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CHAPTER 4

The Challenge of Sustainable Lifestyles

Tim Jackson

In a small apartment in the sprawling suburbs of Mumbai, the financial capital of India, 35-year-old George Varkey wakes at dawn to the sound of his newborn baby's uneven breathing. Already the apartment is hot and humid, the air stirred rather than cooled by small electric fans. His wife, Binnie, is preparing breakfast. His elderly parents, four-year-old son, and younger brother are all still in bed. George is keen to be ready early. Today a news team from the BBC in London is coming to visit.[1]

George's apartment has three rooms and a tiny kitchen. The modern apartment block has running water and electric power. There is a small fridge in the kitchen and a TV in every other room. The family's latest acquisition is a DVD player. Outside is George's Suzuki sedan, essential to his small advertising business. He takes home 55,000 rupees (a little under $1,200) a month. Together with his brother's earnings as a mechanic and his wife's part-time nursing, the family lives reasonably well on just over 1 million rupees ($24,000) a year, well above the average household income in India of $3,000 a year.[2]

George and his family are part of a rapidly growing consumer market—India's "bird of gold." In the last two decades, household income has roughly doubled. In the next two decades, average incomes are expected to triple. By 2025 India will be the fifth largest consumer market in the world, surpassing even Germany in terms of overall spending. On a per capita basis, however, India will still be poor. Each person will still spend on average less than 50,000 rupees, a little over $1,000, a year. Yet in only 20 years the share of the population classified as "deprived" will be more than halved—from 54 percent today to 22 percent by 2025. And this is in spite of the fact that by then India will nearly have passed China to become the most populous nation on Earth.[3]

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Someone who might benefit from this economic "miracle" is 26-year-old Vidya Shedge, another participant in the BBC program. Vidya lives with 10 members of her family in a single room in the considerably poorer outskirts of Mumbai. There is no running water, no fridge, and no DVD player. But they do now have electricity—enough to burn three incandescent lightbulbs and a couple of fans during the hottest part of the day. Vidya's ambition is to save enough from her 7,500 rupees ($160) a month job in a bank to afford a car. She, too, is looking forward to her visit from the BBC. They want to talk to her about "carbon footprints."

Perhaps surprisingly, both George and Vidya already know something about climate change. They understand that human activities are responsible for global warming. George has even discussed what his household can do to reduce their carbon emissions. Every room in the apartment has energy-efficient lightbulbs. A little more surprisingly, and in spite of believing that the industrial world must lead the way, both George and Vidya are relatively optimistic that something can be done to halt climate change.

A recent international survey confirms these counterintuitive findings. In June 2007 the HSBC Bank published a Climate Confidence Index. People in India showed the highest level of concern about climate change—60 percent of respondents placed it at the top of their list of concerns—the highest commitment to change (alongside Brazil), and the highest level of optimism that society will solve this problem. Skepticism and intransigence, it seems, are mainly the domain of industrial nations. The United States and the United Kingdom scored lowest on commitment. France and the United Kingdom scored lowest on optimism. India's optimism in finding solutions is driven in particular by the younger age groups. A whole new generation of Indians see hope in the future.[4]

Justifying that hope will not be easy. For George's family, life has clearly improved since his parents' generation. And yet his standard of living—measured in conventional terms—is modest at best. Vidya's family has a massive hill to climb. Eleven people living in one small room with a combined income of $16 a day is a level of poverty long consigned to history in the West. So how is it going to be possible for George, Vidya, 1 billion other Indians, and great numbers of Chinese (not to mention people in Africa, Latin America, and the rest of Southeast Asia) to achieve the standard of living taken for granted in the United States—and still "solve the problem" of climate change?

How can a world of finite resources and fragile environmental constraints possibly support the expectations of 9 billion people in 2050 to live the lifestyle exemplified for so long by the affluent West? That is the challenge that guides and frames this chapter.[5]

The Math of Sustainability

Broadly speaking, the impact of human society on the environment is determined by the number of people on the planet and the way in which they live. The math of the relationship between lifestyle and environment is pretty straightforward. It was set out several decades ago by Paul Ehrlich of Stanford University and has been explored in detail in many other places since. In essence, the lesson is simple. Reducing the overall impact that people have on the environment can happen in only a limited number of ways: changing lifestyles, improving the efficiency of technology, or reducing the number of people on the planet.[6]

The question of population is clearly critical. Population is one of the factors that "scales" humanity's impact on the planet.

Another is the expectations and aspirations of the increasing population. This chapter focuses primarily on the latter. But a simple example based on George and Vidya's carbon footprints helps illustrate the relationship.

In George's household, the carbon footprint is around 2.7 tons of carbon dioxide (tCO_2) per person. In Vidya's, it is less than a fifth of this, under 0.5 tCO_2 per person. (The average carbon footprint in India is 1 tCO_2 per person.) The difference is mainly due to the different level and pattern of consumption in the two households, since the efficiency of technology providing goods and services is pretty much the same. Basically, George's household enjoys a much higher standard of living in conventional terms. If India's 1 billion people all lived as George does now, that country would have moved from fifth place in the list of carbon emitters in 2004 to third, below only the United States and China. (See Table 4–1.) Their personal carbon footprints would still be low by western standards, however.[7]

Table 4–1. Population and Carbon Dioxide Emissions, Selected Countries, 2004

Country or Region	Population	CO_2 Emissions	Emissions per Person
	(million)	(million tons)	(tons of CO_2)
United States	294	5,815	19.8
China	1,303	4,762	3.7
Russia	144	1,553	10.8
Japan	128	1,271	10.0
India	1,080	1,103	1.0
Germany	83	839	10.2
United Kingdom	60	542	9.1
France	62	386	6.2
Bangladesh	139	35	0.3
European Union (15 countries)	386	3,317	8.6
World	6,352	26,930	4.2

Source: See endnote 7.

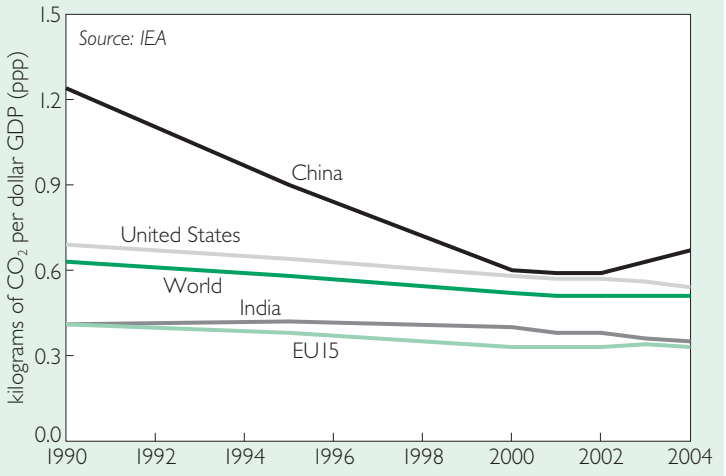
The technological efficiency of providing goods and services is higher in the European Union (EU) and the United States than it is in India. All other things being equal, then, this should lower the carbon footprint in industrial nations. So huge regional disparities in per capita footprint are almost entirely due to the pattern and level of consumption—to differences in lifestyle.

Clearly, western nations have been the key driver of climate change so far. Between 1950 and 2000, the United States was responsible for 212 gigatons of carbon dioxide, whereas India was responsible for less than 10 percent as much. So it is clear that the richest people on the planet are appropriating more than their fair share of "environmental space." Yet this lifestyle is increasingly what the rest of the world aspires to.[8]

Much is made of efficiency improvements. And some relative improvements in the carbon intensity of growth are evident in some countries. (See Figure 4–1.) But these gains are slow at best, and in China they have been reversed in recent years. This is one reason that China's carbon dioxide emissions recently surpassed those of the United States. Across the world as a whole, greenhouse gas emissions grew by 80 percent between 1970 and 2004 and could double again by 2030.[9]

In summary, any gains in technological efficiency are simply being swamped by the sheer scale of rising aspirations and an increasing population. If everyone in the world lived the way Americans do, annual global CO_2 emissions would be 125 gigatons—almost five times the current level—by the middle of the century. In stark contrast, the Intergovernmental Panel on Climate Change has esti-

Figure 4–1. Carbon Intensity of GDP, 1990–2004



mated that the world needs to reduce global emissions by as much as 80 percent over 1990 levels by 2050 if "dangerous anthropogenic climate change" is to be averted. This would mean getting global emissions below 5 gigatons and reducing the average carbon footprint to well under 1 ton per person, lower than it now is on average in India.[10]

This challenge clearly calls for an examination of assumptions about the way people live. What is it that drives and frames people's aspirations for the "good life"? What lies behind the runaway aspirations that seem so unstoppable in the West and are rapidly becoming the object of desire in every other nation?

The "Science of Desire"

In the conventional economic view, consumption is the route to human well-being. The more people have, the better off they are deemed to be. Increasing consumption leads to improved well-being, it is claimed.

This view goes a long way toward explaining why the pursuit of the gross domestic product (GDP) has become one of the principal policy objectives in almost every country. Rising GDP symbolizes a robust and thriving economy, more spending power, richer and fuller lives, increased family security, greater choice, and more public spending. The rise of India's "bird of gold," its consumer class, is heralded in financial markets with huge delight. China's vigorous economy has led to an equally striking sense of market optimism.[11]

Economics has remained almost willfully silent, however, on the question of why people value particular goods and services at all. The "utilitarian" model has become so widely accepted that most modern economic textbooks barely even discuss its origins or question its authenticity. The most that economists can say about people's desires is what they infer from patterns of expenditure. If the demand for a particular automobile or household appliance or electronic device is high, it seems clear that consumers, in general, prefer that brand over others. Their reasons for this remain opaque within economics.[12]

Fortunately, other areas of research—such as consumer psychology, marketing, and "motivation research"—have developed a somewhat richer body of knowledge. This "science of desire" has mainly been dedicated to helping producers, retailers, marketers, and advertisers design and sell products that consumers will buy. Little of the research concerns itself explicitly with the environmental or social impacts of consumption.

Indeed, some of it is downright antithetical to sustainability. But its insights are extremely valuable for a proper understanding of consumer motivation.[13]

For a start, it is immediately clear that consumption goes way beyond just satisfying physical or physiological needs for food, shelter, and so on. Material goods are deeply implicated in individuals' psychological and social lives. People create and maintain identities using material things. "Identity," claim consumer researchers Yiannis Gabriel and Tim Lang, "is the Rome to which all theories of consumption lead." People narrate the story of their lives through stuff. They cement relationships to others with consumer artefacts. They use consumption practices to show their allegiance to certain social groups and to distinguish themselves from others.[14]

It may seem strange at first to find that simple stuff can have such power over emotional and social lives. And yet this ability of human beings to imbue raw stuff with symbolic meaning has been identified by anthropologists in every society for which records exist. Matter matters to people. And not just in material ways. The symbolic role of mere stuff is borne out in countless familiar examples: a wedding dress, a child's first teddy bear, a rose-covered cottage by the sea. The "evocative power" of material things facilitates a range of complex, deeply ingrained "social conversations" about status, identity, social cohesion, and the pursuit of personal and cultural meaning.[15]

Material possessions bring hope in times of trouble and offer the prospect of a better world in the future. In a secular society, consumerism even offers some substitute for religious consolation. Recent psychological experiments have shown that when people become more aware of their own mortality, they strive to enhance their self-esteem and protect their cultural worldview. In a consumer society, this striving has materialistic outcomes. It is almost as though people are trying to hold their existential anxiety at bay by shopping.[16]

At a recent Consumer Forum organized for the Sustainable Consumption Roundtable in the United Kingdom, people were asked to talk about their hopes and fears for the next decade or so. They spoke about their desire to do well for their children and grandchildren. There was a strong wish to live in safe, sociable communities. People expressed spontaneous concern about others, about poverty in the developing world, and—without being told the interests of the sponsors—about the environment: climate change, resource scarcity, recycling. Shot through these expressions of concern, however, like a light relief, were recurrent, persistently materialist themes: big houses, fast cars, and holidays in the sun. Getting on and getting away pervades narratives of lifestyle success.[17]

This deep reliance on material goods for social functioning is not unique to the western world. George and Vidya also say they want to see a good future for their children. They want to do well and be seen to do well among their peers. Just below the surface, these aspirations are cashed out in broadly western terms. Vidya's overriding ambition is to afford a car. For the first time in their lives, George and Binnie are planning a holiday outside India. Getting on and getting away means as much there as it does in London, Paris, New York, and Sydney.[18]

Very similar values and views are clearly discernible in China, Latin America, and even parts of Africa. The consumer society is now in effect a global society—one in which, to be sure, there are still "islands of prosperity, oceans of poverty," as Indian ecologist Madhav Gadjil puts it. But one in which the evocative power of material goods

increasingly creates the social world and provides the dominant arbiter of personal and societal progress.[19]

The Paradox of Well-being

In the conventional view, the recipe for progress is simple: the more people consume, the happier they will be. A close look at what motivates consumers uncovers a whole range of factors—family, friendship, health, peer approval, community, purpose—known to have a strong correlation with reported happiness. In other words, people really do consume in the belief that it will deliver friends, community, purpose, and so on. But there is a paradox at work here that at one level is tragic. People have a good grasp of the things that make them happy but a poor grasp of how to achieve these things. The assumption that more and more consumption will deliver more and more well-being turns out to be wrong.[20]

Using data collected in the World Values Survey, Ronald Inglehart and Hans-Dieter Klingemann examined the hypothesis that happiness (or life satisfaction) is linked to income growth. The good news is that the equation just about works for George and Vidya. There is an increasing trend in life satisfaction at lower levels of income. (See Figure 4–2.) The bad news is that the relationship will begin to diminish as their incomes rise further. Across most industrial countries there is at best only a weak correlation between increased income and reported happiness. And in countries with average incomes in excess of $15,000, there is virtually no correlation between increased income and improved life satisfaction.[21]

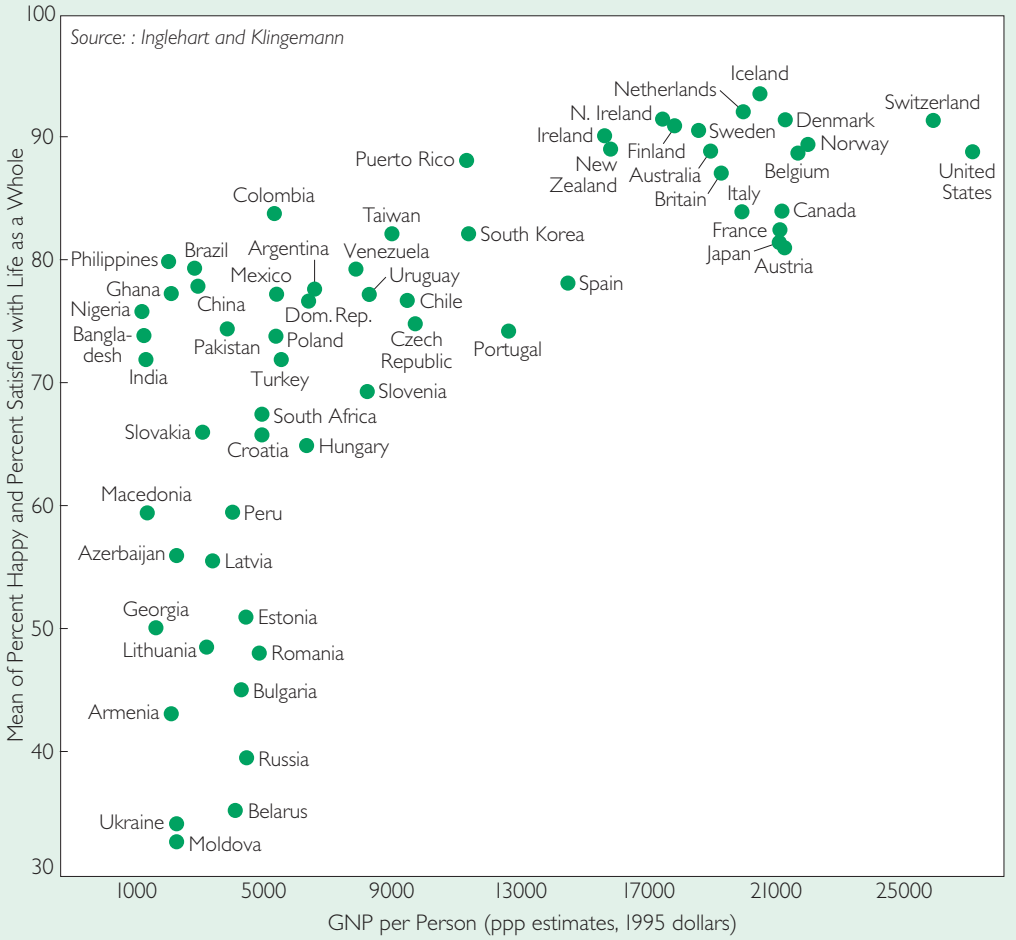
The same paradox is found within individual nations over time. Real income per head has tripled in the United States since 1950, but the percentage of people reporting themselves to be very happy has barely increased at all—in fact, it has declined since the mid-1970s. In Japan, there has been little change in life satisfaction over several decades. In the United Kingdom, the percentage reporting themselves very happy dropped from 52 in 1957 to 36 today.[22]

Some key aspects of people's well-being, far from improving, appear to have declined in western nations. Rates of depression have been doubling every decade in North America. Fifteen percent of Americans age 35 have already experienced a major depression. Forty years ago, the figure was only 2 percent. One third of people in the United States now experience serious mental illness at some point in their lives, and almost half of these will suffer from a severe, disabling depression. During any single year, about 6 percent of the population will suffer from clinical depression; suicide is now the third most common cause of death among young adults in North America.[23]

Teasing out the underlying causes of this unhappiness is not particularly easy. But there are two fairly compelling sets of data suggesting that consumerism itself is partly to blame. The first set suggests a negative correlation between materialistic attitudes and subjective well-being. Philosopher Alain de Boton has shown how an unequal society leads to high levels of "status anxiety" in its citizens. Psychologist Tim Kasser and his colleagues have shown how people with more materialistic attitudes—people who define and measure their own worth through money and material possessions—report lower levels of happiness. Striving for self-esteem through material wealth appears to be a kind of "zero-sum game" in which the constant need for betterment and approval only serves to entrench people in an almost neurotic spiral of consumption.[24]

A second, equally compelling set of evidence relates rising unhappiness to the undermining of certain key institutions. Subjective

Figure 4–2. Subjective Well-being and Per Capita Income, 2000



well-being depends critically on family stability, friendship, and strength of community. But these aspects of life have suffered in the consumer society. Family breakdown, for example, has increased by almost 400 percent in the United Kingdom since 1950. The percentage of Americans reporting their marriages as "very happy" declined significantly over just 20 years during the latter part of the last century. People's trust and sense of community have fallen dramatically over the last 50 years. In the middle of the twentieth century, more than half of all Americans believed that people were "moral and honest." By 2000 the proportion had fallen to little over a quarter. Participation in social and community activities declined markedly over the same period.[25]

In other words, there appears to be a correlation between rising consumption and the erosion of things that make people happy—particularly social relationships. This correlation does not necessarily mean, of course,

that one thing "causes" the other. But in practice, as described later, there are some pretty compelling reasons to take seriously the idea that the structures and institutions that are needed to maintain growth simultaneously erode social relationships. As economist Richard Layard describes it: consumption growth has "brought some increase in happiness, even in rich countries. But this extra happiness has been cancelled out by greater misery coming from less harmonious social relationships."[26]

One tragic result of this elusive search for happiness is that industrial societies are closing off options for other people, both now and in the future, to lead fulfilling lives—without even being able to show reward for it in the here and now.

Live Better by Consuming Less?

The paradox of well-being begs the question, Why do people continue to consume? Why not earn less, spend less, and have more time for families and friends? Couldn't people live better—and more equitably—this way and at the same time reduce humanity's impact on the environment?

This idea has provided the motivation for numerous initiatives aimed at living more simply. "Voluntary simplicity" is at one level an entire philosophy for life. It draws extensively on the teachings of Mahatma Gandhi, who encouraged people to "live simply, that others might simply live." In 1936, a student of Gandhi's described voluntary simplicity in terms of an "avoidance of exterior clutter" and the "deliberate organisation of life for a purpose." Former Stanford scientist Duane Elgin picked up this theme of a way of life that is "outwardly simple, yet inwardly rich" as the basis for revisioning human progress. More recently, psychologist Mihály Csíkszentmihályi has offered a scientific basis for the hypothesis that people's lives can be more satisfying when they are engaged in activities that are both purposive and materially light.[27]

Sociologist Amitai Etzioni has identified three kinds of people pursue simplicity. "Downshifters" are those who, having achieved a given level of wealth, make a conscious choice to reduce their income; they then moderate their lifestyle so they can spend more time with family or pursuing community or personal interests. "Strong simplifiers" are those who give up highly paid, high-status jobs altogether and accept radically simpler lifestyles. The most radical contingent are the "dedicated, holistic simplifiers," who embrace radical change and adjust their entire lives around an ethical vision of simplicity, sometimes motivated by spiritual or religious ideals.[28]

Some of these initiatives, such as the Findhorn community in northern Scotland, emerged initially as spiritual communities, attempting to create space in which to reclaim the contemplative dimension of living that used to be captured by religious institutions. Findhorn's character as an eco-village developed more recently, building on principles of justice and respect for nature. Another modern example is Plum Village, the "mindfulness" community established by an exiled Vietnamese monk, Thich Nhat Hahn, in the Dordogne area of France, which now provides a retreat for at least 2,000 people. At one level these initiatives are modern equivalents of more traditional religious communities like those of the Amish in North America or Buddhist monasteries in Thailand, which every young male is expected to spend some time in before going out into professional life.[29]

Not all networks have this explicit spiritual character, however. The Simplicity Forum, for example, launched in North America in 2001 is a loose secular network of "simplicity leaders" who are committed to "achieving and

honoring simple, just and sustainable ways of life." Downshifting Downunder is an even more recent initiative, started following an international conference on downshifting in Sydney in 2005; its aim is to "catalyze and coordinate a downshifting movement in Australia that will significantly impact sustainability and social capital."[30]

The downshifting movement now has a surprising allegiance across a number of industrial economies. A recent survey in Australia found that 23 percent of respondents had engaged in some form of downshifting in the preceding five years. A staggering 83 percent felt that Australians are too materialistic. An earlier study in the United States found that 28 percent of those surveyed had taken some steps to simplify and 62 percent expressed a willingness to do so. Very similar results have been found in Europe.[31]

Research on the success of these initiatives is quite limited, but existing studies show that simplifiers really have less materialistic values and show greater respect for the environment and for others. More important, simplifiers appear to show a small but significant increase in subjective well-being. Consuming less, voluntarily, can improve well-being—completely contrary to the conventional model.[32]

The backlash against consumerism bears witness to an emerging counterculture that recognizes the limits of the consumer society and is looking for something beyond it. Buy Nothing Day every November—dedicated to persuading people to resist consumerism—is now an international phenomenon. In 2006 there were initiatives on the streets in almost 30 countries and in scores of cities, including, for the first time, a demonstration on the streets of Mumbai.[33]

Equally striking is the rise of the Transition Towns concept—towns and cities that have declared unilateral action against the twin threats of peak oil and climate change. Launched in September 2006 in the small town of Totnes in southwest England, the U.K. network expanded to over 20 towns and cities in only a year. In the United States, 400 cities have signed the U.S. Mayors Climate Protection Agreement, which pledges to meet the Kyoto Protocol targets on reducing CO_2 emissions, in spite of the federal government's refusal to ratify the protocol.[34]

It is important not to get too carried away with this evidence. Simple living communities remain marginal. The religious basis for them does not appeal to everyone, and the secular versions seem less resistant to the incursions of consumerism. Downshifting Downunder generated a flurry of activity in Australia for six months or so, for instance, but barely functions as a working network only two years later. Some of these initiatives depend heavily on individuals having sufficient personal assets to provide the economic security needed to pursue a simpler lifestyle. Finally, it is clear that forced or involuntary simplicity is quite another story. Subjective well-being plummeted in the "transition economies" (former Soviet states) during the 1990s.[35]

As the evidence on global consumerism makes abundantly clear, mainstream consumer values show little sign of slowing down the pace of material and environmental profligacy. Existing attempts to live better by consuming less remain marginal at best. So the question remains, Why do people continue to consume, knowing the social and environmental consequences, even beyond the point at which it adds to their satisfaction?

Competing for Status—and for Survival

Is the urge to consume somehow "natural," hardwired through evolution? Certainly, the desire for comfort, a decent home, good

relationships with friends and family, doing well in the community, and perhaps broadening horizons through experience appear to be very widespread. The emerging field of evolutionary psychology suggests that human desires do indeed have their roots in ancestral origins.[36]

Genetic succession depends on two critical factors: surviving long enough to reach reproductive age and finding a mate. So human nature is conditioned by the need to get the material, social, and sexual resources required for these tasks. In particular, argues evolutionary psychology, people are predisposed to "position" themselves constantly in relation to the opposite sex and against their sexual competitors. As a (male) reviewer of one book on evolutionary psychology noted with some glee: "Animals and plants invented sex to fend off parasitic infection. Now look where it has got us. Men want BMWs, power and money in order to pair-bond with women who are blonde, youthful and narrow-waisted."[37]

To make matters worse, this fundamental element of sexual competition never abates. People adapt to any given level of satisfaction and continually expand their aspirations. This response may be conditioned by the fact that everyone else is engaged in the same unending struggle. There is an evolutionary advantage in never being satisfied. But the result is that people find themselves condemned to run faster and faster, like the Red Queen in Lewis Carroll's novel *Through the Looking Glass*, just to maintain their position in the race.[38]

The idea that consumerism may have something to do with sex has a clear resonance with common wisdom. Advertisers and media executives are extraordinarily creative in using sex and sexual imagery to sell their products. In a recent study of people's behavior in three completely different cultures, researchers found that consumer motivations are almost inextricably entwined in the language and imagery of sexual desire. The fact that material things play a role in creating and maintaining desire is central here. As a respondent in the study remarked: "No one's gonna spot you across the other side of a crowded room and say: 'Wow! Nice personality!'"[39]

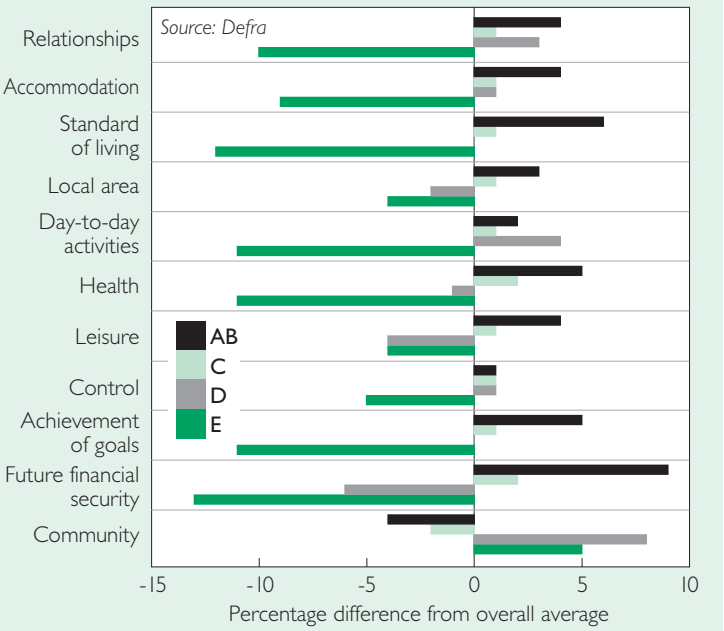
Survival itself is mediated by social status. This is most graphically illustrated by the plight of India's 170 million Dalits. Literally translated, Dalits means "the broken people," and life at the bottom of India's caste system is tough. Infant mortality and undernourishment are high; literacy, access to health care, and life expectancy are all significantly lower than the national average. Workers in the stone trade—almost exclusively Dalits—can have a life expectancy as low as 30 years, compared with a national average of 62.[40]

This effect is by no means confined to poorer countries. Recent evidence has shown how closely health and well-being are related to social status in industrial countries. A fascinating example of this was revealed by the U.K. government's research on life satisfaction across different "life domains." (See Figure 4–3.) Poorer people reported lower life satisfaction in almost all domains. One notable exception was higher satisfaction with their community. People employed in higher-status jobs pay a price, it seems, in terms of social relationships. Being poor may have some limited advantages in this one area. On the whole, however, inequality favors the rich. Though it might undermine social relationships, reduce overall well-being, and even corrupt values in pathological ways, the evidence suggests that being better off really does pay in terms of individual well-being.[41]

The problem for society is threefold. First, at the aggregate level, this intense status competition leads to less happy societies. Unequal

societies systematically report higher levels of "distress" than more equal ones. Second, this mechanism for achieving happiness appears to have no endpoint. There is no getting off the "hedonic treadmill" of rising income and increasing consumption. Third, the environmental and resource implications of this unproductive "race to the top" are quite simply unsustainable. Taken together with the vast inequalities—the "oceans of poverty"—that still persist across the world, these three problems represent an enormous challenge to consumerism. But they also begin to point toward the importance of social structure in determining whether or not society is sustainable.[42]

Figure 4–3. Domain Satisfaction by Social Group, England



Key (examples of occupations in each social group)
AB: doctor, lawyer, accountant, teacher, nurse, police officer
C: junior manager, student, clerical worker, foreperson, plumber
D: manual worker, shop worker, apprentice
E: casual laborer, unemployed

The "Iron Cage" of Consumerism

Left to their own devices, it seems, there is not much hope that people will spontaneously behave sustainably. As evolutionary biologist Richard Dawkins has concluded, sustainability just "doesn't come naturally" to humankind. But it is a mistake to assume that evolutionary motivations are all selfish. Evolution does not preclude moral, social, and altruistic behaviors. Social behaviors evolved in humans precisely because they offer selective advantages to the species. An important lesson from evolutionary psychology is that the balance between selfish and cooperative behaviors depends critically on the kind of society they occur in.[43]

Social behavior can exist—to some extent—in all societies. In very competitive societies, self-serving behavior tends to be more successful than cooperation. But in a society characterized by cooperation, altruistic behaviors tend to be favored over selfish ones. In other words, the balance between altruism and selfishness is not hardwired in people at all. It depends critically on social conditions: rules, regulations, cultural norms and expectations, government itself, and the

set of institutions that frame and constrain the social world.[44]

So there are some searching questions to ask about the balance of the institutions that characterize modern society. Do they promote competition or cooperation? Do they reward self-serving behavior or people who sacrifice their own gain to serve others? What signals do government, schools, the media, and religious and community institutions send out to people? Which behaviors are supported by public investment and infrastructure and which are discouraged?

Increasingly, it seems, the institutions of consumer society encourage individualism and competition and discourage social behavior. Examples are legion: private transport is encouraged through incentives over public transport; motorists are given priority over pedestrians; energy supply is subsidized and protected, while demand management is often chaotic and expensive; waste disposal is cheap, economically and behaviorally, while recycling demands time and effort. These kinds of asymmetry represent an "infrastructure of consumption" that sends all the wrong signals, penalizing pro-environmental behavior, making it all but impossible even for highly motivated people to act sustainably without personal sacrifice.[45]

Increasingly, it seems, the institutions of consumer society encourage individualism and competition and discourage social behavior.

Equally important are the subtle but damaging signals sent by government, regulatory frameworks, financial institutions, the media, and education systems. Salaries in business are higher than those in the public sector, particularly at the top; nurses and those in the caring professions are consistently poorly paid; private investment capital is written down at high discount rates, making long-term costs invisible; success is counted in terms of material status; children are becoming a "shopping generation"—hooked on brand, celebrity, and status.[46]

At one level, the task facing sustainability is as old as the hills: balancing individual freedoms against the social good. This relies crucially on being able to make prudent choices, at the individual and the social level, between the present and the future. Rampant individualistic behavior that seeks short-term gratification ends up undermining well-being not just for the individual but for society as a whole. So the task for sustainability—indeed, for any society—is to devise mechanisms that prevent this "undermining of well-being" and preserve the balance between present desires and future needs.

Oxford economic historian Avner Offer addresses exactly this task in *The Challenge of Affluence*. Unaided, argues Offer, individual choices tend to be irredeemably myopic. People favor today too much over tomorrow, in ways that—to an economist—are entirely inexplicable under any rational rate of discounting of the future. Offer's unique contribution is to suggest that this fallibility has (or in the past had) a social solution. And that solution is precisely what affluence is in the process of eroding.[47]

To avoid trading away long-term well-being for the sake of momentary pleasures, society has evolved a whole set of "commitment devices": social and institutional "mechanisms" that constrain people's choices in ways that moderate the balance of choice away from the present and in favor of the future. Savings accounts, marriage, norms for social behavior, government itself in some sense—all these can be regarded as examples of mechanisms that make it a little easier for people to curtail their evolutionary appetites

for immediate arousal and protect their own future interests. And, indeed, the interests of affected others.

The "challenge" Offer addresses is that affluence is eroding and undermining these commitment devices. The increase in family breakdown and the decline in trust have already been noted. Parenthood has been placed under increased financial and social pressure in industrial countries. And in terms of economic commitment, it is telling that savings rates fell worldwide in the second half of the last century, declining by 5–10 percentage points across the United States and Europe. Meanwhile, consumer debt has soared, rising from $1 trillion to $2.5 trillion in the United States alone between 1995 and 2007. The role of government itself has been increasingly "hollowed out" as politicians on both left and right sought to bolster economic output and free up the "invisible hand" of the market.[48]

The drivers behind these trends are complex, but a key responsibility, argues Offer, lies with the relentless stream of novelty inherent in consumption growth. Evidence seems to bear this out. "Accelerating the rate of innovation is a top priority for technology managers," notes the U.S.-based Industrial Research Institute. The rate of innovation is driven in turn by the structural reliance of businesses and the economy on growing consumption. Novelty keeps people buying more stuff. Buying more stuff keeps the economy going. The continuing expansion of the market into new areas and the continuing allegiance of consumers appear to be vital to this process—even as they erode commitment devices and undermine well-being.[49]

The end result is a society "locked in" to consumption growth by forces outside the control of individuals. Lured by humanity's evolutionary roots, bombarded with persuasion, and seduced by novelty: consumers are like children in a candy store, knowing that sugar is bad to eat, but unable to resist the temptation. This is a system in which no one is free. People are trapped by their own desires. Companies are driven by the need to create value for shareholders, to maximize profits. Nature and structure combine to lock people firmly into the "iron cage" of consumerism.[50]

Living Well—and Within Limits

Put simply, sustainability is about living well, within certain limits. For this to happen, across a global population approaching 7 billion and expected to reach 9 billion by 2050, people's patterns of consumption have to change.[51]

Achieving this is a colossal task. But it is not an impossible one. A proper understanding of the relationship between individual desires and the social good is vital here. As noted earlier, consuming comes naturally to humankind. Restraint does not. Change requires a supportive social environment. People are torn constantly between self-enhancement and self-transcendence. There is little individuals can do to shift their underlying nature. But the balance between self-serving and social behaviors is malleable at the social level. In one social context, selfishness will imprison us, impoverish people's lives, and may ultimately destroy the living environment. In another, the common good will prevails and people's lives will be richer, more satisfying, and more fulfilling.

There is clear evidence of an appetite for change. During an 18-month project, the Sustainable Consumption Roundtable in the United Kingdom identified a strong desire for collective action. *I Will If You Will*—the title of the Roundtable report—was a common

theme emerging from a range of social research. This effect is not confined to the United Kingdom. The evidence on downshifting and simplicity, reactions against consumerism, the high levels of commitment to change (even in developing countries) found in the HSBC survey, a rising interest in alternatives to consumerism: all these are real, demonstrable effects. But good intentions are not enough, and they will continue to be undermined unless physical infrastructure, institutions, and social structures change.[52]

Who is capable of influencing these wider structures? Ultimately, of course, all sections of society must take responsibility for change. Government, business, and consumers all have some role to play; the media, community groups, religious institutions, and traditional wisdom are all essential influences on the social environment. But without strong leadership from government, change will be impossible. Individuals are too exposed to social signals and status competition. Businesses operate in competitive markets. A transition from self-interest to social behaviors requires changes in underlying structures—changes that strengthen commitment and encourage social behavior. Government is the principal agent in protecting the social good. A new vision of governance that embraces this role is critical.

Two or three key tasks are vital here. In the first place, policies need to support an infrastructure of sustainability: access to reliable public transport, recycling facilities, energy efficiency services, maintenance and repair, re-engineering and reuse. Systematic biases against these facilities have to be dismantled and policies to encourage them brought into place.[53]

The second key task lies in establishing fiscal and institutional frameworks that send consistent signals to businesses and consumers about sustainable consumption. A core example of this is the role of a "social cost of carbon" in providing incentives for investments in low-carbon technologies and behaviors. The Stern Review on the economics of climate change suggests that this cost might be as high as $85 per ton of CO_2. There is no doubt that internalizing this cost in market prices and investment decisions would have a major influence on reducing carbon emissions. The review also cast doubt on prevailing discounting practices, suggesting that zero or even negative discount rates might be appropriate when looking at projects with long-term impacts on the environment.[54]

But the role of government is not confined to fiscal frameworks. The way energy industries are regulated, for instance, has a profound effect on the incentives for demand management and energy service companies. Product policy can have a significant influence on access to durable, efficient products that minimize environmental harm. Recent EU legislation, for example, has already led to progressive improvements in the efficiency of energy-consuming appliances. Australia pledged early in 2007 to outlaw incandescent lightbulbs before 2010. The 27 EU nations have now followed that example. Surveying evidence of policy successes, the Sustainable Consumption Roundtable found that progressive standards, clearly signaled to manufacturers in advance, are a particularly effective instrument for moving toward more-sustainable consumption.[55]

The influence of government on social norms and expectations is, at first sight, less obvious. Policymakers are uncomfortable with the idea that they have a role in influencing people's values. But the truth is that governments intervene constantly in the social context. Myriad different signals are sent out, for example, by the way education is structured, by the importance accorded to economic indicators, by guidelines for public

sector performance, by public procurement policies, by the impact of planning guidelines on public and social spaces, by the influence of wage policy on the work-life balance, by the impact of employment policy on economic mobility (and hence on family structure and stability), by the effect of trading standards on consumer behavior, by the degree of regulation of advertising and the media, and by the support offered to community initiatives and faith groups. In all these arenas, policy shapes and helps create the social world.

As this chapter suggests, the drift of these influences over the last few decades has been away from encouraging commitment and in favor of encouraging consumption. But there are some striking counterexamples: places where strenuous efforts have been made to rein in consumerism and focus more specifically on well-being. Several nations, including the United Kingdom, Canada, and China, have begun to develop "well-being accounts"—new ways of measuring national progress alongside or in place of the GDP. (See Chapter 2.) In late 2007, the Organisation for Economic Co-operation and Development, the European Commission, and several nongovernmental groups cohosted a major international conference, "Beyond GDP," designed to look at more effective measures of social progress.[56]

A crucial arena for action lies in advertising, particularly ads directed at children. Global advertising expenditures now amount to $605 billion (with the United States alone accounting for $292 billion). The figure is growing at the rate of 5–6 percent a year, with online advertising growing faster than any other sector, at between 30 percent and 40 percent a year. The impact of this, particularly on children, is pernicious. Marketing pressure has been linked explicitly to rising childhood obesity.[57]

At an international conference in 2006, the World Health Organization stopped short of banning advertising to children, but Scandinavian nations have taken a more proactive stance. In Sweden, TV advertising to children under 12 is banned. Norway, too, has restrictions on children's advertising, and the Consumer Ombudsman has an educational role in Norwegian schools. Recent advertising guidelines in Norway include a ban on advertising cars as "green," "clean," or "environmentally friendly." Although a Norwegian plan to develop anti-consumption adverts failed to attract funding in the United Nations, the nongovernmental group Adbusters, based in Vancouver, Canada, remains a focus of resistance to commercial advertising. Perhaps most striking of all, São Paulo, Brazil, the fourth largest city in the world, has recently become the first city outside socialist economies to ban outdoor advertising.[58]

Australia pledged early in 2007 to outlaw incandescent lightbulbs before 2010.

Religious leadership has declined substantially in industrial countries. But traditional wisdom is still an important influence on the debate about living well. In less secular societies, religion plays a number of roles. It warns against material excess; it provides a social and spiritual context for self-transcendence, altruism, and other-regarding behavior; and it offers a space for contemplation in which to make sense of people's lives in deeper and more meaningful ways than those provided by the fleeting consolations of consumerism.

One thing is clear: if a part of the function of consumerism is to deliver hope—as indicated earlier—then countering consumerism means building new avenues of hope that are less reliant on material goods. In countries

where religious institutions are still strong, this task is much easier. In Southeast Asia, for example, in response to the economic crisis of the mid-1990s, the King of Thailand revived the traditional concept of the Sufficiency Economy, built on Buddhist principles, and provided a much-needed frame of reference to help countless microenterprises in rural villages survive the economic shocks of the recession and build a sustainable future in its aftermath. In the mountain Kingdom of Bhutan, progress is being reconceived in part as a spiritual endeavor. In many Islamic nations, the framework for moral restraint is already in place. From a western perspective, this framework is often seen as oppressive of individual freedoms, particularly for women. But Islam—and other religious traditions—are important sources of understanding the limits of relying on human nature to protect the public good.[59]

In the final analysis, the consumer society offers neither a durable sense of meaning in people's lives nor any consolation for losses. The erosion of religious participation in the West offers one more example of crumbling commitment devices. The examples in this chapter bear testament to the desire for change and the visionary courage of individuals, communities, and a handful of political leaders prepared to initiate that change. Millions of people have already discovered that treading more lightly allows them to breathe more easily. And it offers a new creative space for social change—a place where family, friendship, community, and a renewed sense of meaning and purpose are possible.

A sustainable world is not an impoverished world but one that is prosperous in different ways. The challenge for the twenty-first century is to create that world.

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Chapter 4. The Challenge of Sustainable Lifestyles

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Chapter 5. Meat and Seafood: The Global Diet's Most Costly Ingredients

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