seize power, prompts the majority to unite and elect socialists in 1936. In the United States, powerful individuals including American ambassador to England, Joseph Kennedy, give verbal and material support to the extreme right in Europe and at home. Hitler decorates Henry Ford and IBM director

Tom Watson for befriending the Nazi regime. Corporations including General Motors and Texaco supply military vehicles and fuel to Hitler, Mussolini and Franco.

Some artists take a powerful stand against fascism. Ernest Hemmingway joins other artists fighting for the republic in the Spanish Civil War — and memorializes that experience in his novel, *For Whom the Bell Tolls.* After the Nazi bombing of the city of Guernica, Pablo Picasso turns his genius to portraying the horrific effects. Jacques Lipschitz sculpts his feelings about fascism into the 46-foot *Prometheus Strangling the Vulture* for the Paris World Fair of 1937.

People colonized and exploited by the dominant culture increasingly add their knowing to the oppositional energy. Mexican painter Diego Rivera develops a distinctive style that powers his portrayal of peasants, workers. Frida Kahlo paints elements of Mexican folk culture into disturbing expressions of a multiple Otherness. Harlem Renaissance writers including poet Claude McKay and Langston Hughes bring African American self-affirmation and critique of dominant culture into the mix. The Négritude movement, founded by youthful poets Leopold Senghor of Senegal and Aimé Césaire of Martinique, works at decolonizing minds. A wave of enthusiasm for African, African-American and African-Brazilan expression sweeps the art world. While the Nazis attack jazz for its black roots, prelude to banning outright it in 1935, musicians such as Coleman Hawkins, Benny Carter and Josephine Baker have Paris watching, listening, dancing. And classical composers have been integrating elements of jazz into their music as well.

Modern Art challenges the power of sign systems and the master narrative as never before. Totalitarians seems to understand this. Hitler declares all such art "degenerate," and bans it. Stalin, too, will reject it.

The world goes to war again. Japan invades China in 1937, occupies Indochina and later attacks the United States. In Europe, Germany invades Poland in September, 1939. By the following July, the Nazis control Denmark, Norway and France. The master narrative's hatred of the Other permits the systematic murder of 6 million Jews. Concentration camps also swallow up millions of Gypsies, homosexuals, disabled people, Communists, dissenters, resistance fighters, clergy and intellectuals from the occupied countries. Some 4 million workers, enslaved within Germany, die of overwork and brutal treatment. The tide turns in 1943 when Russia wipes out Hitler's army in the Battle of Stalingrad. Dependent on Stalin's help, the Allies will have little choice but to let him occupy the Eastern European countries he takes from the Nazis. By the time the Second World War ends in 1945, as many as 60 million people have been killed — almost 20 million of them civilians. The race for weapons of mass destruction produces and the United States uses — the atom bomb.

In addition to grief, famine and ruins, postwar Europe confronts a profound moral dilemma. In Germany and Italy, majorities have supported Nazism and Fascism. In occupied countries, such as France, most people have collaborated. Very few risked their lives in guerilla warfare, or by writing

and publishing resistance literature. A few more have in some way acted or at least remained silent in efforts to protect Jews. Some have taken collaboration much further than the small compromises that seemed necessary to get on with their lives. Officials have energetically served the Nazis by suppressing resistance, rounding up Jews and deporting them. People have informed on their neighbors. Or stood by watching as they were taken away. After the war, a frenzy of unofficial reprisals brings killings, beatings and mob violence even to small villages. The Nuremberg trials clarify that "just following orders" does not excuse individual moral and legal responsibility.

In the art world, the moment belongs to those who have resisted. German playwright Bertolt Brecht has spent the war years in exile, attacking Nazism in plays such as *The Caucasian Chalk Circle.* Thomas Mann, whose earlier novels were targeted for Nazi book burnings, now uses the theme of *Doctor Faustus* to examine the mentality leading to Nazism. With *The Tin Drum,* Günter Grass will begin his series of novels exploring the question on everyone's mind: *"How did it happen?"* Italian writers, too, emerge from years in jail, exile or hiding. In fictionalized versions of their own experiences, Carlo Levi, Elio Vittorini and Natalia Ginzburg emphasize the harm Fascism did to those already suffering the cruelties of class hierarchy.

In France, a group of Existentialist writers focuses less on the poor than on the moral predicament of the middle class. Jean-Paul Sartre insists that we are fully responsible for our actions, "condemned to be free." We either respond authentically to our situation, or live in "bad faith" by choosing compromise and conformity. We create the "reality" we usually think of ourselves as facing. An artist as well as a philosopher, Sartre writes these understandings into literary works. In his Spanish Civil War short story, *The Wall*, a captured resistance fighter must choose between revealing his comrade's hiding place or facing the firing squad. He tries sending the police to what he's sure will be the wrong place — but where it turns out his friend had unexpectedly gone and gets caught.

Albert Camus rejects the label Existentialist, but writes in a similar vein. In short stories, novels and plays, he calls upon us to live our lives as if everything depends on our choices — and to choose rebellion against the absurdity of life in this world. "I rebel — therefore we exist." In the play, *State of Siege,* a character named The Plague and his Secretary systematically condemn people to death and intimidate a whole community — until a single individual breaks the spell by daring to defy them.

Asserting that one is not born, but becomes a woman, Simone de Beauvoir's book, *The Second Sex,* explores how society and culture have made woman the "Other." Later, De Beauvoir writes memoirs that recount her own struggles to define herself authentically in opposition to microtheatrical pressures of family and social circles. In 1945, however, she focuses on resistance to macrotheatrical power in the wartime novel, *The Blood of Others.*

Playwright Eugene Ionesco dis-integrates and mocks the sign system in *The Bald Soprano* and other plays. Ionesco's absurdist humor makes for highly effective commentary on recent history. In *Rhinoceros,* he depicts the rise of Fascism with the metaphor of one character after another choosing to turn into rhinos, while the bemused hero stubbornly refuses.

An immense artistic outpouring brilliantly explores such themes after the war. In 1956, filmmaker Alain Resnais brings together footage from the liberation of the death camps in his documentary, *Night and Fog.* The gas chambers. The heaps of corpses. The skeletal survivors looking searchingly into our eyes. A narrator asks, "Who is responsible?" And warns against attributing these horrors to some singular aberration rather than our everyday failure to see and hear those suffering around us. As the Cold War accelerates the race for ever more destructive nuclear weapons, Resnais releases, *Hiroshima, Mon Amour,* with a screen play by the brilliant novelist, Marguerite Duras. This history that cannot and must not be forgotten remains a source of powerful counter narratives in European art.

While Europe rebuilds and struggles to regain its moral footing, a different cultural climate predominates in the United States. Economically and politically strong, and inspired by the collective image of the war hero and wartime rhetoric about the American way, the United States easily steps into the role of super-power and main adversary to the Soviet Union in the Cold War. Laborers are earning better wages and enjoying leisure afforded by the forty-hour workweek that labor unions fought for earlier. Steady employment and pay increases bring more and more workers into the middle class.

In the 1950s, product availability and advertising tend to reinforce cultural conformity. Televisions soon have families enchanted by shows and commercials that model identity and behavior. Men shave their faces and keep their hair cut short, military style. Women strive to obey fashion dictates, including each year's prescribed length for skirts. The separate self/ego narrative, constantly prompting comparison and competition, drives the growth of consumerism. Advertising equates the purpose of human existence and the meaning of success with conspicuous consumption. Owning your own house, buying the new car, new appliances, the carat diamond, the latest fashions.

While parents who suffered through Depression and war savor the newfound comforts and stability, many young people vaguely feel that something is amiss. In 1955, teenagers flock to theaters to see James Dean in *Rebel Without a Cause*. The following year, *The Wild One* portrays motorcycle-riding, black-leather-jacketed young men troubling the quiet life of a small town. When a local girl asks the lead character played by Marlon Brando what he's rebelling against, he replies, "Whadya got?"

In fact, they've got a world with serious problems. In a large section of this great democracy, African Americans are denied the right to vote, enter libraries, sit where they wish on

buses, eat at restaurants and so forth. The threat of nuclear confrontation with the Soviet Union weighs on peoples' minds. School children practice "duck-and-cover" in case of an attack. Cold Warriors are trampling democratic ideals in the name of national security. Senator Joseph McCarthy's House Un-American Activities Committee effectively makes it a crime to join certain groups or espouse ideas associated with socialism or communism. Artists bear the brunt of this repression. Names including Aaron Copland, Leonard Bernstein, Charlie Chaplin and Langston Hughes appear on a "blacklist" that dissuades employers from hiring, drives people into exile, ruins lives and careers. Arthur Miller's play, *The Crucible,* uses the Salem witch trials as a metaphor for the anti-communist hysteria.

It is in this context that a journalist adds the Russian suffix "nik" onto the name "Beats" that Jack Kerouac had given in 1948 to a small group of non-conformists. "Beatniks" do take a critical stance toward the Cold War and the race to produce increasingly destructive nuclear weapons. They don't yet have an analysis of sign systems and the workings of microtheatrical power. But their countering of the master narrative runs deep as they work at breaking whatever chains of cultural oppression they can find.

Gathering in New York's Greenwich Village, on college campuses and in cities coast to coast, the Beat generation turns the insights of Existentialism into poetry, art and lifestyle. They defy the prescribed codes in every way they can imagine. Some men grow beards, women long hair. They might wear sandals. Or adopt the black turtleneck, sunglasses and beret that jazz musicians are wearing. In a society that permits segregation, the Beats gravitate toward African American culture. They steep themselves in the latest "bop" jazz, use its slang, and emulate the attitude known as "cool" — all rooted in black people's oppositional relationship with white culture. Beat artists plumb the depths of loneliness in a world made alien by the master narrative. Alan Ginsberg's long poem, *Howl*, reviles civilization as a devouring monster, celebrates homosexuality and refers to unmentionable body parts as holy. It becomes a cause célèbre when banned. Kerouac evokes freedom unheard-of in the land of the free in his 1952 classic, *On the Road.*

Alongside the Beats, painters such as Jackson Pollack and Marc Rothko bring abstract expressionism to its peak. Exposing the sign system's secret: no link to anything outside. Pollock creates windows of chaotic coincidence by dripping, splattering, pouring paint unto the canvas. In music, John Cage challenges assumptions with new rhythms, new motifs, new sounds. Modern dance thrives as Cage's partner Merce Cunningham, Katherine Dunham, Martha Graham, and Alvin Ailey found new companies.

The early 1950s hold the beginnings of a more widespread musical phenomenon as well. One that will prove truly earth shaking. With improved technology, radio stations operate with greater broadcasting power and reach ever larger audiences. Thanks to shows such as Dewey

Phillips' *Red Hot and Blue*, in Memphis; and Alan Freed's *Moondog Rock and Roll Party* in Cleveland; white teenagers encounter the electrified guitars and amplified sound of black blues and R&B. Teens everywhere fall in love with this music. When white singers begin covering black songs, rock and roll takes off. Bill Haley and the Comets make a hit with *Rock Around the Clock*. Black artists Chuck Berry, Little Richard and Fats Domino are selling records to white audiences. Elvis Presley goes over the top. His *Heartbreak Hotel, Hound Dog* and *Don't Be Cruel* sell an unprecedented ten million copies in a single year. Entrepreneurs catalyze the enthusiasm.

Soon rock and roll is blasting from juke boxes, record players and radios all across the country. Teenagers are swiveling their hips and watching American Bandstand. Walls begin to shake and rattle. Smokey Robinson and the Miracles; Gladys Knight and the Pips; Martha and the Vandellas; the Temptations; the Supremes and other Motown acts keep the soul floodgates open and the bodies moving. Since parents typically dislike the music, it feeds an emerging rebellious youth culture.

Rock and roll counters the master narrative in several ways. Later, rockers like Patti Smith, Annie Lennox and Chrissie Hynde will break through sign system walls with creative lyrics and amped up musical energy. Even in the 1950s, however, this music connects people with the Referent by engaging our physicality and sexuality, celebrating what mainstream culture has suppressed. Rock and roll also carries an oppositional dimension since it comes from those made "Other" by society. Although the Civil Rights movement has begun, 1950s pop lyrics do not typically speak of racial politics. Many black artists take pains to present themselves in ways pleasing to mainstream culture. Yet the music indirectly points to the problem of race in America — and to a broader recognition of wrongs.

Meanwhile, another strong thread of long-peripheralized pop culture has entered the music weave. The folk music revival arises in part from the journeying of John and Alan Lomax who recorded musicians such as Huddie "Leadbelly" Ledbetter, David "Honeyboy" Edwards, Texas Gladden and Woody Guthrie. In coffee houses and nightclubs of the 1950s and early '60s, performers such as Pete Seeger begin generating enthusiasm for traditional work songs, reels, ballads and blues that express the struggles and hopes of the lower classes — black and white. And newer songs such as Woody Guthrie's anthem for democracy, *This Land Is Your Land.*

By the early 1960s, more young people than ever are graduating from high school. Compared to their parents' generation, nearly three times as many — including some children of the working class — are going to college. Although owners of media corporations can control the news, personal experience and word of mouth are providing another take on current events. African Americans' confrontation with segregation. The war in Vietnam. Conformity in the land of the free.

Folk music attracts the college audience. Songs from the early days of union organizing. From the civil rights movement. The Kingston Trio; the Clancy Brothers; Ian & Sylvia; Peter, Paul and Mary and others tour campuses. Joan Baez wins hearts with her wondrous voice and appearance on stage in a simple shift, sometimes even bare feet. College students hold their own "hootenannies," where they sit in informal circles, sing and learn songs, accompanied by guitar or ukulele.

Bob Dylan takes a strong stance in early songs such as *Masters of War* and *Oxford Town.* He has a gift for picking up and re-processing bits of language "out there" in popular parlance. Putting into words what many are feeling. When called the "voice of a generation," he rejects the label. If he is leading anything, it is a post-existential shift of leadership from the hands of the few — into everyone's. Inventing himself as absolutely free, cool, rebellious, never categorizable. Dylan refuses to appear on the career-making Ed Sullivan show, parries with news reporters, insults people who are trying to honor him and infuriates folk music purists when he "goes electric." His act has profound effects on other musicians.

The music cascades as more songwriters and performers address real problems, real dreams. By the mid-1960s, an anti-conformist mood has grown strong enough to affect advertising. Change is in the air. Broadway star Barbra Streisand revolutionizes notions of beauty. She pronounces the You in her first top ten hit, *People*. DJs create programming that fosters the emerging consciousness.

When the Beatles come to the United States, parental objections to their "long" hair add to the appeal of their sound. *I Want to Hold your Hand* sells a million copies in ten days. A month later, an unprecedented 73 million people watch the fab four on the Ed Sullivan show. Two months after that, Beatle songs occupy all five of Billboard's top slots. With their hair, their clothes, their presence and their lyrics, they suggest new notions of masculinity. The unbridled passion of screaming female fans persuades other males to adopt the style. Young men everywhere begin growing their hair longer and wearing "mod" flowered shirts. By 1965, the Beatles are experimenting with musical forms and writing lyrics with greater depth and intellectual content. They, too, question the status quo in *Nowhere Man* and *Think For Yourself.*

The Rolling Stones display a more conventional masculinity than the Beatles, but give voice to the ambient alienation and raise the issue of what it is to "be a man," with *(I Can't Get No) Satisfaction.* Simon and Garfunkel's *I Am a Rock* reminds listeners that we are not islands; while *Sounds of Silence* tries to get at a truth beneath all the noise. In the hit theme song from the film *Alfie*, Dionne Warwick asks the question, "What's it all about?"

"Love, love, love..." answer the Beatles in the world's first satellite television transmission in 1967. By this time, millions of young people wearing long hair, beads and bell bottoms have turned off their TV sets and tuned into the music. Many come from relatively privileged backgrounds, but question the society that favors them. Some even ask, 'What is reality?' 'How do

we alter it?' They abandon mind-numbing alcohol for the "mind- expanding" drugs marijuana and LSD. This multifaceted movement protests the war in Vietnam, racism and later, environmental destruction. Artists talk back to the master narrative with lines such as Jefferson Airplane's, "When the truth is found to be lies." Opposition reaches deepest, however, in insisting on love. And not a naïve love unaware of the world's enmities, clarifies Marvin Gaye in *What's Goin' On?* "War is not the answer," he asserts, "for only love can conquer hate."

This counter culture strongly emphasizes a positive vision. Tries to rethink everything: identity, Nature, cosmology, religion, patriotism... Songs record specifics. "I used to be a woman you know," Neil Young dares to say. "We are stardust," sings Joni Mitchell, "billion-year-old carbon." Buffy Sainte-Marie declares that, "God is alive," and, "Magic is afoot." Laura Nyro asserts that "Love is surely Gospel." The Fifth Dimension has everyone singing the *Age of Aquarius,* "when harmony and understanding... sympathy and trust abound." Jimmy Hendricks carries America far out with his rendition of *The Star-Spangled Banner.* John Lennon suggests we Imagine a world of possibilities. People explore alternative spiritual and religious systems. Think about what they're doing with their lives. Assert that everyone should be artists, or at least live artistically. Try to actualize in communes and collectives the society they envision. Insist on sexual freedom.

In the 1960s and '70s, African Americans win the right to vote and legal protection of their civil rights. Women gain admission to previously closed occupational and political arenas. The Sixties open the door for individualism, pluralism, personal freedom and diversity — more than previously dreamed possible. Hairstyles, clothes, body-art, whole lifestyles unthinkable in the fifties normalize by the end of the century.

Not surprisingly, such transformative activity provokes a tremendous backlash. Many people have had enough tumult: assassinations, riots, demonstrations. Some see no need for change, fear moving too fast or have greater faith in traditional solutions. While laws have moved toward inclusion of minorities and women, individual minds have held fast to old attitudes. Manipulated by politicians, the resentment fuels a swing to the right. By the 1980s, people who'd been on the verge of stepping into the new, have been swayed by rhetoric defending the war in Vietnam, opposing affirmative action and celebrating everything the Sixties rejected: greed, violence, racism and the exaggerated display of wealth. Anything "Hippie" goes decidedly out of fashion.

Never really unified in the first place, the Sixties youth movement disintegrates for a multiplicity of reasons. Many object to the very idea of analyzing problems and solutions. Analyses that do emerge do not go deep enough to eradicate modalities of the master narrative such as racism and sexism. Although Post-modernists such as Foucault and Derrida have begun writing in the 1960s, the tools they provide do not become widely available until later. Without consciously

understanding the power of sign systems, microtheatres and narratives, people unknowingly reproduce the patterns of oppression they are trying to eliminate.

Nonetheless, artists continue to undermine the master narrative. A feminist women's music genre emerges with a less exploitative perspective, wins hearts and endures into the 21st century. Desire and hope for Peace, Love, Freedom and Happiness remains strong. In an unprecedented global performance moment, the world welcomes the millennium with the sounds of Bob Marley's, *One Love.*

The decades surrounding the millennium dramatically accelerate the pace of cultural innovation. Computer technology revolutionizes the production, distribution and consumption of all forms of art, particularly music and literature. Voices of the colonized come to the fore. Woman assumes the role of subject center. Everyone is "hip." Artists might take any movement of the past as their starting point. Or try to invent something entirely new. Post-modernism broadens the definition of art to include virtually all human activity. In a museum of contemporary art, you might come upon a wall of shelves filled with kitchen utensils, books, souvenirs, rocks, CDs, etc. Or a huge stack of 17 by 22 inch paper with a black border printed on each sheet. And next to the pallet, a sign inviting you to take one home.

Art history maps a journey of the human mind. Art engages, enhances, sometimes changes our storytelling. Given that all narratives are constructed of signs, none inherently rises above others. It's up to us to judge their merit on the basis of where they come from / where they take us. If we continue down the path we are presently traveling, we seal our fate. Earth cannot long sustain a species producing the havoc that our present master narrative tells us is "natural." The arts have always offered us alternatives. Narrative threads of beauty, freedom, Love. Proof that we can overleap the sign system and get in touch with the Referent. Hope that we can free ourselves from the grip of a destructive master narrative. And create the loving world we all desire. The Post-modern art scene is happening at the crossroads, where each of us enters into the artistry that creates the future of the Earth.

Chapter Seven:

Alternative Narrative in the Stars

Problematic Tradition

Given the history and subject matter of astrology, it would be surprising if the system did not come riddled with problems. Any branch of knowledge that has a place for feeling and intuition is likely to include elements of the unreasonable. The more so an undisciplined, non-institutionalized body of knowledge, peripheralized by science, passed down from generation to generation, and susceptible to the pressures of modern consumerism.

So much conflict and dispute surrounds astrology that it's a wonder it receives scholarly consideration at all. Not surprisingly, controversy surrounds the sociological and psychological studies that have been done. Overall, science and the academic world generally dismiss astrology for assigning meaning to physical phenomena. While organized religion rejects astrology for working with metaphysical meaning in a way that does not necessitate the existence of God. Astrologers themselves do not agree on the most basic factors.

Compounding these problems, we know the mind can play tricks on us: seeing what we wish to believe, reconstructing what we thought we saw. We know, too, that astrology can be used as an excuse for abdicating personal responsibility. And probably most important, we fear for our treasured freedom when we hear any talk about personality and behavior connect somehow with birth.

Despite these objections, many people, relying for the most part on their personal experience, conclude, "there's something to it." Perhaps we could agree on this much: if we could formulate a version of this theory that describes individual personality with at least some degree of accuracy, while respecting our personal freedom — the stars would represent an alternative narrative of considerable significance. For they offer an individuated identity, yet composed of elements shared in common with one another. A narrative that implies a personal relationship with Earth, an intimate connection with the Universe. To uncover this narrative, however, requires that we disentangle core value from centuries of misrepresentation, distortion and contradiction.

People and civilizations of the past organized and named the stars differently, even when recognizing the same clusters. Studies suggest that our present constellations probably originated in prehistoric Mesopotamia — modern-day Iraq and Syria. From there, the patterns and stories made their way to the temple walls and tombs of Ancient Egypt. And thence to Greece. Arab scholars preserved and refined the knowledge base during the Middle Ages. Their manuscripts were taken up by Europeans at the time of the Renaissance. The charts and their attendant records proved indispensable for navigation during the period of European exploration and global conquest. And thus made their way into the modern world.

The first astronomers/astrologers divided the sky by marking the location of the Sun at the equinoxes and solstices and further subdividing these quarters or "seasons" by three, according to the average number of complete lunations (moons) in each period. Their final step involved a creative connecting of star-dots to form icons — which mirrored their experience as Sun traversed each of the twelve sections. The signs thus rendered the meaning of the time. For example, the Sun during late July and August might be described as ferocious as a Lion. Other months, such as the thirty degree segment of sky at the beginning of the Spring, required more imagination. How the four stars there suggested a ram is anyone's guess. But certainly a ram is known for getting through no matter how mountainous or obstructed the path — as Spring pushes through every year. The zodiac evolved in this mythic fashion. Astrological signs and astronomical constellations aligned when the configurations were originally created.

A misalignment between signs and constellations came about as time passed. Earth slightly wobbles on her axis, which causes the location of the spring equinox and each of the successive periods of the year to move backwards through the visible stars. A complete cycle takes approximately 26,000 years. Due to this slight wobble, the first degree of Aries (the beginning of Spring) now occurs at the beginning of the constellation Aquarius. Likewise, the period of Taurus appears just inside the constellation Pisces; the first degrees of Gemini in Aries, and so forth. This discrepancy is one of several contested issues among practitioners of astrology. "Tropical" astrologers disregard the visible backdrop and hold that the meaning of the signs derives from the unchanged internal relation between Earth, Sun, Moon and planets. "Sidereal" astrologers shift the original meanings of the signs to coincide with the visible stars.

For skeptics, the difference between signs and constellations is conclusive evidence that astrology cannot be trusted. For astronomers, astrology is little more than a quaint artifact, a souvenir from the history of science. Prior to the Age of Reason, metaphysics and unverifiable assertions of what things might mean ran rampant through the halls of knowledge. Descartes' methodical doubt aimed at freeing real knowledge from speculation and superstition. Formal science would afterward confine itself to measurement and objective observation.

With the scientific revolution, astronomy definitively separated itself from astrology. In the past, great astronomers such as Kepler had been astrologers. Now scientists would think about the stars only in terms of distances, magnitudes, descriptions and discoverable laws of causal relationship. The misalignment between sign (meaning) and constellation (visible stars) no longer mattered.

What concerns us here, as we seek useful alternative narratives, is this:: "Does a connection exist between Self and the configuration of the Stars at one's birth?" As we focus on this question, we use will use the word "Stars," but not to mean everything astrology has come to include. Setting aside

prediction, forecast, divination, prognostication, event-related discourse and the like, we limit the scope of the Stars to the moment of birth and personal identity.

Difficulties remain, however, especially in the context of democratic political culture. The complex dynamic we call "self" rebels against objectification / categorization. Consciousness and the freedom of our Will guarantee that we are able to deny and successfully work against any efforts to represent us. Having certain propensities does not determine what we do with those gifts. A sensuous disposition, for instance, would suggest a deep appreciation of music, gardening, cooking, the visual arts... Yet we can choose to disregard or even suppress our predilections. And someone born without such Stars can certainly develop those capabilities.

Many other factors influence our personality as well: genetic information; gender roles and other forms of cultural and social conditioning; birth order and sibling relations; childhood experience; education; economic opportunity and so on. If we hear about our Stars, it's usually after we're deeply entangled in a web of constructed and learned identity.

See for Yourself

Like the Arts, the Stars can link Consciousness more directly with the Referent. The system proposes that the arrangement of the heavens at the moment of birth carries significance for personal presence in the world. Given academics' general aversion to the topic, the only way we can ascertain the legitimacy of this claim, at least at this time, is by personal experience. Each person must decide for themselves the accuracy of a dimension of personality as represented by the Stars.

One does not need an astrologer to test the thesis. Free birthcharts are obtainable at numerous websites with explanations available in both print and digital media. The quality of the interpretation, of course, depends on the source. The following version of the Stars modifies tradition with contributions and refinements made by thousands of real people. It begins by assigning meaning to the twelve places, using the four seasons to provide the basic metaphor.

As "sun signs," these depictions offer an opportunity to judge how well the Stars do or do not correlate with what you might know about yourself, as well as the personalities of your friends, relatives, co-workers.

The Signs

Aries (*March 21 - April 21):* The soul of spring. Buds on trees. Awakenings. Forward moving. Enthusiastic. Energy. Fiery and intuitive. Beginning things. Seeing possibility.

Taurus (*April 21 - May 21):* The fragrant Earth. Young leaves. Grasses greening. Gardeners planting seeds. Birds sing. Flowers bloom. Practicality. Sensuality. Things taking root.

Gemini (*May 21 - June 21):* Up from underground. Treetops read the forest floor. Meadows talk with clouds. Adaptations. Communication. Thinking and re-thinking through it all.

Cancer (*June 21 - July 21):* Summer rain and rivers flow. Family sensibilities. Heartstrings tied to home. The growing season. Getting down to business. Making things real, concrete.

Leo (*July 21 - August 21):* And then the sun like a lion roars. Ignites a thousand wishes. Golden hearted. Stand by your side assertive. Clear. Easy individuation. Laid back. Leadership.

Virgo (*August 21 - September 21):* Things return to order. Vacations end. Back to school. The weather mellows. Everything in place. Organized. Taking care. Perfecting. Patience. Finishing.

Libra (*September 21 - October 21):* Equal days and nights. Harmony and balance. Confident harvest. Completion. A presence of truthfulness and honesty. A sense of fairness. Justice.

Scorpio (*October 21 - November 21):* Hillsides turning red, purple. Drama of imagination. Feeling enables where reason forbids. Secretive and mysterious. On stage. Sensing the magic of it all.

Sagittarius (*November 21 - December 21):* Everywhere signs telling of what's to come. Self-motivated, deep thinking, energetic, goal oriented. Preparations. Going somewhere. Friendship.

Capricorn (*December 21 - January 21):* The longest night. The stillness of ice. Quiet of snow. Yet these snowflakes in caprice. Purifying cold. Strong reliable. Persevering. Responsibility.

Aquarius (*January 21 - February 21):* Winds dispersing winter's air masses. Respite from difficult conditions. Change. Kindness. Service. Gift giving. Helping others.

Pisces (*February 21 - March 21):* Galeries of snowflakes, snow sculptures melt. Rivers run free again. Not counting costs. Sacrifice. Forgiveness. Compassion. Bridging from the old to the new.

The Sun, Moon and Planets

The Sun, Moon and planets travel through the signs. Again, we will let description of our experience with each of the celestial bodies convey their meaning. For the purposes of articulating personal identity, they indicate facets of the Self. The centermost contours of the personality; one's emotional life and unconscious; how one thinks; how one is graced / what one loves; what one finds inescapable; what one has in abundance; and what might represent the boundaries, the limits, the key.

The three outermost planets (Uranus, Neptune and Pluto) — being recent discoveries of Consciousness — will represent the Epochs of their discovery, knowledge and awarenesses emerging in those eras. We can build a sense of what each means by considering what artists and writers were saying / what was happening.

The Sun - The Sun describes that which is centermost, most apparent and most important. What some might call the "heart and soul."

Example: Sun in Aries — A life of seeing possibility. Beginning something new. Enthusiasm. Energetic. A forward moving unpredictability. A subtle fiery willfulness. One more crazy idea. An openness for wonder to happen.

The Moon - Next most apparent, the Moon describes experience residing in the background. The configuration of our unconscious material. Something about our emotional life.

Example: Moon in Capricorn — Enduring relationships. A dependable lover. Emotional strength. Hard working. Stable. Practical. Reliable.

Mercury - Closest to the Sun and quickly moving, yet never going very far from the centermost experience. Analogous to our cognitive mind, our way of thinking, words and thoughts.

Example: Mercury in Pisces — Thinking that's emotionally inclined, highly associative. Poetic connections more than logical sequence. Compassionate and easily moved to tears.

Venus - Goddess of art and beauty. The star that graces both sunrise and sunset. Venus describes one's art, one's beauty, what one loves.

Example: Venus in Taurus — A special appreciation of food, music, perfumes, velvet, color. A love of gardening. A sensibility for the arts.

Mars - A definitive red star midst all the white ones, Mars draws our attention. It accents or describes as inescapably notable whatever experience or sign it falls within.

Example: Mars in Leo — Easily individuating / being yourself. A drive to clarify. Stand your ground assertiveness and leadership.

Jupiter - An extremely large planet with possibly as many as 53 moons, radiating enormous amounts of energy, Jupiter describes abundance, fullness, good luck. Exponentially magnifying or multiplying characteristics of the sign in which it is found.

Example: Jupiter in Sagittarius — A super friendliness. A strong sense of direction. Lots of goals. Deep thinking. Going all the way there. Distant travel. A great love of animals.

Saturn - Carries a distinct set of rings around it, suggesting boundedness, limitation. Thus, if we wish all stages of the cycle to be free, flowing and available, then Saturn indicates the resource or skill one needs to open up or develop. The key. The opportunity.

Example: Saturn in Leo — The key is being assertive, definitive. Leadership required. Clarifying reality as you understand it.

Uranus - Discovered in 1781. Enlightenment moving into the Age of Democracy. Writers include: Rousseau, Voltaire, Diderot, Mary Wollstonecraft, Thomas Paine. The awareness of human responsibility for our social and political structures. Our ability to make changes. An emerging Consciousness of each individual's significance in the World.

Example: Uranus in Gemini — Enlightenment by way of an intellectual engagement with others and the world. Reading / studying / communicating with others can effect change. Lead to the awareness of your significance in the world.

Neptune - Discovered in 1846. Romanticism. Writers include: Blake, Keats, Hopkins, Melville, Thoreau, Emerson, Emily Dickenson, the Brontë sisters, Darwin. The awareness of relationship with Nature, of universal dreams and utopian visions. Consciousness of significance in the Universe.

Example: Neptune in Libra — Awareness of your place in the Universe comes through balancing our relationship with Nature. Bringing utopian dreams to completion.

Pluto - discovered in 1930. Existentialism, Relativity, Quantum Mechanics. Writers include Heidegger, Sartre, Martin Buber, Simone de Beauvoir. Consciousness of significance in the Cosmos.

Example: Pluto in Leo — Assertiveness required for the reality you would wish to create. You need to clearly define what matters. See your way through the apparent disorder.

Rising Sign - the sign on the eastern horizon also contributes to the picture. Referred to as the rising sign, it describes the experience being unfolded or presented to the world.

Example: Libra rising — Honest with others and the world. Unfolding equality and fairness. As a judge. A peacemaker. An intellectual inclination. Puzzle solver. One who finishes what she begins.

More examples of sketches of Stars and how they describe individual personality can be found at > http://bridgetochange.com/somestars/index.html

The question is whether the description for your moment of birth resonates with Self-knowledge. If you don't know the time of day you were born, the position of the Moon and your Rising Sign may be uncertain. Nonetheless, the portrayal of Self provided by the Sun and planets usually provides enough material to judge whether or not the representation fits.

Implications

As a storytelling species, we crave explanation. If the Stars deliver narrative that tells us something we know is true about ourselves, we want to ask, "How can that be?" Although it would seem logical that creatures evolving for billions of years in a particular cosmic environment might somehow reflect facets of that larger setting, science would contend that legitimacy depends on the demonstration of a causal link.

We are unaware of any such link. And within Western Civilization's master narrative, how could there be? Science maintains that substance (that which exists) is material, pure externality, physical only. Yet, as observed earlier, reducing the mind to a mechanistic phenomenon does not quite fit with the experience we have of Consciousness — nor with the freedom that we know as subject centers.

If we understand all of matter as having some kind of interiority, however, options emerge as to how personality could be interwoven with the heavens. We came upon one possibility in Chapter Four. In an effort to resolve contradictions between quantum mechanics and relativity theory, physicists postulate that the Universe is likely composed of "extra" dimensions, "curled up" at the interstices of the four we know (height, breadth, depth and forward moving time). And since mathematicians understand dimension as a degree of freedom or possibility, it does not stretch reason to propose that one or more of these extra dimensions might somehow enfold the link between personality and the Stars. The Sun, Moon and planets may bestow meaning at the moment of our birth in a personal, not a mechanical way.

Recognizing that the Stars describe a dimension of our personal presence doesn't necessarily free us from the master narrative, however. The Stars become alternative to the self/ego identity only when we open our minds to the very different answers this description submits to the questions: *"Who are we?" "What are we doing here?"* and *"Why?"*

Implicit in the Stars is an identity of Belonging rather than separation. A much more complex and nuanced identity than the master narrative's self-as-separate model that reduces our worth to material possessions, our value to competition. Your whole Star chart, the whole picture of the moment of your birth, includes the total story of being a child of Earth. Although only one experience is present as centermost (the location of the Sun) — and the particularity that the Moon and planets describe as they appear in their places — all the experiences available to human personality are present in some way. Aries through Pisces: The ability to see possibility / Sensuality and practicality / Communication skills and adaptability / A sense of home and family / Individuation and leadership ability / Carefulness and patience / Honesty, fairness, justice / Mystery and drama / Direction, meaning, purpose / Reliability and perseverance / Veins of altruism / A gift for making sacrifices for others. The Stars take us from a meaningless world into an evolving Universe of creative Love.

The Stars can liberate the idea of Self from subjugation to hierarchies of coercive power. In a narrative of planetary Belonging we become Person-in-Relationship — as initiated by the quarks when time began; developed by the long chain polymers when they made the first steps into Life; and complexified by the bacteria when they invented the nucleated cell. The Stars reposition us within and as part of, rather than above or outside the Universe. A profound alternative to the master narrative.

Part III:
Toward a Solution

None of us would wish to pass onto our children an abyss frothing with problems. A world mired in endless wars. Where some hoard much more than they need and others have nothing. Life under the threat of terrorism. Or the next mass shooting. Nations arming themselves with weapons of mass destruction. Global warming. Climate change. Looming shortages. Oceanic collapse. Over-population pressing the limits of Earth's ability to sustain us.

We set out in Part One to understand what brought us to this edge. And concluded that a mistaken set of beliefs about our identity — a master narrative that conflates individuality with separation — lies at the root of our problems.

In Part Two, we investigated alternatives to the separate self/ego idea: in our religious and spiritual traditions; in various discourses of contemporary science; in the arts; and in the Stars. We know there are more ways to understand ourselves than the mistaken one at the core of that the master narrative.

In Part Three, we turn to exploring how what we've considered might contribute to helping us find solutions. Here we will delve more deeply into Complexity Theory, a field of study that focuses on how change happens in situations that defy simple description, explanation and prediction. While suggesting a way out of our complex and chaotic set of problems, Complexity Theory can also help us believe it possible to do what needs to be done. Finally, we will bring these understandings to bear in framing a plan of action to bring about a 'Phase Transition.'

Chapter Eight:
Complexity

A Fractal Universe

Science has now reached the threshold of affirming what artists and religious traditions have long maintained. Our Universe turns out to be much more complex and nuanced than our sign system conventions and Aristotelian categories suggest. Even the borders between dimensions have proven less distinct than traditional geometry would have us believe. We live not only in a multi-dimensional Universe, but also and more accurately, in a *fractal* multi-dimensional Universe.

So what does "fractal" Universe mean? Commonplace experience can help explain. At first glance, the kitchen floor, a tabletop, the computer screen all appear as smooth planes — two dimensional objects of length and width. We know, however, that greatly magnifying any one of these planes reveals slopes, hills, valleys, hairline cracks, a changing landscape scattered across the surface. Engineers might take some of these characteristics into account when designing a product requiring a particular finish; but for practical purposes, these micro-irregularities seldom enter into consideration. If for some reason, however, we would wish to document the irregularity, we would need to add a fraction of depth or height to our description. This "fractal" quality permeates our world. Fractal, however, is more than a description of surfaces. Fractals surround us.

"Lightning doesn't travel in a straight line," observed Benoît Mandelbrot, the mathematician who gave fractals their name. In fact, you can't describe the path of a lightning bolt without dealing with its jagged movement. Or measure the length of a shoreline without first determining how you will accommodate its contours; and perhaps most importantly, your means of measuring it. Rivers, rocks, plants, clouds, our faces, galaxies... All are examples of naturally occurring fractals. We live in a fractal Universe.

We have long known that the forms in Nature result from repetitive processes. Waters cut the Grand Canyon. Grinding, crushing and breakage shapes the boulders. Cells divide again and again. We also knew that anomalies appear in the repetition of the simplest mathematical formulae. And when computers became available that could perform mathematical operations with formerly inconceivable speeds, we found that these chaotic anomalies themselves generate patterns. The stunning graphics most commonly associated with the term fractal.

Computer generated fractals visualize the chaotic and fragmented. Studying them added to an evolving vocabulary and the refinement of methods with which we began to look at complex forms and investigate how change happens. Not only did we learn that apparent chaos has emergent patterns, but it also became clear that these patterns become embedded throughout the entire fractal entity. Magnification of any part of a fractal reveals recurring details, a likeness to the whole.

Although "Self-similarity" reaches through every scale of fractal structure — to infinity, it doesn't appear as a rigid duplicity or exact symmetry. Self-similarity shows up in resemblances. The individual leaves of a fern differ in size, while the basic shape of each leaf and the veins within repeat the overall pattern of the frond. The branching in trees repeats from root to bud; yet with a variability that illustrates Nature's spontaneity. Trees grow in relationship with their environment and all its unpredictability. The unpredictable beauty at the heart of our World.

The fractal quality of the Universe and the ubiquity of self-similarity offer insight into the direction that our solution will need to take. Beginning with our narratives. Consider how the stories we tell ourselves appear logical and consistent to us. But were we to examine them on a fine granular scale, they would surely show anomalies and contradiction. Or imagine greatly magnifying a single day in a life, moment by moment; we would probably find that our beliefs and what we practice are not perfectly consistent. A reality anthropologists would likely affirm. Because we live in an ego culture, we carry threads learned in childhood, embedded in language, performed and reinforced in microtheaters. Unless we maintain constant vigilance, we can unknowingly be reproducing the very patterns of coercive power driven by the separate self/ego idea. Such as obeying the 'being better than' imperative of competition. Attitudes that we may have thought we'd already eliminated, that we consciously set out to correct. It's more complex than we tend to think.

Complex Dynamic Systems

Long before the development of chaos/complexity theory, Henri Poincaré forewarned us of the problems associated with predicting anything. In 1889, Poincaré demonstrated that Newton's Laws of Gravity could not foretell the future of the solar system. He showed that even if we knew the initial positions of a three-body system of Sun, Moon and Earth, the slightest perturbation afterward would result in dramatically different orbits. Since we have no way of knowing what the initial conditions of the entire solar system might have been, Poincaré reached the conclusion, "Prediction becomes impossible." To science, unpredictability equals chaos. Not a promising field of research, especially if your goal is to discover laws. So at the beginning of the 20th century, scientists preferred other areas of study. Electromagnetism. Gravity. The make-up of the atom. Radiation...

In the 1960's, however, the topic of unpredictability re-emerged. Edward Lorenz, a meteorologist at MIT, was using an early model computer to study atmospheric change. Hoping to improve weather forecasting, he programmed an environment with all the known meteorological laws, then added in weather data; anticipating that he would soon be watching patterns evolve that would lead to reliable forecasting tools.

Not long into the project, however, his computer crashed. To pick up where the program had left off, Lorenz needed to input the most recent data readings. Which he had from the last printout

before the system went down. So he entered the data, got the program up and running again. But shortly thereafter, the weather went wildly erratic. It turned out to be the difference between his 'three-digit decimal point' printer and his 'six-digit decimal point' virtual world. A difference so small, Lorenz concluded that weather is unpredictable. He dubbed the (now well-known) phenomenon that he had stumbled upon, "the butterfly wing effect." A butterfly wiggling its wing in Brazil, he said, could literally affect the weather over Texas. Some years later, as biologists, mathematicians and medical science confirmed similar instances of "sensitivity to initial conditions," the value of understanding chaos and complex dynamic systems became apparent.

Complexity Theory would not have developed without computer technology. Computers permit researchers to graph complex dynamic systems as they change through various phases and states. In a relatively short period of time, we've learned an enormous amount about chaos, complexity and how complex systems behave and evolve. The few critics of Complexity Theory see little value in descriptions of systems that defy prediction. For most, the recognition that such systems share characteristics, some universally, holds tremendous potential for understanding our world.

No one would disagree that Complexity Theory has cross-disciplinary applications. Complex dynamic systems exhibit common attributes whether such systems are ecological units, living cells, immune systems, clouds, sociological networks, stock markets, neurophysiological phenomena, periods of historical transformation, language, sand piles or traffic jams. Discoveries made in one area translate readily into another. Work done by physicists investigating turbulence contributes to understanding the behavior of financial markets, devising public relations strategies and developing advertising schemes. Studies of evolving microbiological worlds provide insights for computer software design and earthquake prediction. Research into the noise of electric circuitry proves valuable to space exploration and business administration. Economists, biologists, medical doctors, physicists, psychologists, astronomers, mathematicians, meteorologists, historians, politicians, sociologists, even military strategists have found Complexity Theory to provide valuable insights.

How could a single theoretical approach yield understandings about phenomena as diverse as sand piles and human societies? Complexity Theory recognizes different types of complex systems. Some are fixed. Such systems include objects in general, things that are static over time — that don't change as dynamic unities do. Mentality might be present at some level, but not as in systems that change, particularly those that are able to change themselves. The latter category of "adaptive" complex dynamic systems most interests us. Such networks or systems are unified and composed of relatively free agents. Organisms, societies, ecological networks exemplify adaptive systems.

Such complex systems are made up of parts interacting with one another in ways that change over time — including randomness. Almost all share the trait of "non-linearity." That is, complex

systems function by way of feedback loop relationships, rather than following step-by-step sequences. In a feedback loop dynamic, the information generated by the system goes back into the system, and contributes to directing the system as it moves forward. Turning on the oven and setting the temperature, for instance, sets-up a feedback loop. When the flames warm the oven to the desired temperature, the thermostat informs the flames to slow down. The information moving from the oven to thermostat and back to the flames represents a relatively simple feedback loop.

The master narrative and its institutions are another example of a feedback loop. The master narrative has us think of ourselves and our interests as separate from one another and our planet. We enact that narrative in microtheatrical performances of competition and coercive power. Often unknowingly, as modalities of the separate self/ego identity (classism, racism, sexism...) come embedded in our language and institutions. These in turn, generate environments, structures and ways of doing things, that reflect, reinforce and reproduce that same separate self/ego identity narrative.

Like fractals, complex dynamic systems function by iteration (repetition). The parts or agents of the system repeat activities, pathways — routines of thinking, doing. Through this repetition, system-wide patterns emerge. These patterns map the system: where it is; what doing; where going. The emergent patterns could never be studied were the system taken apart and analyzed piece by piece. The property of "emergence" draws our attention to an underlying principle of complex dynamic systems: *the whole is greater than the sum of the parts.*

In an interesting paradox, the principle of emergence enhances, rather than diminishes the importance of the parts or individual agents. Complex adaptive dynamic systems are said to be "self-organizing." Each agent exercises a freedom that can only be attributed to a subject center, resulting in the entire system acting from within, rather than being directed by an outside cause. In one of the more spectacular and oft cited examples, individual birds making choices in relation to their immediate fly mates create the stunning swirling flocks that enchant the eye.

Although they're likely to have differing relationships with one another, different roles or functions in the system, the agents of complex adaptive systems themselves create the emergent patterns. Some may have more information than others, more power to influence the system's trajectory, more opportunity to effect change. The DNA within the nucleus of living cells, for example, directs metabolism and supplies the patterns for the reproduction of the protein structures, which in turn produce the cell's overall shape, form and function. Other parts of the cell produce energy from food, remove waste material, maintain the walls, have a role in reproduction. No matter the role, every individual agent is important. And in successful complex dynamic systems, such differentiation of responsibility is based on competency to perform the particular task in service to the whole.

Under the master narrative, human history does not fit this description. When societies are informed by the separate self/ego narrative, agents are empowered not on the grounds of competency; but rather according to arbitrary criteria, such as birth to a particular family, or social group with 'connections,' and so forth. Such societies further violate the sustainability pattern by teaching that individual responsibility means taking care of oneself and a narrowly defined idea of family; only secondarily, if at all, does the master narrative advocate concern for the general welfare, service to the whole.

Researchers use the term "nested" to describe how complex adaptive systems reside within one another. Like Russian Matryoshka dolls, agents are located inside ever larger complex dynamic systems. Take human existence, for example. We each carry out our own personal iterations — thinking along these lines rather than those, choosing to do this rather than that — creating highly individuated emergent patterns. Being members of societies, our decisions and performance also contribute to the creation of the patterns that characterize our world at large. In healthy complex adaptive dynamic systems, information and energy flow freely — guaranteeing the well being of the individual agents at all levels, their choices, and thereby the overall fitness of the system.

Interaction among agents in a healthy system does not always result in agreement, however. Whether a living body, a society, a business, etc. ways of doing things can become outdated, information corrupted. Agents, being self-organizing subject centers, exercise a radical freedom in the narratives they choose to activate, or discredit. If the interests of individual agents fail to align or fall out of alignment, disagreements appear; resonance gives way to conflict. In stable systems, such disturbances last for only a short period and have little effect on the overall pattern. Networks, in fact, depend on alternative ideas. Better information can lead to improvement, inspire the system to shift to an enhanced solution. Differences also produce untried possibilities that may prove useful later.

A system is healthy when the microscopic to macroscopic behavior leads to successful adaptations. As the whole system responds to the micro-intentions of agents on local levels, the system climbs from one fitness peak to the next. Adapting, complexifying, progressing. Solutions to problems move networks toward constantly transforming goal-states. These moves and shifts are made possible by maintaining a balance between reliance on existing solutions and an openness to innovations and change. This middle ground is often referred to as the "edge of chaos."

Complexity Theory makes a compelling point about this surprisingly universal order/chaos, 'middle ground' dynamic. A point that brings our search for solutions back into focus. Because complex systems are nested within other systems which are also evolving, pathways inevitably encounter changed circumstances. Conditions that require new solutions. Even successful pathways that have served the network well, after a time, reach their end. If a system fails to change or evolve

in relation to these changed conditions; or proposes inadequate solutions to the altered circumstance, destructive forces set in. Systems can fail. Go over the edge of chaos.

Successful complex dynamic systems respond to small problems long before total disorder and destruction set in. They perform well, even when sudden and unpredictable catastrophic circumstances arise. If threatened with complete dissolution, complex adaptive dynamic systems can respond by wholly recreating themselves. Complexity Theory calls such total transformations "phase transitions."

Phase Transitions

Phase transitions happen on a small scale, everywhere, all the time. Ice melts. You add milk to your tea. You fall in love. Complexity Theory's conceptual model for how transitions happen has led to new understandings in almost every field of social science. Economics has used it to study recurrent patterns in stock market crashes. Its perspectives have assisted sociologists analyzing city planning and the creation of urban forms. In medicine, the interaction between the individual and society with regard to health outcomes. Political science, in the relationship between social class and political allegiance. Geography, in globalization studies focusing on income inequalities among different nations and their effect on life expectancy.

Phase transitions also occur on a grand scale. We noted in Chapter Five the three major phase transitions that science recognizes. The beginning of the Universe initiated by energy-sharing quarks. The playful long chain polymers opening the gateway to Life. The transition to the nucleated cell effected by the spirochetes and purple oxygen breathers. So striking the changes of such weightier phase transitions that the outcome would seem improbable, unbelievable, almost inconceivable — before they happen.

The magnitude of our problems and their solutions suggest that this scale of phase transition describes the kinds of change that we need. Imagine moving from a master narrative saturated with the self-as-separate ego identity to a paradigm of interdependence and community. People suddenly realizing, feeling and acting on their connection with everyone else. The wealthy wholeheartedly dispersing their privilege and accumulations in order to care for others and the planet. Nations disarming, hammering their swords into plowshares...

Phase transitions do not unfold previously existing patterns. The metamorphosis of caterpillar from chrysalis to butterfly, for instance, is not considered a phase transition, since the transformation is pre-programmed. For the same reason, most adaptations do not qualify. In a phase transition, actors risk everything to create a new solution. The outcome is both unprecedented and unpredictable.

Phase transitions can take place rather rapidly and look quite spontaneous. Or it can appear that systems approach phase transition boundaries slowly, then suddenly leap them. In any case, phase transitions result from the activities of individual agents in their unique microtheaters. In a major phase transition, agents respond to circumstances that threaten the entire system. The seriousness of the situation displaces issues that may previously have dissociated interests. It is this unexpected unified response that makes a phase transition possible. Using Complexity Theory, we might envision how the phase transition we need could possibly take place.

In its earliest stages, individuals perceive that something is wrong — and needs to be fixed. As these first responders begin to understand the roots of the problem, they sound the alarm that the issues are system-wide and associated with the overall pattern — in our case, the master narrative.

At the start, since the changes being called for threaten separate self-interest, agents at higher levels may not hear or agree with the initial communications coming from micro-levels. Upper level agents may not perceive or assess the issue clearly or their intelligence may be overwhelmed. They may reply that nothing needs to be done; that there is nothing that can be done; that the best possible is already being done; or that minor adjustments will suffice. Since upper level actors have greater influence over the network as a whole, including the power to manipulate the information portals, they can to some extent suppress lower level urgings.

Individuals in privileged positions have the ability to "canalize" information; that is, limit or distort what's available system-wide. The can introduce "noise" — spread false information, use flawed logic, play on people's fears and prejudices, stir up dissonance and so forth — to drown out the fluctuations. Producing conflict across the network can lead to lower level agents making decisions on the basis of limited or inaccurate information. Perhaps destroying alternatives trying to form. Given the problems we're facing, this tactic could prove catastrophic.

When it becomes clear that adjustment, reform or mere tweaking cannot solve the problems, agents at all levels of the system awaken. Because complex dynamic systems are sensitive to initial conditions, a micro-fluctuation by any agent can bring macro-results — "the butterfly wing effect." Alternative narrative and performance can begin on any level and cascade upward.

If the individual agents processing the new information belong to networks with robust and wide-reaching lattice structures, horizons rapidly expand. By word of mouth, through media and social networking, the stakes involved become well defined and increasingly better articulated. The desire for change grows. When more and more agents begin accepting risks of speaking out and acting, taking up the costs, efforts multiply.

The second stage might open with system-wide desire for change becoming the predominant pattern in the narrative field. No more is it a question of whether or not change is needed; the issue now is what will that change look like? And how will it be brought about? If the system is allowed to

draw on its full potential, it can call on all possible sources of information. The value of alternatives then becomes apparent. Agents reconsider narratives which may have been kept at the margins because differing from the pattern defining the system at large.

As would have been the case up to this point, the pathway forward is not predictable. Empowered agents may recognize the need for change, but attempt to drive the system back into failed solutions of the past. This strategy can cause the entire system to lose stability. A series of such of insufficient solutions, each failing in turn, can cascade through the system and ultimately lead to total collapse.

Another possible situation finds alternative pathways forming, but without stability. Or adequately forming, but meeting with indifference. Agents in a system recognizing the need for change might generate such alternatives or even a series of them; but without focus or sustained energy, they can disappear. Then reappear, repeatedly — without being able to save the system.

If the system is successful, a genuine and sustainable alternative pathway emerges. The sought-after passage, however, doesn't come from a simple repetition of previously peripheralized material. What was marginalized may form the basis of the new solution, but not its entirety. The solution comes as the result of agents sorting through and building the side-lined information into new possibilities, creating an unforeseen, unexpected new way.

If the new pattern truly does represent a viable alternative, it begins to inform the entire system. As individuals and clusters of individuals make the choice to abandon the failing pathway and migrate to the new pattern, the bifurcation cascades. The third stage would see implementation. Agents sustaining and elaborating the alternative by constructing institutions that conform to the new schema — no matter how radically improbable or unbelievable the solution may have seemed earlier.

In order to succeed, each stage of a phase transition requires communication and input of energy. The individual agents with their varying degrees of knowledge and influence carry the drama forward. The smallest act can have immeasurably far-reaching effects.

Human history adequately testifies to the assessment that the master narrative we've been following, informed by the self/ego idea, has caused immeasurable suffering and destruction. We've now arrived at that pathway's end. We're at the crossroads of a world broken — from the environment to our endless wars. Everywhere hurting. Life was not meant to be this way.

As complex as our situation might be, as seemingly impossible the goal, we've already begun to understand how we can reach it. Complexity Theory affirms that these kinds of changes have happened before. The change we need can happen. But it is we ourselves, each of us individually and together, who alone could bring about such a transformation. Whatever our personal psychology, our social position, the place of our society, and culture in the world at large, what we each do matters. Each individual. We are the agents responsible for our complex adaptive dynamic systems. More than we may ever have realized, "People have the power."

Chapter Nine:
A Plan of Action

In the last chapter, we learned from Complexity Theory that it's the individual agents who generate the patterns of complex adaptive dynamic systems. Our thinking, choices and behaviors in microtheaters produce the dominant pattern of the narrative field. It's not just political leaders, scholars, journalists, writers, entertainers — everyone matters in this effort. Each of us will need to point out, question and replace the master narrative with a better alternative.

This chapter aims at outlining a plan of action. It approaches the task by addressing three key questions: how might we change the master narrative from one of the separate self and coercive power *over* each other, to one of Love and peace? What might the alternative we need look like? How can we get there?

We begin by acknowledging those who have come before us. All who have risked their lives and fortunes to make the world a better place. We owe them for our way of life, our civil rights and political freedoms, the tools of democracy. It is with these gifts, the love they bequeathed — not with violence — that we can create the kinds of changes in our world that we've desired since the beginning of civilization.

Microtheatrical Change

Each of us are complex, wholly unpredictable individuals living absolutely unique lives. Second by second, a myriad of possibilities invite our attention. We decide which thoughts to think, which pathways to pursue, which fantasy to engage, which activities. Being a subject center implies the freedom to choose. We bear individual responsibility for our behavior and choices. As agents in complex dynamic systems, however, we find ourselves immersed in feedback loop relationships.

We're each involved with and enact a master narrative that informs our world. We help fill the microtheatres of our minds, homes, work and social places with that storytelling — in our present situation, a separate self/ego narrative. The macrotheatres of our political and economic institutions close the loop by producing environments and ways of doing things that propagate and normalize that narrative we individually and collectively engage on the microtheatrical level.

Historically, these feedback loop relationships have repeatedly limited our progress because we weren't aware of them. Without deconstructing and critiquing the master narrative (the separate self/ego identity), political revolutions have replaced one hierarchy with another. Likewise, our alternative narratives — religions, spiritual traditions, science, arts and the stars — have often ended up directly or indirectly serving the master narrative, instead of discrediting it. To save our World, we each need to become aware of the narratives that are presently controlling us. Reclaiming our

freedom with that awareness, we could reach alternative understandings of ourselves — and so profoundly change the patterns of what we're doing as would constitute a phase transition.

As discussed in Chapter Two, we can visualize narratives as an entanglement of swirling neon lines. Those we most often activate produce discernable patterns in the narrative field. "Basins of attraction," Complexity Theory might say. These emergent patterns depict what we pay greatest attention to, regularly think about or enact, how we spend our time — what most attracts us. That is, the "attractor." Describing the attractor for the world at large reveals the master narrative. Identifying the attractor in our personal narrative field says something about who we are as individuals.

Given the freedom and dignity of self-organizing subject centers, there's only one place a phase transition can begin — that's in the minds of the agents. No one can force us how to think. Not even sign systems, narratives and microtheaters. Once we become aware of these factors, we can exercise our freedom. In the same way we each freely choose our friends, we can each choose either to remain in the prevailing basin of attraction or migrate to an alternative attractor. It's in our minds that each of us can weigh the value of one narrative over another. It's in our minds we can choose the stories we're going to tell. It's from there that a wiggling of wing could cascade upward and outward.

Knowing a phase transition begins with each of us, the plan of action becomes self-evident. The aim will be, in Complexity Theory vocabulary, to create a "strange," or as some put it, "chaotic" attractor. "Strange" (or "chaotic") only because so foreign to the master narrative. For the world we desire resides outside the boundaries of the self/ego narrative basin. Altruism (acting for the benefit of others) ignores the imperative of competition. Forgiveness (seeking to learn and heal the cause for an offense, rather than retaliating) is not how the ego narrative would have us respond. Such is the "strange attractor" that we need.

For most people, that attractor probably sounds more familiar than "strange." Society could not function without the consideration and generosity we regularly experience within our families, from friends, co-workers, teachers, nurses and doctors, first responders, passing strangers, volunteers... Many who've greatly profited from this world's get-for-yourself paradigm consider philanthropy a must. We can envision altruism, forgiveness and the like because we already to some extent enact them. But we need more than a city or a state with a national reputation for courteous driving, or "hospitality." More than national and local news stories of unexpected kindness by individuals and groups. What we need is an entire world aware of the master narrative and defying it by deliberately loving one another. "Un-realistic," says the master narrative. Believing it possible is only the first step.

For this microtheatrical side of the plan to be successful, each of us would need to practice certain mental skills. First and foremost, the ability to pay attention to the thoughts flowing through our minds. Becoming more aware of what we're telling ourselves, the words we're using, our interior storytelling / fantasizing — recognizing their core assumptions and the identity narrative they carry.

In addition to deconstructing the narratives we find in our inner dialogue, we would also need to pay attention to those we hear or encounter. Even the underlying narratives informing gestures, activities, spaces and objects. Everywhere replace the failing self-as-separate storyline with narrative contributing to the new pattern we desire. Mapping a personal pathway to compassion, cooperation and the happiness we find in Love.

Luckily, we have an array of tools that can help us develop the skills required. Meditation and mindfulness, mantras, yoga, dancing, running, walking, working out and such where we exercise our will — combined with alternative narrative/performance in inspirational reading, drawing and painting, music, contemplation of mandalas, moments in Nature, with our pets, candlelight dinners... Gathered together or in solitude. Whatever works for getting you closer to the One you are — free of those chains of signification: the doubts, fears and loops the master narrative constructs. Maximizing our personal resources, we can stand up to the coercive microtheatrical power that works to squelch self-development, strength of mind, expanse of soul, personal creativity. Qualities each of us has stubbornly kept alive. By repeatedly activating even small reserves of them, we can empower our individual and collective psychology.

Developing an awareness of narratives and microtheatrical power can also help us to forgive one another for the mistakes and misdeeds that cause our everyday suffering and have brought us to the edge of planetary destruction. We have all done harm, most often not out of malice, but rather under the influence of cultural forces. We can change our behavior by discarding narratives that normalize competition and conflict. Expanding those that bring to awareness our interdependence and our responsibility for each other. The “Strange” that Love informs.

Liberating us from the master narrative, the strange attractor we need brings us closer to free. A strange attractor sees from different points of view. Instills respect for individuality and personal space. It assumes as many forms as there are individuals among us. Our strange attractor moves decision making away from predictable ulterior motivation toward the authentically personal. Thus, even as it makes Love possible, it also protects against microtheatrical tyrannies disguised as love. Real love cannot be required, demanded, or in any way coerced.

The strange attractor would remind us of the happiness we find in such love. The importance of connection and relationship. Whether put in words or not, we share experiences, understandings, hopes — near and far. We love one another. We care about people we may never see again. When individuals we love move away, we remember their words, recollect our time together, long for physical again-ness. When someone we love dies, we mourn the loss — yet find that not even death can keep us apart. People who have played positive roles in our lives live on — in and through us — linking us to one another and to a kind of immortality. What we do for one another can never be erased. Because you have come here, the Universe is forever changed. With You comes Eternity.

The strange attractor's pattern would treasure the wildness that generates endless variations on beauty. It would view Nature as Mother, rather than a force needing to be gotten under control. It would cultivate a whole new mindset regarding the plants and animals who feed us with their lives. Instead of drifting into speculation about possible parallel universes, simulations or clinging to metaphysical explanations that say our real home is somewhere else — our strange attractor would encourage us to appreciate and take responsibility for Earth. Right here, right now. It would resonate with narratives implying a Personal Universe, One you are a part of.

A strange attractor could gather our moments of coincidence and dream into a bouquet of wild flowers. Slip us into a kind of timelessness. Where the spatial and historical context recede. A magic that makes us feel as if we may have happened once before. That something about you goes on forever.

Believing we are capable of the world we've always desired, brings us closer to it. We can envision what that world might look like and create it. Aware of the workings of the master narrative, we can more consistently and effectively enact sensitivity to others, kindness, gift giving, forgiveness, encouragement, patience, understanding, responsibility. We can use our imagination to come up with new behaviors, practices — new performance — turning our microtheatres into loving ones. Microtheatrical transformation, however, is only the first step in a phase transition.

Macrotheatrical Change

Our microtheatres — minds, homes, workplaces, social spaces — are not isolated. Networks link us. We communicate via satellite, wireless and wired networks. We travel along networks of streets, highways, interstates, air and sea corridors. Networks of production and distribution deliver food, water, energy, sanitation, healthcare, news, information, entertainment and so forth. Networks combine our microtheatres into *macro*theatres.

Complexity Theory provides ample evidence that complex adaptive dynamic systems — cells, organisms, bodies, societies, eco-systems — survive as long as their members, their agents, make appropriate choices. Successful systems, integrate the input of all members. They resemble a grand, democratically organized symphony of free acting agents, self-directed subject centers, spontaneously making music with one another, rather than a king or dictator ruling over a hierarchy. A system assures itself the deepest cooperation and the widest range of intelligence when all its agents have equal access to the available resources, receive undistorted information and participate fully in decision making. Without free, accurate and effective channels of communication, complex adaptive dynamic systems can fail, fall into extinction.

In the world spun by mistaken notions of separate self-interest, however, the handling of information is part of a macrotheatrical game. A grand scale competition. Individuals and small,

unelected groups feel more than justified in exercising power over others. They're rewarded with privilege, luxury and admiration for doing so. For those near the top of the hierarchy, the goal becomes a competition to see who has the most. Academic competition encourages obtuse language that deprives ordinary people of important understandings such as the workings of sign systems. The master narrative sees to it that the world plays by its rules. The imperative that competitors search for ways to procure advantage — by whatever means. A prime opportunity presents itself when information channels can be manipulated to control the decision making and influence the direction of the overall system. Complexity Theory calls this canalizing.

We presently labor under this blockage. Privately owned or "public" media deliver only a limited scope and version of information. Even if we put aside the politics of unscrupulous misinformation and manipulation, we still have a problem. News reporters and anchors don't always explain in clear terms whose interests are at stake and how. How things got this way, what's beneath the conflicts. The audience is expected to figure those things out. Or not. Gatekeepers of the publishing and entertainment industry conduct business according to perceived market value. The world appears all the more unalterable when artists, writers, entertainers, scientists and politicians all replicate the narrative of separate self-interest. Consciously and unconsciously, we're clogging our networks with information that keeps us from creating a better world.

When complex dynamic systems reach the end of a pathway, or begin showing signs of going over the edge of chaos, everything can change. A phase transition can happen when it becomes clear to the system's individual agents that the situation threatens the survival of the entire system. If canalizing takes place, and the spread of information is obstructed and distorted, it may take longer for the seriousness of the situation to register. For some, such interference can be motivated by self-interested ignorance. Whatever their vested interests, human beings tend to ignore information that contradicts what they believe. You can't blame people for the hold the master narrative has over their minds. The point is rather to find ways to reach everyone with the information that the time has come for a world of loving one another, Peace on Earth.

Help Wanted

If our strange attractors of love, created in personal microtheaters, were to begin resonating and hooking up into larger networks, effects would likely start to appear. We might see growing support for liberation and justice movements. Investigations into root causes and realizable solutions of sexism and racism. Recognition of the problematic way we've been constructing masculinity, and how we generally relate to those we see as "other." Serious public discussion about what an alternative might look like. Ever widening circles of individuals lobbying their legislators; participating in social media, email, snail mail and phone campaigns; taking part in demonstrations;

spontaneous art and dance in unexpected places. Teach-ins about the workings of the master narrative and our ability to change it. Renewed interest in skills that help us control our own minds, and in the humanities, philosophy, poetry, music. Reduction in crime rates. An exponential increase in random acts of kindness. Workplaces reporting higher morale. An upsurge in community volunteers. Library use. Voter participation.

A truly macro-theatrical strange attractor would emerge, as those joining in would come to include agents who work as reporters, editors, critics, bloggers, news analysts, talk show hosts, advertisers, writers, disk jockeys, politicians, entrepreneurs, marketing and public relations professionals, artists, actors, producers and owners of mass media. With television specials, new cinema, storytelling with a different spin cascading through the collective narrative field, ever greater microtheatrical liberation would follow. A feedback loop unlike any other.

The historic period might resemble a second Enlightenment. A great increase and widening spread of knowledge. A renewal of mind. An unexpected springtime for humanity. Open discussions everywhere dealing with issues set aside for too long. But this time, with far wider participation of agents, we would be creating something much greater than the Enlightenment: a Phase Transition. Leaving the failing pathway of the ego narrative and enabling a path forward, toward the world all desire. Unexpected joy and satisfaction accompanying our creation of profound institutional change.

Systemic and Institutional change

Societies function by virtue of individuals performing a variety of tasks. People make up the networks that deliver food, water, housing, energy, transportation, healthcare, news, weather, education, essential and non-essential services... In complex societies such as ours, we depend on one another for everything. Obviously, not every member of a society is able to contribute equally. Some — such as children, the aged, the mentally or physically challenged — rely on the community's sense of social responsibility, the goodness of others. And among those able to contribute to the common good, we find a wide range of skills, inventiveness and motivation.

Societies also differ. Our globe provides varying quantity and quality of natural resources. In addition, a history of colonialism has profoundly affected relative levels of power, poverty and wealth. And of course, we've created a wide variety of cultures.

Economic systems (from the Greek words, *ekos nomos*, meaning "house rules") embody how people do what they do to meet their needs. A village economy differs significantly from that of an elaborated, technologically advanced cyber society. Yet both will have rules, structures and ways of doing things; methods of distribution, exchange and reward. Typically, the economic system grounds how a people think of themselves, others and the world.

A few societies — certain Native American groups, for example — have proven humanity capable of economic systems characterized by cooperation and sharing. This world's most powerful

economic systems, however, are based on the master narrative of separation, with its get-for-yourself imperative manifesting as a competition for goods and power. Historically, when we've tried to do something else, we've failed for lack of the analysis that permits deconstructing the master narrative. Caught up in that narrative, Communist revolutionaries did not succeed when they tried to establish a classless society where everyone would work for the common good and share equally in the wealth. Even where Communism improved certain aspects of peoples' lives, the effort to impose a cooperative system by force has led to counter-revolution, totalitarianism, persistent disparity between the living conditions of the masses and the men at the top, and no less environmental destruction than economic systems frankly based on egoism. If we want to change the house rules, we have to address the underlying master narrative.

The separate self/ego narrative directly informs the economic system we call "free market," "free market capitalism" or "capitalism." One can imagine the roots of such systems in the earliest appearance of separate self/ego-based social relationships and use of resources. If you could take over and defend a piece of property, you were welcome to do so. You then owned that land — the resources on it, the plants and animals who lived there, and in some societies, even the people. Roman Law codified this idea of private ownership, including the right to unlimited individual property accumulation. And along with that right, the corollary of slavery. History chronicles only part of the strife and suffering that resulted.

In our present situation, technology has transformed earlier modes of exchange into a vast globalized economy. Multi-national businesses and corporations exploit planetary resources and people's labor in order to produce a profit for the shareholders. In keeping with the master narrative, individuals and nations hoard wealth in order to maintain and expand their power — while millions of people in developing nations literally starve. And workers in developed nations lose jobs, go without healthcare, struggle to makes ends meet, deal with daily insecurities in a system with no guarantee that those who wish to work can find employment. While the master narrative helps keep the lower classes from rising up in civil rebellion by encouraging them to compete among themselves and admire the symbols of wealth, it permits the ruling classes to use ploys such as stirring up racism to manipulate and distract.

Meanwhile, nations arm themselves against external threats, to keep others from invading; as well as to ensure access to raw materials and secure worldwide markets for labor and consumption. The United States, for example, presently maintains seven naval fleets, global military bases, international radar installations, a deadly nuclear arsenal, intercontinental ballistic missiles, satellites, espionage, a super-secret National Security Agency and a gargantuan defense budget. And still we do not feel safe. But such ineffective reliance on the ability to inflict mass destruction is only one of the problems associated with an economic system structured by the separate self/ego idea.

Such systems also have extremely toxic effects on the democracies so hard-won by our ancestors. Since laws and regulations can interfere with profit taking, money and power drive elections and influence legislation. By any means deemed necessary. And because the master narrative justifies individuals enriching themselves whenever and however they can, bribery and corruption infect every level of government. All of which undermines the democracy that we and those who came before us have sacrificed to establish and preserve.

An economic system that proudly boasts of being based on greed and fear, cannot take us where we want to go. As corporate spokespeople and economists explain, the competitive strategies required by free market capitalism lock us into "profit first" business model. The system can only reward activities when there's money to be made. It doesn't pay to stop polluting or clean up the damages already done, any more than it pays to keep workers on the job in a downturn, or feed the hungry. Which is the main reason we're still arguing over global warming; why children go to bed hungry; and in some places, people are starving.

A phase transition would completely transform our economic system. Once we would recognize that our true self-interest is not separate from one another —inextricable from the needs of our planet and international communities, we could truly and willingly base our house rules on sharing and trust. Such an economic system could meet everyone's needs. We could find better ways to create reliable, sustainable, non-polluting energy for all. We could feed the hungry, build homes for the homeless, heal the sick. We could take care of our environment.

Only the master narrative keeps us from creating a world in which everyone receives adequate nutrition, housing, health-care and education. We could engineer a system that guarantees everyone employment, and a sustainable income. An economic system mirroring our best ideals would respect democratic principles, ensure true participation in decision making in both government and the workplace. The very idea of a small privileged group taking advantage and exercising power over others could go the way of other crude practices we have abandoned in the name of civility and sanitation.

In a phase transition, we would rethink our justice system as well. Punishment and revenge have failed us. A phase transition would shift entirely to efforts such as rehabilitation programs, substance-abuse treatment, psychological help, understanding and forgiveness. Crime and sick behavior are symptomatic of the insanity that characterizes our master narrative driven world.

Justice also requires the payment of debts — even those we as individuals may not have directly incurred. In the United States, for instance, we live on lands taken by force from Native Americans. We enjoy a standard of living founded on centuries of slavery. Our wealth was built by exploiting the resources and labor of other people in other nations. Freeing ourselves from the

separate self/ego narrative that has long told us we need not take responsibility for errors that others made, we would take steps to set right the wrongs of the past.

Since such changed behavior would let the world see us differently, we could set aside our weapons. Turn our military resources and personnel into projects aimed at helping people in need around the world. While 'turning our spears into pruning hooks,' we could also develop new skills of personal responsibility and strategies of non-violence that could protect and defend our lives, freedoms, civil and human rights, as well as those of our neighbors. We could replace our war colleges with peace campuses, convert ROTC into Peace Preservation programs.

Some might hope that changes of this sort would eventually happen, but think it will take centuries. Our problems, however, no longer give us that much time. Phase transitions can and often do take place rapidly.

Constitutional Change

We define democracy according to the principle that we, the people, are capable of governing ourselves. In contrast, dictatorship, oligarchy and bureaucratic totalitarianism allege that only certain individuals or small groups should govern. On the one hand, the people have the power and direct their government. On the other hand, a single individual or privileged class maintains advantage and exercises power over the people. Complexity Theory supports our feeling that democracy works better.

In a government *"of the people, by the people and for the people"* the citizens retain the right to determine the form and practice of their institutions. The Will of the people becomes law. Constitutions informing democratic governments include, explicitly or implicitly, the right of the citizenry at any time to reconstruct their systems and institutions — since some form or practice chosen in the past might prove tyrannical at some future date.

During the framing of the United States Constitution, George Mason raised this point. James Madison recorded the debate. In the end, Article V was written and approved. It outlines a mechanism securing the right of the people to call for a Convention for proposing and ratifying amendments — outside the purview of the established National Legislature.

Article V states:

"The Congress, whenever two thirds of both Houses shall deem it necessary, shall propose Amendments to this Constitution, or, on the Application of the Legislatures of two thirds of the several States, shall call a Convention for proposing Amendments, which in either Case, shall be valid to all Intents and Purposes, as Part of this Constitution, when ratified by the Legislatures of three fourths of the several States or by Conventions in three fourths thereof, as the one or the other Mode of Ratification may be proposed by the Congress..."

No one disputes that Article V provides the means for the calling of a Constitutional Convention. And all agree that the results of such a Convention would require ratification. It is also clear from the debate surrounding the passage, as well as the final wording of Article V, that such a Convention stands independent of Congress. Almost everything else about a Second Constitutional Convention, however, remains undefined.

What form would such a convention take? Within what time frame and with what sort of petition could it be called? Who would fund it? How would its delegates be chosen? What powers would such a Convention actually have? Could it re-construct institutions and systems? Legal, editorial, professional and personal answers vary on all of these questions. For the most part, a generalized distrust of one another taints discussion surrounding Article V. Those on the Right have historically feared that the Left would get control of such a Convention and curtail unlimited private property rights. At present, those on the Left fear that the Right's ongoing attempt to call a Convention to require a balanced federal budget might end up rescinding parts of the Bill of Rights and/or Amendments, such as those establishing voting rights.

Some believe another Convention should never be called. Others observe the power of twenty-first century corporations and conclude the Convention method is the only way that the changes we now need can happen. Some suggest that such a Convention can have no more than amendatory powers. Others attest it represents the Premier Assembly of the People; and given its only precedent, could assume unlimited power. The net hosts innumerable websites and articles dedicated to the topic — its history, the opinions of legal scholars, the why and why not.

In the early years of the United States, threatening to invoke Article V was used to urge passage or blockage of various bills. Over time, it was no longer taken seriously. In the 1960s, however, Senator Everett Dirksen began collecting petitions regarding Supreme Court intervention in the re-apportionment of State Legislatures. The strategy was ultimately abandoned; but it motivated research into what such a convention might involve. The possibility of a Convention surfaced again in the late 1970s over a Constitutional mandate for a balanced federal budget. That effort faded, but has since been revived. In 2017, a partisan group of lawmakers convened in Phoenix and performed a dress rehearsal around the idea. In November of that year, the Wisconsin state legislature submitted the 28th petition for such a convention. Thirty-four are required.

We need to think about this for a moment. How does this effort to call for a Convention affect Article V's potential as part of our plan of action? We need a means of change informed by alternative narrative, a means that can help us free ourselves and our institutions from the master narrative. But a Constitutional Convention for the purpose of balancing the budget does not offer an alternative to the self-as-separate idea. As a totally pre-phase transition phenomenon, it at best, would not address our problems. At worse such a Convention could destroy our democracy. Repeal peoples' civil rights, limit voting rights, restrict women's rights over their own bodies and so forth. Attempts

to pull complex adaptive dynamic systems backward are likely to result in chaos, collapse, failure of the system at large. None of us want that. What we want is a phase transition.

Until the present master narrative has been exposed and deconstructed — and that mistaken idea of our identity is being replaced by narratives of caring kindness, we can all too easily be misled. We want a phase transition. The strange attractor we need draws us toward equality, freedom, love and happiness. Peace on Earth. A place we haven't been before, a pathway not yet taken. A "higher love," sings Steve Winwood.

In the name of full disclosure: I must acknowledge that in the 1970s and '80s, I proposed that we call a Constitutional Convention — as the means to the new world we wish to create. I still believe it's a viable approach. One of the basic Age of Enlightenment insights that led to the overthrow of kings recognized human responsibility for social and political institutions. We create them. They do not create us. The first and only Constitutional Convention produced the present Constitution of the United States. While going far beyond the reason it was ostensibly invoked, it did what many delegates believed needed to be done. It laid the foundation for the nation we've become. And in so doing, bequeathed us Article V. A means for the people to retain control independent of the standing legislature; and preserve continuity while peacefully making a profound transition. A place where, logically, we could dismantle and re-assemble our institutions in accord with our strange attractor. With great care and in tune with our strange attractor.

The context of creating a phase transition throws a different light on calling for an Article V Constitutional Convention. Visible signs of the change we seek would have cascaded across the narrative field. With honesty and fairness on the rise in every microtheater and a new, freely cooperative, economic system emerging, we could expect true progress instead of the old conflict and obstruction. Love the prayer on every lip. A Constitutional Convention could draw us together, and catalyze even greater movement toward that Peace on Earth we all desire. As long as we make sure it is called and conducted in such a way that it can only bring about the kind of loving world we envision. As long as we exercise our microtheatrical freedom at the macrotheatrical level.

The process leading to the Calling of the Convention could itself facilitate translation of phase transition ideals into reality. State and local governments could provide places and forums for people to participate in discussions and decision making that would ultimately specify the details of the Convention itself. The use of the net and social media in innovative ways, live streaming of local participation events, televised town hall meetings, newspaper platforms and editorial pages, social networking, radio talk shows, all could serve as places for harvesting — and winnowing individual agents' input. Each state could aim at producing a document attuned to the strange attractor and harmonized with those of other states, outlining the logistics of the Convention — from delegate

selection and convention form, to framing a set guidelines and mandates, to specifying the required mode of ratification.

To ensure that the Convention would be called in a reasonable amount of time, we might link the Calling of the Convention to our National Elections. We, as a People, could vote for or against Calling for an Article V Constitutional Convention. We could do so by electing a presidential candidate who represents Calling for a Constitutional Convention. The candidate might carry a petition, drawn from points of agreement in those made by the States. If the candidate won, the first duty as president would be to request the States Legislatures to submit to Congress that same petition which the citizens would have created and approved. This could happen with a third party emerging, unifying itself, then offering a candidate. But a better method might be for both existent major party candidates to carry the same petition; again, the one drawn up by direct participation of the people earlier. To guide the Convention as it hammered out any remaining differences so that's its work would meet with swift and unanimous approval in the ratification phase.

Whatever pathway we would take to its calling, a Convention could serve as a significant step in a phase transition. It could draw on the resources and collective input of our best economists, scholars, bankers, investors, entrepreneurs, laborers from every field. It is impossible to predict the exact details regarding the form of new systems and institutions. We do know that Constitutional continuity requires a ratification process of whatever changes the Convention would propose. We also know that a phase transition implies a whole new master narrative about who we are and what we're doing here. Thus we could expect — and would have to insist that — our new institutions and systems be grounded in cooperation rather than competition, that they nurture fairness, ever greater participation and representation, care and assistance rather than powering over and militarism. Structures reflective of a whole new understanding — responsive to everyone's needs, responsible to our planet.

Belonging

Drawing from insights provided by Complexity Theory, we've outlined a plan of action. We can only begin to imagine possible expressions that an alternative master narrative based on altruism might inspire. New models of heroism. Unexpected acts of kindness becoming "the new normal." Forgiveness replacing revenge. More happiness with one's job. A drop in the rates of crime, suicide and depression. The workings of sign systems, microtheaters and narratives becoming an object of study in our children's schools, along with meditation and other skills — helping them learn to control their own minds. Free concert specials with enlightening themes. More television and cinematic narratives celebrating relationship and compassion. People in positions of power and privilege shedding their advantage in favor of real equality and democracy. The wealthiest

throughout the world dispersing their immense fortunes in order to help others. Unbelievable goodness. Everything the master narrative would call impossible.

Of course, it's easy to doubt that such a Great Change can actually happen. We look around and see how far we would need to go. Know that terrible evil has been wrought in the name of good intention. Some of us have come to distrust joining anything — even if there is no membership, no leader, no organization. We worry about making matters worse, fear the unknown. There's no love without risk. And the master narrative keeps telling us we can't. But now that we understand what that voice is, we know how to talk back.

Crossing from where we are to where we want to be may be less difficult than it appears. We are an ingenious and inventive species, more intelligent, more brilliant, more loving than the master narrative has ever let us believe. We are descendants of the quarks sharing energy at the foundation of matter; the altruistic first metabolizers who playfully opened the biosphere; the purple oxygen breathers and spirochetes who saved Life on Earth by sacrificing their identities, ultimately enabling multi-organed creatures including us. We can do this.

The World all of us desire begins within. It is from there we know our freedom. No outside power controls us. We created and can change the sign systems and narratives that have misled us. With a new awareness of how that works, we as individuals can more freely choose and create the narratives we keep in the in-between of ourselves and our world. We can decide what thoughts to think, which to elaborate; which pathways pursue, which abandon; what's most important in our lives. Love, and the desire to be loved, have always proven a far deeper and more enduring joy than money, power, fame and privilege.

By whatever mystery and series of events, we've arrived together at this cross-roads. Here we decide whether we, as a species, are worthy to go on. Our meaning waits to be discovered — though not much longer. As Mother Earth's sign-system-making child, we appear well qualified for assuming the role of Her Gardener, Caregiver of Her Children. A place in Nature we could belong. A possibility now in our hands.