

CHAPTER 1

The Power of Vision: Worldviews Shape Progress

"What we do in the world flows from how we interpret the world."

—Charles Birch¹

Worldviews are powerful, and shifts in them can be seismic. Consider what happened to Dave Bookless, a young British man on vacation with his wife Anne in 1990. The couple, lovers of natural beauty, chose to spend two weeks on the Isles of Scilly in the United Kingdom, where they marveled at the stunning seascapes, imposing cliffs, and unique wildlife. Dave and Anne were also committed Anglicans, and they took pleasure in reflecting during their vacation on verses from Genesis (the first book of the Hebrew scriptures and the Christian bible), in which God creates the seas and the land, plants and insects, animals and humans, with each day of creation culminating in the refrain, "And God saw that it was good." To Dave and Anne, Scilly was indeed very good.²

The islands, in the Atlantic Ocean southwest of Cornwall, are remote and rustic, and Dave and Anne had hauled in their provisions for the two weeks. As the days passed, Dave became aware of the refuse they were generating as they consumed food, paper towels, soap, and other items. By the end of their stay, he was astounded at the number of garbage bags he and Anne had filled. But the real shock came when he learned that the island had no provision for trash pickup: they, like other vacationers to Scilly, would have to dump their refuse over a cliff. For Dave, this was "a Damascus road experience," a reference to the religious conversion of Saul of Tarsus, the

tormentor of early Christians who, while traveling to Damascus, was struck from his horse as a voice challenged him, "Saul, Saul, why do you persecute me?"³

Dave is a prayerful man, and he, too, sensed that God was speaking to him after he had tossed away his vacation rubbish. The voice—not audible, but deeply real to him nonetheless—was clear: "How do you think I feel about what you're doing to my world?" In that experience, Dave's view of reality and of his place in it changed forever, as a strong commitment to environmentalism flowered to complement his deep faith. He went on to become an Anglican priest, and his ministry has always included an environmental dimension. Today, he is executive director of the U.K. branch of A Rocha, a Christian conservation group operating in 15 countries worldwide.⁴

Dave's new orientation constituted nothing less than a shift in worldview—essentially, the assumptions people hold about the world and how it works, and one of the most influential determinants of one's priorities, politics, and lifestyle choices. Worldviews tell us what matters and what does not, what is more important and what is less so.⁵ They are constructed from the answers we give to the greatest mysteries of our lives: Who am I? Why am I here? What is my relation to you and to the world around me? Often operating at a subconscious level, worldviews help people frame, sort, and accept or discard the barrage of data and information that comes at every human being every hour of the day.

Often, our worldview narrative is shared society-wide, with assumptions and beliefs that guide the collective life of whole peoples.⁶ (See Sidebar 1-1.) Imagine Dave Bookless' experience being shared not just by his wife Anne, but by his entire hometown, or even by all Britons. And imagine that all were as deeply affected as Dave was. Such a shared experience might become a new thread in Britain's national narrative. All Britons might awaken to the amount of trash that they, individually and as a country, are generating. Throwing things away—a simple, daily act that most of us do reflexively—might become offensive, even sinful. A world without waste, perhaps never envisioned or dismissed as a utopian dream, might now become a

SIDEBAR 1-1. Judeo-Christian Worldviews and the Environment

A landmark 1967 essay by historian Lynn White asserted that the Judeo-Christian mandates to "subdue the Earth" and to "be fruitful and multiply" set the philosophical foundation for environmentally destructive industrial development in the West. The verses, he argued, created a worldview among Jews and Christians in which the natural world exists to serve humans.

The claim of Judeo-Christian culpability is controversial, however. It has been strongly criticized by many religious scholars, not least because White's argument is founded on just a few lines of scripture. Some critics of White note that a more complete reading of the Hebrew and Christian scriptures produces a much more nuanced understanding of the environmental perspective of these faith traditions. Others argue that even if White was on the mark, the evolving human understanding of sacred scriptures means that new interpretations of ancient verses—including environmental interpretations—are possible.

The critique of Judaism and Christianity, in turn, shaped the worldview of a generation of western environmentalists that religion is the problem, and that religious constituencies should be shunned in environmental work. But Sierra Club Executive Director Carl Pope sees this as a great mistake: Environmentalists have "made no more profound error than to misunderstand the mission of religion and the churches in preserving the Creation," Pope says. And he notes that White himself looked to religion for help, asserting that it would need to be part of the solution to the growing environmental crisis. Indeed, White ended the essay by suggesting that St. Francis of Assisi, the Tuscan lover of nature and the poor, become the patron saint of ecologists.

Source: See Endnote 6 for Chapter 1.

goal. Like the unseen rudder on a great ship, worldviews have the power to steer whole societies in new directions.

Building sustainable societies is not simply about changing poli-

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cies and technologies, important as these are. Sustainability requires a new understanding of our world and our place in it, a new appreciation of our relationship to nature and to a global community of human beings. It requires a different worldview. well...

The Modern Lens

Worldviews are shaped in part by the major challenges facing a country, community, or tribe. Historian of religions Huston Smith observes that human societies have faced three major kinds of societal challenges: obtaining food and shelter for survival (what he calls the nature problem); getting along with each other (the social problem), and relating to the universe at large (the religious problem). All three exist in any society, but their relative importance changes over time. Whether the nature, social, or religious problem dominates a group's outlook will affect how its people think about progress.⁷

The 20th century notion of progress was heavily shaped by the nature problem, and by our scientific response to it, which in turn emerged from the European Enlightenment of the 18th century. For Enlightenment thinkers, the world was like a machine: it was composed of interlocking parts that could be observed, analyzed, and even manipulated. Study the parts and tinker with them using the scientific method (repeatable experiments that allow inquisitive people to test ideas about how things work), and the world becomes far more knowable—and controllable—than our ancestors had ever believed. The Enlightenment gave Europeans and, later, people virtually everywhere, a sense that they could master nature, a greatly liberating revelation after eons of human suffering at the hands of plagues, famines, earthquakes, cyclones, and other wildcards of nature.

This sense of mastery of the physical world has given science a privileged place in human affairs. Indeed, the 20th century German philosopher Rudolf Carnap once wrote that "there is no question whose answer is in principle unattainable by science."⁸ Many policymakers have agreed. Indian Prime Minister Jawarhalal Nehru asserted in a speech in 1960, "It is science alone that can solve the problems of hunger and poverty, of insanitation and illiteracy.... The future belongs to science, and to those who make friends with science."⁹

J. Gordon
G. Smith
C. Sagan

This confidence articulated the optimism of the time: progress, it seemed, would be largely a scientific endeavor.

But the Enlightenment worldview shaped human life well beyond science. It also made major contributions to how humans relate to each other—Huston Smith's "social problem." Confucian scholar Tu Weiming, a constructive critic of the Enlightenment worldview, nevertheless gives it credit for spreading values of liberty, equality, dignity of the individual, privacy, representative government, and due process of law.¹⁰ These, he observes, helped create the dominant institutions of our day, including industrial capitalism, market economies, democratic governance, mass communications, research universities, bureaucracy, and professional organizations. These values and institutions, combined with the scientific power of the Enlightenment worldview, made it "the most dynamic and transformative ideology in human history," Tu concludes.¹¹

On the other hand, the Enlightenment's contributions to the religious problem—how we relate to the universe—were minimal and largely derivative of its scientific advances. For many thinkers in the past three centuries, the advances of science shrank the spiritual realm of human experience considerably, to the point that the German philosopher Friedrich Nietzsche could speak of the "death" of God. Religion continued to exist, of course, and great theologians and religious thinkers have emerged in the past three centuries. But because the human relationship with the universe appeared to be explainable as a set of mechanical interactions, spiritual questions seemed increasingly irrelevant for societies dominated by the Enlightenment view of science.

The scientific worldview of the Enlightenment remains the principle guiding light for most industrial societies. "We mark our progress and project our future largely according to the machines we make and the factual discoveries we total up," notes religious writer Thomas Moore. "Information, research, evidence, reliability—these are the measures of our intellectual life. Like our Enlightenment ancestors, we don't trust the reality of a thing unless we can kick it and measure it. We hope for a perfected world that we will fully understand and control."¹²

Casting Shadows over Enlightenment

But many people today question the power of mechanistic science to explain the world. Many also question the value of today's increasingly extreme expressions of individualism, consumerism, and other perversions of Enlightenment values. The growing uneasiness with some aspects of the Enlightenment worldview may be laying the groundwork for an alternative way of understanding the world.

Regarding scientific endeavors, the critique is not that science is prone to technical error, but that manipulating small pieces of a machine-like physical universe causes us to lose sight of the big picture, with serious consequences. Consider, for example, traditional and scientific views of nitrogen, an important plant nutrient. Farmers for millennia supplied nitrogen to plants by applying animal manure to soils. But in the 20th century, scientists learned to isolate the element from ammonia and manufacture fertilizer, which farmers could easily apply to soils in huge quantities. The scientific advance greatly increased the fertility of crops and was one of the reasons for the huge increase in food production in the 20th century.

But while nitrogen molecules are the same whether delivered via manure or in the form of chemical fertilizer, the method of delivery makes a difference. In manure, nitrogen is bound up with organic matter, which helps keep the nutrient from washing away. By contrast, fertilizer is typically applied loose to cropland and is free to wash into rivers, then oceans, where it contributes to the creation of "dead zones" of depleted oxygen where no fish can live. Some of the dead zones are huge—one at the mouth of the Mississippi is larger than the U.S. state of New Jersey—and are a major aquatic disruption worldwide, having doubled in number since 1990.¹³

The mistake with our use of fertilizer and a host of other technologies of modern science, notes Indian physicist and activist Vandana Shiva, is that we assume that understanding parts of a system, such as molecules of nitrogen, means that we understand the whole. Separability allows us to abstract knowledge from its original context, which oversimplifies our more dynamic understanding of how the world works.¹⁴ And when economics is married to this reductionist scientific model, the consequences are profound: "...a forest

is reduced to commercial wood, and wood is reduced to cellulose fibre for the pulp and paper industry," Shiva writes.¹⁵ Economic productivity becomes an overriding value, even if it reduces a forest's capacity to circulate water through a bioregion, or its ability to provide for a diversity of other species. "In this way, reductionist science is at the root of the growing ecological crisis, because it entails a transformation of nature such that its organic processes...and regenerative capacities are destroyed," Shiva argues.¹⁶

Shiva and others contrast this predominant reductionist science with the science of traditional (indigenous) knowledge, which tends to be holistic in its approach. It is an organic, rather than mechanistic, understanding of nature, where "concepts of order and power were based on interconnectedness and reciprocity" rather than on separability and manipulability.¹⁷ Traditional knowledge is competitive in terms of its capacity to produce robust science, notes Shiva, but its rules and mode of operating are entirely different from that of modern science.

Indeed, more and more observers are taking a new look at indigenous forms of knowledge and find that these have their own explanatory power—a power that is sometimes rooted in myth and in spiritual outlooks and practices. Carol Jorgensen, director of the office of Indian Affairs at the U.S. Environmental Protection Agency, notes that native peoples of the Americas carry an extensive and powerful base of knowledge of how the world works, which is passed from generation to generation in the form of stories. "This knowledge is vast, tested and peer-reviewed," she says, meaning that it is judged for its truthfulness over time by other members of the tribe. "The only difference from modern science is that it is passed down orally, rather than published," she says.¹⁸ These knowledge systems are often viewed as superstitious beliefs by modern science, especially when they are represented in the form of ritual, myth, or other spiritually oriented practices.¹⁹

inter-subjective
testability

"Too Much of A Good Thing"

Meanwhile, some of the social values emerging from the Enlightenment have been transformed into handicaps, observes the Confucian scholar Tu Weiming. In modern societies flush with freedom

and prosperity, he notes, progress has degenerated into inequality, reason into self-interest, and individualism into greed. His conclusions may be broadly shared. Australian public health researcher Richard Eckersley finds that surveyed Australians increasingly express concern about a lack of public spiritedness and an increase in greed in their country, and they blame "too much of a good thing"—too much consumption or individualism, or excessive dependence on markets for solutions to societal problems.²⁰ Economists and policymakers, for example, justify the yawning gap between CEO and worker pay because a market indifferent to ethics has determined what executives and wage employees are worth, no matter the impact on inequality. Advertisers seem to convert St. Thomas Aquinas' seven deadly sins—pride, envy, avarice, wrath, gluttony, sloth, and lust—into virtues. And people in general seem to confuse individualism with self-centeredness and instant gratification.

Changing Worldviews

Many of the elements of the Enlightenment heritage, which is now nearly global in its reach, will be needed to build sustainable societies. Clearly, science is indispensable. Feeding a world of nine billion people and providing them with dignified levels of health care, education, housing, transportation, and employment is inconceivable without the power of science and technology. And Enlightenment values of individualism and market economics are too important to just toss aside. But it may be time to rethink the Enlightenment worldview, as Dr. Tu argues, amending it so that it equips societies to deal effectively with modern environmental and social challenges.²¹ Indeed, both modern science and our social and economic values will likely flourish best in the 21st century if they answer to a new and higher standard, a broadly agreed set of ethics.

Fortunately, worldviews can evolve, and when they do religion is often a stimulus. Cultural historian Thomas Berry sees religion—along with education, business, and government—as a major source of society-wide change in the world, while psychologists see religion as one of four key sources of individual behavior change. Think about the influence of religion in societal transformations of the last

few decades. Archbishop Desmond Tutu and religious people from around the world helped frame apartheid in South Africa as a moral issue, and used investment policies and moral suasion to work for its peaceful overthrow. Religious groups heavily influenced the Jubilee 2000 initiative to reduce developing country debt, and in the process reframed global thinking about debt. Infant baby formula, the high-tech way to feed infants in the 1960s, was reframed as a source of infant malnutrition in the 1970s, thanks in large part to pressure from religious people.²² The power of religion to tackle great moral issues is clear, and clearly applicable to the environmental and social crises of the 21st century.

The courage Dave Bookless showed in changing his worldview will need to be replicated across whole societies if a worldview supporting sustainability is to be created. Citizens and leaders will need to overturn many of the assumptions about how we live, from what constitutes a normal diet or a normal way to get to work, to how our communities deal with poverty. A successful revamping of our societal worldviews will create a new view of progress rooted in holism and relationship. In the process, we may wonder how we ever came to embrace some of the pillars of 20th century progress. The more questionable ones assert that:

- the sole purpose of an economy is to generate wealth
- collecting material goods is the major goal of life
- waste is inevitable in a prosperous society
- mass poverty, while regrettable, is an unavoidable part of life
- the environment is an afterthought to the economy
- species and ecosystems are valuable for economic and aesthetic reasons, but do not have innate value
- ethics plays a negligible role in defining progress.

Overturing all of these "truths" will be central to building sustainable societies. Most are also of great interest to faith traditions worldwide. The looming question is whether we can look at the world in imaginatively new ways that help us create genuine human progress for the 21st century.

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