# RECONSTRUCTING VALUE

## LEADERSHIP SKILLS FOR A SUSTAINABLE WORLD

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# Preface

You have a big problem to solve.

In fact, you have several problems to solve, and they are highly complex and entangled with one another. We are not talking about the problems and challenges that you face in your daily work, though they are likely related. We are talking about the larger playing field on which all of your work happens – along with your relationships, and your nourishment, your obligations and your aspirations: all of the things that sustain your life and make it worth living. The problems you need to solve are ones that threaten to compromise, undermine, and even destroy the conditions that allow you to live that good life. We call these "problems" because they are trends that are heading in the wrong direction and that need our attention and care: issues such as energy generation, clean water provision, food production, a liveable climate, and equitable development for people across the planet. We say that *you* have a big problem to solve because problems for humanity are your problems too and, really, if not you, then who? The big difficulty, the big design challenge we have before us is one of sustainability: how to create conditions for humanity and other life to flourish on earth, while respecting the earth's ability to absorb our impacts so that others can follow after us and continue to thrive.

The good news is that problems, when taken as creative challenges, can be opportunities to create something new and valuable, something that helps make things better and not worse. More good news is that many of these problems stem from our own past behavior, from the systems of energy and industrial production that have propelled us this

far, and that have emerged from the logics of growth and consumption that we assume as natural and necessary. If human cooperation and ingenuity built such systems, in the face of the constraints as they were perceived and as they shifted over the past several millennia, then surely we can apply the even greater potential for cooperation and ingenuity that we now possess, enabled by enormous advances in new technologies and social connectivity, to thrive and flourish against our emerging constraints. The leadership challenge at this juncture – and this is a challenge to you, if you are or if you aspire to be a leader in your organization and your life – is to work to understand our major sustainability challenges, to help others in developing a shared understanding, and to engage people broadly in constructive conversation and action towards the goal of all of us living better lives. This is leadership for sustainability, and it is a critical element of the big problem solving we need to undertake.

## Why We Wrote This Book

The three authors of this book are management educators, and so this book is aimed foremost at learners in business education, whether in formal business programs or in executive education. We teach in business schools and executive education, mainly in the areas of business strategy, organizational behavior, and organization theory, and, as former organizational leaders and managers ourselves, we hold deep respect and empathy for those in that work. We care deeply about issues in sustainability – meeting today's needs in ways that are just and caring, without compromising the needs of future generations – and we all have children, so these ideas are immediately as well as generally important to us. As management scholars, we recognize that the dominant logics and actions of business and business schools (e.g., an ethos of growth for growth's sake, driven by ever-increasing levels of debt-driven consumption to meet manufactured human wants, powered by take-make-waste production methods) often ignore issues in sustainability, and thereby make them worse. As such we have worked for the past fifteen years to integrate sustainability issues into management education and practice, and this book is a summation of ideas we have developed to date to aid in that integration. At the core of these ideas is the concept of *transformation*: moving to a more sustainable

path means transforming our systems of production and consumption, as well as the logics of our personal and organizational lives. This entails that we first question our assumptions about what we value, our understanding of how that impacts our physical and social conditions, and our understanding of the implications of our assumptions and actions now and in the future. The design of this book, therefore, is one of *transformational learning*, where the first task is to lay bare the logics of the current system and to question deeply the implications, so that we can reconstruct our ideas of value. This requires leadership skills in reflective practice: the ability to pause to wonder, probe, analyze, and synthesize what is happening and why, in order to understand more deeply the connections among elements in our world and the effect our actions have on them. There are a number of requisite leadership skills for reconstructing value through reflective practice, and this book is designed to help identify and develop them.

## Purpose and Design of the Book

There are several good books on sustainability and business generally and on sustainability issues in particular, and we use many of them in our teaching and reference them here – so why write another? Many books on sustainability are content-rich, and they inform us deeply of the nature of the challenges; others are prescriptive how-to's, full of ideas for organizational initiatives or programs to enhance eco-efficiency, or to improve corporate social responsibility practice. While these are useful, we felt there were three things missing for the purpose of our teaching: first, a fuller acknowledgment of the number, scope, and complexity of the challenges we face, written for the lay manager to comprehend; second, a focus on the collective "social learning" process that is required for transforming our unsustainable assumptions and actions at the levels of society, organizations, and individuals; and third, and related to the first two, an understanding of the leadership skills required to address this complexity and to effectively engage in a process of reflective practice and social learning to reconstruct value. Many books offer prescriptions for getting incremental programs implemented into existing organizational logics. While these can be useful for improving day-to-day operations we think the challenge is bigger than that. We also need to work to understand and transform those

logics to place them on a more sustainable ground, while at the same time recognizing that managers are faced with pragmatic organizational realities under the current systems of value creation and trade. Leaders need to be equipped and educated *for* sustainability, and not just *about* sustainability. They need to be able to navigate their current reality while at the same time generating sustainability conversations (the first step towards action) in their organizations, about what matters and why in light of sustainability challenges, and about what might be possible if we think beyond our existing systems and taken-for-granted ways of operating. Therefore, this book is not just a collection of chapters on different topics in sustainability; rather, its narrative arc describes a transformational learning journey, where the lessons from one chapter are carried forward to the next, and together they form an integrated whole.

## Outline of the Book

Our model for reconstructing value is built in four parts, which we call the 4R's: *rethinking*, *relating*, *responding*, and *reinventing*. In chapter 1 we introduce some background ideas in sustainability and briefly describe the 4R's in relation to the organizing model for the book. The remaining eight chapters are structured in four parts, each with two chapters focusing on one of the 4R's of reconstructing value. In part one, "Rethinking," chapter 2 explores the 4R's more deeply, along with the dominant modes of thinking associated with each, in order to open up possibilities for envisioning new ways of doing business. Chapter 3 draws connections between thinking and learning: by critically delving into underlying assumptions, we set the ground for single-, double-, and triple-loop learning – getting better at playing the game, challenging the rules of the game, and questioning the nature of the game itself. In part two, "Relating," chapter 4 explores the wide array of global issues facing humanity, considering their complexity and their interrelated nature. While not exhaustive, we feel this integrated overview is essential to set the context for our challenges in reconstructing value. In chapter 5 we consider connections among an organization, its stakeholders, and issues in sustainability, with the aim of becoming fully aware of the operating context and taking an integrative approach to considering the relationships between

complex issues and the multiplicity of stakeholders at play. For part three, "Responding," we examine in chapter 6 the ways that practicing managers make sense of the idea of sustainability, and we develop a picture of the range of "sustainability conversations" at work in different organizational contexts. Chapter 7 explores the relationships between individuals and their organizational context, which is essential for understanding the barriers and enablers for change. We highlight ways that leaders can recognize and address the social dynamics that emerge within an organization undertaking a sustainability-focused vision, to help to create momentum for sustainable change. Part four, "Reinventing," draws on design thinking as a means to "put it all back together" in a creative and innovative manner that aligns with a sustainability-based view of organizations. Chapter 8 expands on ideas in social learning and considers the requisite skills for undertaking multi-sectoral collaborative initiatives. In chapter 9 we invite you to imagine that you own the whole problem: if the future welfare of humanity depended on you, what would you do? Here we expand on the core of our model by describing design criteria for reconstructing value that is embedded, sustainable, and transformational.

## Leadership Skill Building: Process Questions, Leadership Skills, and Skill-Building Exercises

Throughout this book we describe a multitude of relevant concepts and examples in sustainability issues, thinking skills, and learning theory. To help build the necessary skills to put those concepts into practice, we offer a number of learning features that we have developed and use in our own teaching. These begin in chapter 2 and run through chapter 9, and consist of the following elements:

### Process Questions

Moving towards more sustainable practice is a process of transformation, and so leaders for sustainability must build skills in process leadership. The challenges highlighted throughout the book hold questions for process, and so we offer many questions to help managers provoke inquiry in their organizations that will result in effective sustainability conversations.

*Leadership Skills*

Process leadership requires the practicing manager to have a broad array of skills, and so we offer some clearly itemized supporting skills that comprise leadership for sustainability.

## Skill-Building Exercises – Learning Team Dialogues and Assignments

To help build those skills, we supply several skill-building features in the form of five in-class Learning Team Dialogues and three Assignments to be undertaken (these are examples of what has worked well for us; many other examples are possible). The Learning Team Dialogues (in small groups of four to six people) give learners the opportunity to engage with the concepts developed in each chapter and to analyze a real world issue or an organization or sustainability initiative. They are an essential component in building capabilities into reflective practice.

## There Are No Easy Answers – So Good Questions Are Important!

It has been said that real advances depend not only on answering questions but also on questioning answers. Because there are no pat prescriptions for moving to a more sustainable trajectory, we take a *process* perspective. If we can find general agreement on the objectives and boundary conditions for sustainability, we can generate good constructive questions to help take us there. Good questions are the first steps to innovative design. Good questions provide an opening to a process of engagement, to bring people into a collective conversation about what is important and why. Good questions help us to explore possibilities about how we can live better, and allow others who follow to live better, too.

   This is in essence a hopeful book. Not the kind of hope that implies a careless abdication of responsibility to the hand of fate, but rather the hope that comes from the hard work of caring enough for ourselves and for others to pay attention to what is happening, and to question whether what we are doing makes good sense. We believe there are no easy answers to the challenges ahead. But if we equip ourselves with

some very good, well-informed questions, and then approach those questions with a mindset and process for collaborative problem solving, then a more sustainable present and future are within our reach. It is our problem to solve, because we *are* the 7 billion people living on earth today. For those of us who choose to take up that challenge, there are new generations arriving, including our own children, who will be grateful that we did.

# New Questions for Business

The mind and the world jointly make up the mind and the world.

<div align="right">– Hilary Putnam, Pragmatist Philosopher</div>

The problem that is usually being visualised is how capitalism administers existing structures, whereas the relevant problem is how it creates and destroys them.

<div align="right">– Joseph Schumpeter, Economist</div>

## Sustainability = Change

It seems a paradox that when we talk about sustainability, we are talking about change. "To sustain" usually means to keep something going, to maintain the status quo. But undeniable evidence is mounting that just about every system on which our current way of life depends is under deep duress, due to the *un*sustainable rate of our patterns of consumption of the world's resources and the *un*sustainable way that we finance our social and economic development. Global human population has multiplied more than fivefold over the last 150 years, from 1.2 billion people in 1850 to 7 billion in 2011, and it is projected to swell to over 9 billion by mid-century. The growth in global population coincides exactly with our exploitation of fossil fuels; if we remove the labels from the graphs, the population curve and the oil production curve are indistinguishable over that period. Over the past two centuries – a mere blink in geologic earth time – we have been extremely successful

in converting cheap energy into more and more people through advances in agriculture, transportation, housing, and medicine. More people require more power and sustenance, and so population growth in industrial nations is pushing the limits of energy generation, housing, clean water provision, and food production, and altering the climatic balance – the life-giving elements of fire, water, earth, and air. We are confronted with significant challenges in each dimension, and of course they are highly interdependent: energy and water security affect food security; conventional energy generation impacts climate; a change in climate will impact arable land and water availability with consequential effects on human security. The connections are deep and inseparable.

To continue building a prosperous future for humanity, we need to begin to live as though limits matter, which means changing the way that we operate on the planet and in the global economy. The first decade of the twenty-first century witnessed the flatlining in stock market values and living standards across Europe and North America. Arguably, these phenomena were indicative of the beginnings of limits to *economic* growth being experienced in the "old" and "new" worlds that first embraced industrialization. The hard truth about limits is that they make change inevitable: we won't necessarily change because we can, or change because we should, but rather, change because we must, because conditions are changing around us. As in the old saying, "Change is mandatory, suffering is optional," the open question is whether we will proactively navigate towards positive change for our collective well-being or simply carry on with business as usual, hoping for the best until more negative, dramatic change finds us. Either way, a book about sustainability is fundamentally a book about change.

## Leadership for Sustainability

This book is also about leadership in organizations and the leadership skills for moving us towards a more sustainable world. The chief difficulty in relating ideas in sustainability to our daily work life is that sustainability deals with broad issues in society, and our work lives are usually bounded by the goals and the activity of a particular organization. Bridging that society-organization chasm is the primary challenge in leadership for sustainability: bringing global issues into

the conversational life of the organization and transforming the vision, goals, and actions of our organizations to put the world on a more sustainable path. This is no small feat, because our organizations, and our broader systems of value creation and trade, are designed to work based on foundational assumptions that are inherently *un*sustainable. Transformation at the organizational level requires transformation at the societal level – shifts in the assumptions, rules, and governance mechanisms that define the operating ground for business and other organizations.

Leadership for sustainability is therefore necessarily *transforming leadership*. Eminent leadership scholar James MacGregor Burns defined transforming leadership as "a social process for mutual transformation," in which both the formal "leader" and those being "led" can help each other to live better lives: "it raises the level of human conduct and ethical aspiration of both leader and led, and thus has a transforming effect on both."[1] In transforming leadership, there is a pragmatic focus on improving the societal conditions for human flourishing, and the role of leadership is to bring that into focus, to help direct our conversations and actions towards that end. Transforming leadership is not a heroic act on the part of one individual – it is a social process of democratic engagement; and it is not the responsibility of one or a handful of people in formal leadership roles – it is distributed in the way we engage and interact with each other. Throughout this book we define leadership as a process of social engagement, led by constructive conversation, with the goal of altering our unsustainable assumptions and actions and helping us live better lives.

## Organizations and Leaders as Agents for Change

Organizations are powerful forces for change. They constitute the primary structures of our societies and are gathering places for all kinds of resources and concerted action, whether they are for-profit businesses, social enterprises, non-profits, civil society organizations, or governance institutions. Our interest and focus here is on the role of organizations in moving towards greater global sustainability. But for organizations to lead change, they must of course be adept at changing themselves, so we are interested in particular in the role of individual leadership in influencing the directions, decisions, and actions their organizations take.

Leadership for sustainability can happen at both the organizational and individual level, and it is driven by how we think, act, and learn. A critical facet of learning towards sustainability lies in deeply questioning the basic assumptions of our business and institutional structures: understanding as best we can the interconnections that link what we do to the fire, water, earth, and air that sustain us, and to the local and global economies in which we operate. Throughout this book we draw attention to several aspects of leadership for sustainability: how leaders think, how leaders learn, how they help to guide the learning of others, how they conceive of sustainability, and how they lead in building collaboration towards new futures. We focus on leadership as a process of social engagement, the formal organizational leader as reflective practitioner, and the role for the organizational leader in helping to *reconstruct value* – to help collectively redefine what we see as valuable going forward in light of sustainability challenges. But before we can talk about *reconstructing*, we need to think about the "construction of meaning" as an essentially social process – how many of our deeply held "truths" and practices are actually human inventions, which we then treat as our operating reality. We assign value to things by communicating with each other, through all forms of conversation, in an ongoing process of *social construction* of our operating realities.

## Constructing Our Social Reality

It is safe to assert that thinking and action are tightly linked: we act on the basis of our own sense of purpose, ambitions, and aspirations, and we are guided by our views of how the world works (our reality assumptions), and how we think it ought to work (our values assumptions). To begin to shift the ways we act in the world, we must first examine the ways we think. But if the fields of psychology, sociology, economics, and organizational behavior have taught us anything, it is that (1) different people think differently, and (2) our various viewpoints interact to form a social reality, which comprises a set of societal norms, practices, and shared values encoded in law and custom. As individuals, we interact with that social reality, as we perceive it, and often we take that reality as a given – forgetting that much of it was made up by other humans and that we are all complicit in maintaining a shared sense of "how things are." We pull up to a red light and stop. We dress

appropriately for the occasion. We show up at 7:00 p.m. for a university night class. All the while, we are mostly unconscious of the fact that at some point in the past a group of people sat around a table, barn, or fire and decided that red means stop, tennis shorts are not right for a funeral, and a particular building is part of a university. We also agree that a taking a course leads to a diploma and that a diploma is valuable – only because we all "agree to agree" that it is. If we all decide to agree tomorrow that the university's Engineering Building is now a homeless shelter, it could become that overnight. The physical bricks and mortar remain the same, but the social use and identity of the building is transformed. In sociological and management studies, this is known as the *social construction of reality*,[2] and it is centrally important to discussions of sustainability. What this means is that we continuously negotiate the meaning we assign to things – what we believe, what is right, and what is true – in the social and cultural sense.

Physical reality is different from social reality, though often we treat both as given. We cannot simply all agree to agree that a large oak desk is not a heavy object for one person to lift – there is an undeniable physical reality to deal with. But if you were to tip the oak desk in your office on its side and use the legs to hang your jacket, you might get some concerned reactions from your colleagues. There is a physical reality to the desk, and there is a social reality pertaining to the proper use of it. The distinction between physical and social reality is also centrally important to the pursuit of sustainability: we sometimes fail to see, or we forget, that some things are socially constructed imperatives (such as fashion or economic growth), and we treat them as we would a physical reality (such as cold or gravity). In essence, we often socially construct meanings related to objects in our physical reality in ways that serve and support our belief systems, rather than in ways that are ecologically justified.

## Taken-for-Granted Assumptions: Believing Is Seeing

Seeing is believing – or is it? The idea of the "reflexive loop"[3] says that, in fact, the reverse is often true: our beliefs affect what data we take note of in our experiences and thus reinforce our existing opinions. This flips the logic on a widely accepted platitude, suggesting in essence that things need first to be believed in order to be seen. We cannot act

without our beliefs – they are the guiding rules with which we navigate our way through the world. We make judgments, form interpretations, and come to conclusions based on the beliefs we have formed, but often we decide what is right or true based on what we already believe. Often we do not do the difficult work of delving into our beliefs to bring our underlying assumptions to the surface, of examining their validity in light of new or changing evidence, and of understanding how our deeply held beliefs affect our ability to see. In order to examine how our beliefs filter what we see, we need to develop the capacity to think critically, and an important part of thinking critically is bringing what is *subconscious* in our thought to the level of *conscious* realization. Only by challenging our surface understanding of the way things happen is it possible to start to deconstruct the assumptions and meanings that give rise to those beliefs, and thus make it possible to shift them to achieve different outcomes. In chapter 2 we will examine alternative modes of thinking in more detail. Here, we will briefly consider some of the various assumptions in management thinking at the organization level in order to illustrate the connection between our assumptions and actions. We will then outline some general "world views" about the relationship between people, the planet, and the economy, and the implications for sustainability. What we *believe* impacts what we are able to *see*, which affects what we *do*. So we need to examine our beliefs carefully.

## Metaphors for Organizing: Our Images Are Bundles of Assumptions

Gareth Morgan has written extensively about the ways in which our images of organizations influence the ways we think about management and change.[4] These images are made up of bundles of assumptions we carry in our heads about how organizations work, or at least how we think they should work, and they take the form of general metaphors for organizing. For example, if we see organizations as *machines*, we assume that the land, capital, and human resources are independent, separable, and interchangeable parts – cogs in the machine – that all work together for some pre-designed purpose. Management in this view is a mechanistic exercise of planning, control, and incremental improvement, where change is relatively easy – merely an exercise of setting out objectives, plugging in the right cogs, and executing the plan. If instead

we see organizations as *organisms* fighting for survival or symbiosis in an ecosystem of other organizations, we might pay more attention to external contextual factors, and view change as more variable, adaptive, and iterative. If we see them largely as *political systems* of domination and resource control, then we would view managers primarily as political actors, and we would bring issues of power to the foreground when thinking about change.

Morgan describes these and several other metaphors that underpin our major theories and practices for managing in organizations, including organizations as cultures, as brains, as instruments of domination and control, or as processes of flux and transformation, illuminating the strengths and limitations of each. Our mental images are useful for helping us to manage, but they have the power to distort our view as much as they enlighten. In becoming aware of them through reflective practice we can explore them to their fullest potential. Where things become challenging is when you have five people sitting around a planning table who hold five different images of the organization. The "truth" of organizational life lies somewhere in between the perspectives of various individuals, and each underlying assumption we uncover or metaphor we identify results in a different way of understanding physical and social reality. By bringing to the surface the assumptions that drive our actions, we can approach organizational issues and sustainability challenges in a more multidimensional and, hopefully, more creative way. By involving actors outside the organization – customers, suppliers, civil society organizations – further insights may be derived that can help the organization understand its role in the value-creation process and thereby enhance its attractiveness to those stakeholders.

A similar effect occurs when managers think and talk about sustainability. Later in chapters 6 and 7 we will explore some other images – which we call *conceptions of sustainability* – held by practicing managers based on our own research. To first set the ground here, let us explore sustainability as a general concept, as the idea has been described in theory. Organizational researcher Kurt Lewin said in the 1940s, "There is nothing so practical as a good theory,"[5] and quality guru W. Edwards Deming, after a lifetime of studying and improving management practice, wrote, "Without theory, experience has no meaning. Without theory, one has no questions to ask. Hence, without theory, there is no

learning."[6] Simple theory helps us to organize, relate, and test the ideas we encounter in daily life. It helps us to learn.

## Approaching "Sustainability" as a Concept: What Does It Mean?

What do we mean when we talk about "sustainability"? "To sustain" means "to keep going," but the moment we try to bring that definition off the page into our lived experience, questions start to flow from it: Sustain what? Sustain for whom? Is the thing we are trying to sustain of any real value? How do we determine what is valuable and worth keeping, and what should be changed? The term "sustainability" gains moral and philosophical weight as soon as we start to examine it, and it provokes thinking because it is a value-laden idea. It asks us to stop and consider what we believe is important. It asks us to think about how our world ought to be structured and run. It also embodies an implied critique, in that it says "perhaps the way we are doing things now is not the way we should be doing things; failure is either creeping or imminent, and we should consider exploring alternative directions." It is a word that packs all kinds of meaning for moral philosophers, policymakers, business people, activists, and citizens.

### Sustainability as a Contestable Concept

The reason the term contains so much is because sustainability is what is called a *contestable concept*.[7] Art, democracy, liberty, justice – these are all contestable concepts that have a basic first-level meaning based on a core idea (for example, democracy is government of the people, by the people; liberty is freedom from oppression, freedom to exercise one's will; art is creative expression of the human condition). Abraham Lincoln and Mahatma Gandhi refashioned entire societies by reconnecting them with simple core principles at key moments in time; take for example the phrase "All people are created equal." In general, people can find agreement on the first-level meaning because it is so broadly stated. But there is a second-level meaning, where we strive to put the ideas into practice, and this is the ground for practical and political contest over how the ideas are interpreted and implemented. Things get even more interesting at the second level, because it is there that we

are asked to call up and debate our values, what we think is important. Just because an idea provokes debate does not mean it is a contestable concept, since people will debate just about anything. *Essentially contestable concepts* fit three basic criteria:[8] they are "appraisive" in nature, which means they signify and accredit some measure of value; they are internally complex, in that they admit a wide range of competing descriptions of their overall meaning; and they are "open" in character, meaning they allow modification of meaning in the light of changing circumstance. Essentially contestable concepts invoke a big idea and then serve as the arena for the values debate that must inevitably follow. They have a core idea that helps to focus the topic, yet they have sufficient flexibility and vagueness to demand that we interpret and reinterpret their meaning in different contexts and over different time periods. Thus, the United States abolished slavery through a civil war in the middle of the nineteenth century but was still working on civil rights one hundred years later. India overthrew British colonial rule, but partition between India and Pakistan remains a source of regional instability to this day.
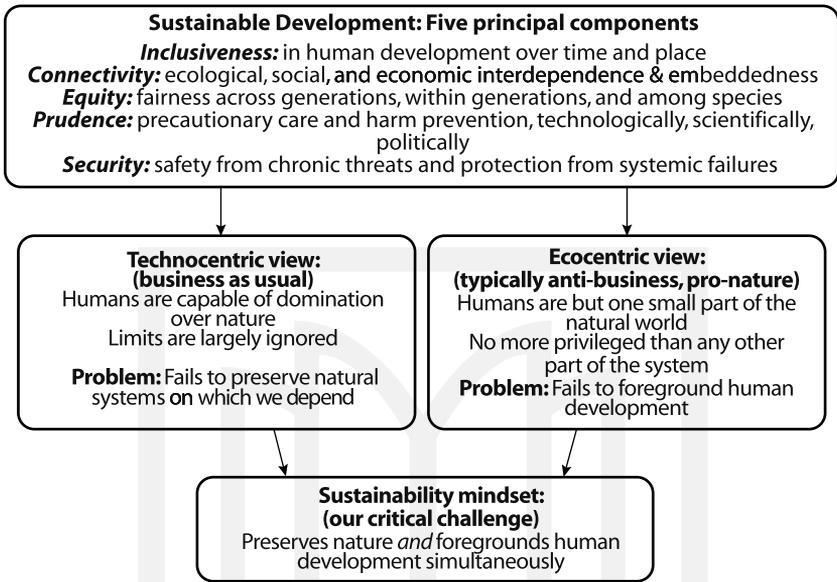
Like democracy, art, or liberty, sustainability is an essentially contestable concept which will inevitably take many decades and many experiments to evolve. It has a generally accepted first meaning: to keep things going in a way that is internally consistent and resistant to collapse. It also has a generally accepted first-level meaning in the realm of business. In an effort to integrate sustainability ideas into the role of business in society, the World Commission on Environment and Development ("the Brundtland Commission") in 1987 offered a definition of "sustainable development" that is still broadly accepted: "development that meets the needs of the present, without compromising the ability of future generations to meet their own needs."[9] In the business world, the Brundtland definition of sustainable development is frequently taken as the starting point for discussion. The task, then, becomes interpreting that first-level definition in various contexts over time. Some critics have questioned the paradoxical nature of the term, arguing that "sustainable" and "development" cancel out each other's ideas – that is, we can't sustain and develop at the same time because development has traditionally meant degrading the natural environment. They argue that the term "sustainable development" or "sustainability in business" is an attempt to co-opt environmental and social

justice agendas into the language and unchallenged objectives of the global economic system; that is, growth for growth's sake (we move quickly to second-level contestation). This critique points out a fundamental clash in basic views of how the world works, which we will explore in a moment, and by striving to merge the "pro-business" and the "environmentalist" or "social justice" perspectives, we can draw focus to the essential challenges of our time. These viewpoints are not entirely mutually exclusive and there is much room for common ground. But the merger does require that we challenge some of our basic operating principles for the planet and the global economy.

## Five Principles of Sustainable Development, Assessed against Three Alternative Mindsets

In the mid-1990s, Thomas Gladwin and colleagues[10] examined a broad range of research and writing on sustainable development in an effort to understand some of the key principles and the differing perspectives regarding sustainability. The conceptual framework they offered is still highly relevant and useful today. They summarized threads of research across multiple disciplines concerned with the distinctions between "technocentric" and "ecocentric" world views, and they proposed a synthesis they termed a "sustaincentric" view, which we will call a *sustainability mindset*. Technocentric and ecocentric ways of perceiving the world are in many ways opposed or antithetical to one another. To assess the pragmatic usefulness of each view, they derived a general description of sustainable development from a broad literature, beginning with the Brundtland Commission report. They deduced five principle components of sustainable development: (1) *inclusiveness*, in reference to human development over time and place; (2) *connectivity*, meaning an embrace of ecological, social, and economic interdependence; (3) *equity*, or fairness across generations, within generations, and among species; (4) *prudence*, calling for precautionary care and harm prevention, technologically, scientifically, and politically; and (5) *security*, or safety from chronic threats and protection from systemic failures. They then examined some key features of the technocentric and ecocentric paradigms and compared their underlying assumptions to the ideal principles of sustainable development. They found each

**Figure 1.1. Developing a Sustainability Mindset through a Synthesis of "Technocentric" and "Ecocentric" Perspectives**

**Sustainable Development: Five principal components**
*Inclusiveness:* in human development over time and place
*Connectivity:* ecological, social, and economic interdependence & embeddedness
*Equity:* fairness across generations, within generations, and among species
*Prudence:* precautionary care and harm prevention, technologically, scientifically, politically
*Security:* safety from chronic threats and protection from systemic failures

**Technocentric view:
(business as usual)**
Humans are capable of domination over nature
Limits are largely ignored

**Problem:** Fails to preserve natural systems on which we depend

**Ecocentric view:
(typically anti-business, pro-nature)**
Humans are but one small part of the natural world
No more privileged than any other part of the system
**Problem:** Fails to foreground human development

**Sustainability mindset:
(our critical challenge)**
Preserves nature *and* foregrounds human development simultaneously

mindset wanting in some respects and proposed a hybrid perspective more closely fitting the notion of sustainable human development. See Figure 1.1 for an overview of the connections, and Box 1.1 for the basic tenets of each perspective.

**BOX 1.1**
BASIC TENETS OF A TECHNOCENTRIC, ECOCENTRIC, AND SUSTAINABILITY MINDSET

*A technocentric mindset: Human dominion over nature*

• The earth is inert and available for us to exploit to human ends.
• The natural world has value only in so far as it can be commoditized and valued monetarily and used instrumentally.

- The earth is resilient and changes slowly enough for us to adapt and control it.
- Actions to mitigate potential, but uncertain, damage should be assessed in terms of near-term cost-benefit efficiency.
- Natural capital is highly substitutable because of human ingenuity.
- The economy is a closed system separate from nature, where resources are priced through markets, and waste is largely ignored, except where legislation demands.
- The primary economic objective is to allocate resources to meet human wants (not necessarily needs).
- Growth is good, more growth is better.

### An ecocentric mindset: Humans are just one element of the natural world

- The earth is alive, sensitive to disturbance, and sacred.
- Humans are but one thread in the great web of life, no more privileged than any other part of the system.
- All things are fundamentally interconnected and interdependent.
- Intrinsic value also exists outside of humanity in non-human nature.
- Nature is fragile and easily stressed.
- Population growth is has already exceeded the planet's carrying capacity.
- Human capacity to generate and wisely use adaptive technologies is limited, and our judgment is flawed by the bias towards short-term gain versus future survival.
- Resilience depends on small, distributed systems for energy and food versus globalized, densely interconnected value chains.
- Natural capital is only minimally substitutable through human ingenuity.
- Growth must be contained within the regenerative capacity of natural systems.
- The primary economic objective is to maintain steady-state on inputs and outputs, while optimizing human security, material sufficiency, and equality with other elements within the biosphere.
- Collective well-being overrides market forces, on the assumption that not everything of value has a price and can be fairly traded because markets, while useful, are imperfect.

*A sustainability mindset: Preserving nature and advancing human development*

- The earth is humanity's home and must be well managed to ensure human survival.
- Economic and social systems are embedded within the natural biosphere.
- Birth, growth and maturity, and death and renewal comprise the natural cycle of living systems, and renewal depends on system resilience.
- Humans are immersed in the biosphere in organic and ecological terms, but can transcend natural elements in intellectual terms.
- Ethics apply to the good of human and non-human nature and embrace values of political and cultural human rights.
- Justice is valued between and within generations.
- Material and energy extraction must be limited to prevent the decline of natural systems.
- Waste emissions should not exceed natural assimilative capacity.
- Ecosystem biodiversity must be protected from human destruction.
- Population growth must be curbed.
- Consumption levels in developed countries must be reduced.
- Markets are useful resource allocation mechanisms, but must be subject to policy constraints for sustainable levels of consumption and waste.

*Adapted from T.N. Gladwin, J.J. Kennelly, and T-S. Krause, "Shifting Paradigms for Sustainable Development: Implications for Management Theory and Research," Academy of Management Review 20 (1995): 874–907.*

## Technocentric and Ecocentric Perspectives: Technocrats versus Tree-Huggers

For Gladwin and colleagues, the motivation for constructing a picture of these three world views was the concern that management thinking, and indeed humankind, had become conceptually detached from the

rest of the natural world, much to our peril. This dissociation was a result of a long-entrenched technocentric world view, rooted in seventeenth-century Enlightenment thinking and a view of human dominion over nature. A technocentric view holds that the earth is primarily a limitless store of "natural resources" to be exploited to human ends, and that humans can and should exercise full dominion over nature. In contrast, an ecocentric world view draws from some Eastern philosophies, indigenous teachings, and ecological movements that reject the idea of human dominion over nature. An ecocentric paradigm holds that humans are but one element in the biosphere, fully subject to its laws and limits, and are no more privileged than any other part of the system.

### *Weighing Technocentrism and Ecocentrism against the Principles of Sustainable Development*

Judged against the ideal principles of sustainable development – inclusiveness, connectivity, equity, prudence, and security – Gladwin and colleagues concluded that both the technocentric and ecocentric views fall short. Technocentrism represses the fundamental connectivity of life-support systems, largely ignores questions of equity within and across generations and among species, and risks the future viability of humanity by disregarding natural constraints in a precautionary manner. On the other hand, ecocentrism asserts the holistic, interdependent nature of the biosphere, but fails to give any weight to the role of human intellect in managing the balance – while absolute dominion over nature is an overly arrogant proposition, humans must exercise some dominion over nature (i.e., cultivating food, water, shelter) for pure survival. Ecocentrism, in holding ecological sustainability as the overarching objective, discounts the negative effects that social and economic unsustainability have on ecological systems – if people are hungry, cold, or otherwise desperate, they will quickly despoil nature to survive in the short term. In short, technocentrism fails to preserve nature and ecocentrism fails to adequately foreground human development, so both are inconsistent with the notion of sustainable human development – inclusive, connected, equitable, prudent, and secure.

### *A Sustainability Mindset: Not a Compromise, but a Synthesis*

A *sustainability mindset* is more than just a pragmatic compromise between technocentrism and ecocentrism; rather, it is a synthesis, drawing from each the tenets most consistent with principles of sustainable development. Drawn from ideas of responsible stewardship present in most major religions, from ecological economics, and from complexity thinking, a sustainability mindset holds that the key challenge is in advancing human development in areas such as prosperity, justice, and human rights, while at the same time preserving nature and respecting the regenerative limits of the biosphere. The primary "sustainability" challenge to managers in practice is to hold human development as a goal, but to do so within the carrying capacity of the earth. In practice, this is a radical concept: business systems are built almost entirely on a technocentric paradigm, and evidence is mounting that the contradictions and failures of that world view are working to undermine its foundation and stability – most acutely in those parts of the world that first embraced industrialization. Many civil society stakeholder groups, to whom managers are increasingly compelled to respond as we will see in chapters 4 and 5, advocate an ecocentric view. The chasm between the two views of the world is significant, and both have shortcomings when assessed against broad principles for sustainable development. While they may not consider the challenge in these terms, it may be argued that the best that practicing managers can do is to work to implement something resembling a sustainability mindset in their organizations, to hold the resulting paradox, and seek creative solutions that transcend otherwise limiting world views.

### Reconstructing Value that Is Embedded, Sustainable, and Transformational

In this book we develop a framework for reconstructing value: a shared human process for redefining what we value and how we can realize it. At the heart of the framework are three design principles to guide the journey: embracing the *embeddedness* of human society in the biosphere; incorporating a *sustainability mindset* as described above; and making

a commitment to *transformation* by engaging in a highly participative process to restructure our policies and institutions. Embeddedness means that we acknowledge a hierarchically nested perspective of environment-society-economy, the elements of the triple bottom line first popularized by John Elkington.[11] It has become commonplace for business firms to frame their objectives around elements of people-planet-profit, often depicted as a Venn diagram of three interlocking circles, with areas of overlap. This is a social construction of physical reality that serves our current belief system but is inconsistent with ecological facts. The facets of the triple bottom line are not overlapping realms, but are embedded one within the other – as concentric circles – with economy inside society, which is wholly and practically located inside the planetary domain.[12] This is not to take an ecocentric perspective, but the logic is straightforward: human society exists entirely within the earth's biosphere (even the international space station was constructed from and is sustained by earthly materials and some solar power), and the complex beast we call "the economy," our system of value creation and commercial exchange, is wholly a human creation, meant to meet human needs. The planet can carry on without human society (it did for a very long time), and society can exist outside of commercial trade and the financial system, but it does not work the other way around: we cannot run a business in a society that fails, and we cannot feed and operate a society in a dead ecosystem. Adopting an embedded view means that we accept the basic logic that environment-society-economy are nested systems, and that limits are real. The implications of this are not trivial: it demands that we critically question assumptions of perpetual growth based on linear models of resource extraction, goods manufacture, consumption, and waste disposal, and that we question the things that are externalized in our economic equations and business models. It demands that we seek *transformational* outcomes: results that come from truly integrating business practice with the social and environmental elements of the operating context, and that shift our ideals of constructing value – deciding what we think is important. It means seeking circular models for natural resource use and economic growth where net consumption does not increase and yet the quality of life for 9 billion people is advanced. This is perhaps the central challenge for business – how to decouple economic and social prosperity from natural resource extraction, an idea we will revisit in chapter 9.

## The Challenge of Reflective Practice

In order to begin the work of *reconstructing value* so that humanity can develop and thrive within the carrying capacity of the biosphere, leaders and managers need to develop a capacity for reflection, and they need to build reflective practice into their daily lives. Henry Mintzberg emphasizes the central place for reflection in management practice and management skills development:[13] Reflection means thinking about experience to make sense of things, but it is neither idle dreaming nor casual musing. It means wondering, probing, analyzing (breaking down), and synthesizing (putting together) elements of what has transpired against our theories of what we think could or should have happened, in order to understand more deeply the connections and interplay among things. Reflection is hard work. It requires delving into what is elemental in a complex situation, considering things from multiple perspectives, assessing the options against our values and operating constraints, and putting things together to form a plan of action. Reflective practice is when managers do that routinely, and there are many blocks to that happening.

A key challenge to routine reflective practice is the time-constrained nature of day-to-day activity. Organizational life is often so fast paced that leaders and managers get caught in the trap of simply keeping up with current efforts rather than pausing to envision how things might be shifted or improved. However, perhaps an even more significant issue is the bias against reflection and the preference for quick action that organizations impose on their leaders, which is similarly emphasized in business school education.[14] Delaying action to reflect is often viewed as a sign of weakness in organizational leaders, rather than acknowledging how reflection-in-action[15] allows for a process of questioning and self-exploration that enables managers to critically identify their own and others assumptions and beliefs and to broaden their perspective to consider new opportunities. The biggest barrier to reflective practice is often not a lack of time but the disregard that organizational managers have for uncertainty, viewing it in a negative light, and taking great pains to avoid wading into the messiness of such contemplation. However, reflection is an essential part of the learning process. It is an active undertaking that requires a rigorous approach to inquiry, and we cannot assume that practicing managers

will have the intuitive capacity for reflection without explicitly working to develop these skills. In order to reconstruct value we need not only to make time for reflection, but also to value and embrace the uncertainty and confusion that will arise once we begin to take things apart. The ability to achieve a high comfort level with uncertainty and to approach critical reflection with confidence are both essential aspects of leadership for sustainability. The practice of reflective thinking is essential in managing organizations to support sustainability outcomes, as it allows us to challenge our underlying assumptions so that "we can develop more collaborative, responsible and ethical ways of managing organizations."[16]

## Reconstructing Value: New Questions for Business

Our business schools are traditionally segmented to build specialized knowledge in specific disciplines, such as marketing, organizational behavior, and finance. Each discipline offers a slate of courses to answer questions particular to that perspective of the organization. Traditional business school questions (and their associated disciplines) include:

- What is our value proposition? How do we compete and win in the market? (Strategy)
- How do we find or create a market for our product? (Marketing)
- What is the most efficient procurement/production/service/delivery method? (Operations and Supply Chain Management)
- How do we motivate and manage our workforce (Human Resource Management/Organizational Behavior)
- How do we structure our assets and manage our money? (Finance/Accounting)

These questions are important, and the tools and methods imparted in each discipline are helpful in building essential skills for managers. However, for the most part, these disciplines describe the optimum way to operate within the rules of the current game of business, and the basic game of commerce was designed over centuries when natural limits really did not matter. Rather less frequently do they embrace questions of entrepreneurialism: How do we creatively destroy entire business sectors and replace them with more useful ones? When do oil

companies become renewable energy companies? When does private transportation become replaced by public transit? Harvard University admitted its first business degree students in 1908, fully adopted the case method in 1920, and business schools are still using many of the thinking tools and teaching methods that were developed from the 1950s to the 1980s. The game is changing, and society needs the management profession not only to adapt, but to lead in a new and more sustainable direction. Even Harvard's Michael Porter, who more than any management scholar has advocated the principles of competitive strategy that have guided the past forty years of management education and practice, is now exhorting us to think differently about value creation:

> A big part of the problem lies with companies themselves, which remain trapped in an outdated approach to value creation that has emerged over the past few decades. They continue to view value creation narrowly, optimizing short-term financial performance in a bubble while missing the most important customer needs and ignoring the broader influences that determine their longer-term success. How else could companies overlook the well-being of their customers, the depletion of natural resources vital to their businesses, the viability of key suppliers, or the economic distress of the communities in which they produce and sell? ... The presumed trade-offs between economic efficiency and social progress have been institutionalized in decades of policy choices.[17]

A changing game means new ideas of value creation, and new questions for management and management education. These questions flow from an embedded, sustainable, and transformational view of human, social, and natural systems. They are not contained in one discipline or course but stretch across all disciplines. For example, how can we maximize the societal value we create and minimize the negative societal effects of our actions? How will we create value for a broad set of stakeholders? How can we ensure that benefits and harms are fairly distributed? How can we create a just world – not only for moral reasons but for the sake of peace and security? How can we ensure that future generations will have a habitable, thriving planet? How can we be not only eco-efficient, but eco-effective? How can we fully cost our inputs and outputs? How will our natural support systems cope

**Figure 1.2. The Process of Reconstructing Value: Reflective Practice Skills for Sustainability**
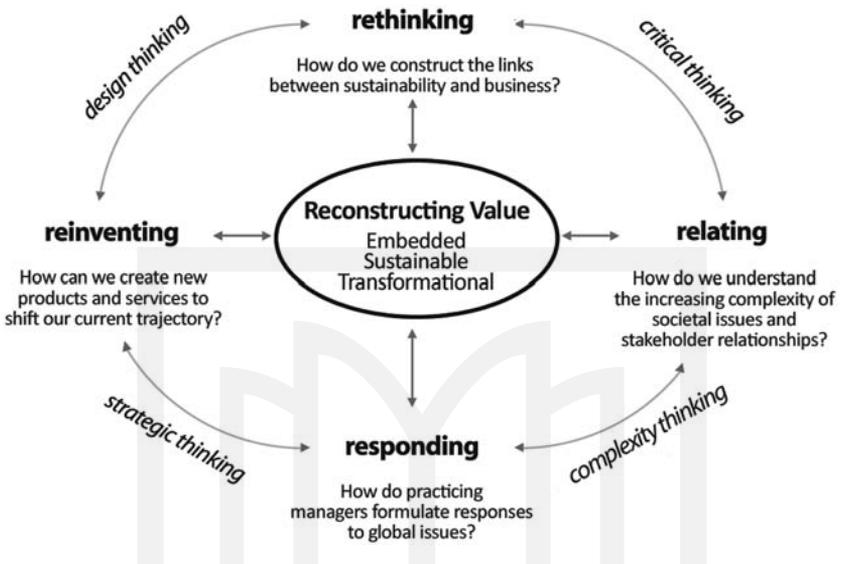


with an exponentially growing population? How will we transform our current trajectory to a path that is more sustainable? These questions require a fully considered, fully integrated approach across not only management disciplines, but also government, business, and civil society sectors. They will require that managers become highly adept as reflective practitioners.

## The Process of Reconstructing Value: Reflective Practice Skills for Sustainability

In this book we work to build capacity for reflective practice, so that leaders can help to reconstruct our ideas of value in ways that are *sustainable*, with economy *embedded* in society and society embedded in nature, working towards *transformational* outcomes. We define reconstructing value as a process of the "4R's" of reflective practice: *rethinking*, *relating*, *responding*, and *reinventing*. Figure 1.2 presents our model of reconstructing value that will serve as the roadmap for this book.

The 4R's represent four phases of value reconstruction that are sequential, though overlapping and not mutually exclusive, and endlessly iterative, so we show those as connected in a circular loop. *Rethinking* involves examining and digging to the often unstated, underlying assumptions we hold about our actions in the world – what we assume about how the world works and how we think it should work. *Relating* means considering the number and kind of connections between ourselves and others across geographic regions and generations, or connections between the effects of human activity and its natural context, or those between a business and its stakeholders. *Responding* deals with how we formulate strategies and plans for action built on the rethinking and relating work. And *reinventing* entails designing new forms of relationships and new actions aimed at producing novel outcomes to shift our current trajectory. These outcomes are transformational in the sense that they help us to understand a reconstructed definition of value, as well as how we might actually put it into practice.

Underlying the phases are four types of thinking we see as vital to advancing on the journey: critical thinking, complexity thinking, strategic thinking, and design thinking. Each mode of thinking offers unique insights, and we will explore these in more detail in chapter 2. All modes of thinking are always in play, but one or another comes to the forefront depending on which "R" is in focus. Reflective practice is the essential skill that underpins all of these phases. It means regularly stepping back to consider the meaning of what has transpired in order to illuminate assumptions, think about connections, and plan for future actions. Without taking time to do this on a regular basis, organizational outcomes are compromised because managers and leaders fall into a rut of acting that may be increasingly efficient, but may not actually be enhancing organization effectiveness, and also may be compromising societal outcomes. We begin in chapter 2 with an in-depth review of the 4R's, along with the associated modes of thinking in each phase.