I’m off to Edinburgh this summer to speak on solidarity and climate change, topics too little discussed during the recent decades of neoliberalism and too infrequently seen as essentially interconnected. The venue is auspicious, for the world has been and continues to be harmed by misinterpretations of Adam Smith, the great eighteenth century thinker of that city’s great university. What is the role of human interests in human behavior? What drives the choices human beings make in regard to the ways they use each other (laboring people) and the material world they inhabit (things)? In the past, far too many people have been treated and used like things. In the future, can we cut down on that and also start treating more and more things like people—coral reefs and arboreal forests, for example? Herein lies one of the threads connecting solidarity and climate change.

Perennially important to some degree, these questions about motivation and choice have become the fundamental concerns of the fossil carbon epoch. In the global political economy of today, the single most influential answer to these questions runs roughly as follows: We think that rational self-interest ultimately rules our behavior and that when we make choices driven by the competition and discipline of the free market, all will be well because society will prosper and the limitless bounty of nature will persevere.

This is far from what Smith actually taught; his understanding of markets, motivations, and morality was much more nuanced and complicated. In any case, it seems clear to many, myself included, that this answer will not guide the world adequately in its transition from a fossilized to a post-fossilized carbon economy. The good news is that this dogmatic faith in rational economic choice and free market competition is being critically reassessed from many angles, and its grip on political and policy thinking is loosening. It is important, however, that we get the perspective that emerges to replace it right.

In an effort to sort this out, I want to begin with reference to the work of Charles Lindblom, an important political economist who should be better known and remembered among those interested in ecological governance. All societies and economies, including those emphasizing possessive individualism and market competition, rely on elemental mechanisms of social control, which Lindblom calls the authority system, the exchange system, and the persuasion system. These systems are symbiotic: although a given society may stress one, in reality all three are always operative to some degree. As the terms imply, authority shapes behavior by coercion, exchange shapes behavior through the pursuit of self-interest, and persuasion shapes behavior by appeal to moral ideals and reasons.

Neoliberalism seems blind to the synergy of these forms of social control and places both a socially unjust and an ecologically perilous reliance on the exchange system. But swinging the pendulum toward the authority system is a desperate wager also, since historically the authority systems of large nation states have not pursued the kind of ecologically resilient policies we need now—far from it. One significant lynchpin in global climate change is how this balancing act will play itself out over the next decades in China’s political economy.
Make no mistake: these social control mechanisms and formations of collective and individual choice are vital to understanding our twenty-first century planet. Atmospheric greenhouse gas emissions, biodiversity loss, and other stresses that have been placed on biophysical systems have all encroached on prudent operating margins. Why? This is due in large part to the choices generated by these social control mechanisms in all societies, with some societies having much larger collective and per capita carbon footprints and ecologically rapacious handprints than others, of course.

In the interest-group democracies of politics and policy in capitalist nation states, the social controls of the authority system depend on legal and regulatory choices made by policy elites that are tolerated by their electoral constituencies. Similarly, in the neoliberal global economy of finance and trade, the social controls of the exchange system depend on choices concerning investment, debt, and technological innovation. Finally, the motivational, normative, and epistemological dimensions of what the citizenry tolerates and what the private investor risks—the social controls of persuasion—stand behind the dynamics of the authority and the exchange systems. Factual belief, trust, conscience, hope, a sense of right and wrong—the convictions and contentments of human agents—are the stuff of both social cohesion and social dynamism. If achieving a post-fossil carbon political economy in an orderly and humane way requires behavior change on a large scale—does anyone really believe otherwise?—then coercion, self-interest, and justice will all have to be realigned to produce new patterns of choice.

There are two strategies for constructing a new architecture of social control that deserve serious consideration. Neither strategy relies exclusively on authority and coercion, exchange and self-interest, or persuasion and moral conscience. Both try to reconcile a liberal respect for autonomous choice with a rationally and empirically informed understanding of what the best interests of individuals and societies require.

One of these strategies is what I will call the “architecture of desire” and the other is the “architecture of relational judgment.” The first (often referred to as “choice architecture,” “nudging,” or “libertarian paternalism”) involves designing contextual conditions influencing choice in ways that channel individual self-interest and desire but do not go so far as to override them. The second social control design strategy involves the re-emplacement of authority, exchange, and persuasion and fosters the capability and sensibility of ecological judgment (or practical reasoning). This re-emplacement stresses the relationality and interdependence of authority, exchange, and persuasion and locates them, not in some abstract conceptual or constitutional space, but in ongoing dialogic or communicative practices.

Let me turn first to the architecture of desire. As I mentioned, certain psychological viewpoints have been influential within mainstream economics, and these have usually stressed an emphasis on instrumental rationality, the maximization of self-interest, limited benevolence, and care-
There are two insights underlying this approach. One is that human decision making is often defaulted or automatic rather than reflective. Indeed, many in neuroscience hold that conscious awareness is very selective, probably for evolutionary reasons: consciousness is like a neurological window and sees only those things that pass by while many other neurological processes (perception, emotional stimulation triggering behavioral response, and the like) take place off stage, in the background of a busy brain. The architecture of desire and choice by-pass the aware attentiveness of explicit conscious thought, judgment, and cost-benefit calculation. Another way it works is by off-setting the untoward results of poor reasoning or attentiveness—such as those in which the heuristic of expected continuity is misleading or the probability of something with serious health consequences is mistakenly estimated—using redundancies, fail-safe mechanisms, and other means to guard against both isolated errors and error cascades in complex systems.

The second insight is that decisions, both deliberate and autonomic ones, are influenced by the natural or social environments within which they take place. Desire and choice are structured, either explicitly or implicitly, virtually all the
time, by material options or by cultural narratives, social norms and sanctions, and institutional structures. The question is not whether to engage in nudging and choice architecture, but how to do so and to what ends. All the same, it is a mistake to assume—just because contextual factors shape all of us all the time, and we all use cognitive and emotional short-cuts and make mistakes—that the traditional ethical aspiration to become more reflectively self-aware and perspicacious has been rendered moot or shown to be an illusion by behavioral research. The age-old ethical and political question returns: If we can’t overcome these limitations—if we are living in Plato’s cave looking at shadows on the wall—then why are those who would govern us, the choice architects or nudgers, able to see reality more clearly? And if some are, why not more of us, or all?

Still, recognition of the ubiquity of influences shaping choice need not be taken in an authoritarian direction. It can be seen instead as a corrective to excessively atomistic individualism and self-interested rationality. Behavioral economics and cognitive psychology could move in the direction of a relational or ecological understanding of human identity and agency. Thus far, though, the architecture of desire approach has been characterized by a conventionally individualistic notion of the person and an adversarial and conflict-ridden view of relationships generally, especially relationships involving the authority mechanism and the state. This is where the libertarian aspect of “libertarian paternalism” comes in. Nonetheless, concern about domination and exploitation should not obscure or rule out the possibility of solidarity and compassion.

So it is that the attention now given to the systematic and deliberate pre-structuring of individual choices raises important ethical questions. How far should policy and behavioral change efforts move away from the realm of conscious, reflective, and deliberate action and strive to manipulate the operations of non-conscious cognitive heuristics, defaults, and neurological processes outside the window of consciousness? How much should we permit errors known about by others to be used to produce behavior supposedly advantageous to the person who makes the mistake, but with no attempt being made to correct those errors at their source? The architecture of desire certainly may have beneficent intent. It can be a form of care for those in need (which turns out to be pretty much all of us poor judges, illogical wanters, and inconsistent choosers). But can it lay the foundation for ongoing practices of solidarity, respect, and care with those in need, in some kind of partnership—some parity of voice and standing—with them? Such a relationship cannot be content with—or be defined by—good outcomes alone. A strength of the choice architecture framework is that it recognizes that decisions are in fact structured now, but in problematic ways. Nonetheless, there is still an important difference between attempting to persuade by means of facts and valid arguments versus taking calculated advantage of psychological factors such as loss aversion or inattention to get persons to make choices that they do not judge to be best.

This brings me to the second, alternative strategy of re-aligning the three social
control mechanisms of authority, exchange, and persuasion that I call the architecture of relational judgment. From this perspective, the architecture of desire can be employed ethically in areas of social and health policy and environmental conservation, but it should be accompanied by parallel efforts to cultivate and nurture relational judgment and thereby to enhance civic literacy and to expand the moral imagination of care and solidarity in a just democratic society. Without this parallel track, choice architecture can become addictive and self-perpetuating, the occupational hazard of social engineers. Instead of being seen as a substitute for a kind of human learning and development that is taken to be neurologically out of reach, choice architecture should be seen as contributing to a process of human development and learning that moves toward an enhanced and more equitably accessible relational or ecological social intelligence. The architecture of desire tries to offer good outcomes for individuals and populations, and it understands the limitations of an individualistic, instrumental notion of rational choice and action, but what it sees is an environment of pushes and pulls—a sort of motivational house of mirrors—rather than an ecology of meaning and dynamic networks of interdependence. The architecture of judgment can correct that cognitive bias of the choice architects. Moreover, I would go even further and argue that the cognitive biases of ordinary people, which choice architecture seeks to exploit to good effect, can be remediated by reflective practice and participation in dialogic communities offering parity of voice and engagement to all members.

By a “practice” I mean a normatively structured form of activity through which agents pursue a variety of capabilities and goods that conduce to the development of their human flourishing.7 By judgment, I mean the capacity to discriminate among available courses of action on the basis of an interpretive understanding of shared values embedded in an ongoing institutional practice and in a broader form of communal life.8 Judgment is a reconstruction of the meaning and purpose embedded in the patterns of individual and collective choice.

Social practices already permeate everyday life, so when I use the metaphor of the “architecture” of judgment I don’t mean to imply that this is an architectonic question of building such forms of relationship and activity from the ground up. Instead I intend to pose a more situated, practical question of mending or healing broken practices or sending out extensions of existing practices into new domains, like shoots or tendrils growing and intertwining in rhizomic fashion—such as has happened with the abolition of slavery, the recognition of the human rights of women, the legalization of gay marriage, and can happen with the recognition of the moral considerability of non-human species and living natural systems. Social practices of relational judgment, such as caring and solidarity, give all parties a mutual standing. This is place-based practice among those who make choices, exercise authority, trade and swap and promise, and engage in dialogues of persuasion with one another. All parties are free and respected in the sense that they are the authors of their own acts and lives, but they are symbiotic, not solipsistic, authors. Moreover, since judgment is fundamentally dialog-
ic it requires a space for open dialogue and room for maneuver—an accompanying place conducive to judgment’s formation and exercise, a place of equality and mutual understanding among the parties so that refinement of ideas can take place, and dialogue is not a sham.

Judgment is what connects public with private and self with world. Judgment is context sensitive. It does not seek to make global and ultimate determinations but rather provisional, local ones—decisions for the here and now. Since the options are real, not hypothetical, and since the social and natural world normally offers a rather narrow range of effective options at any time, the options are not usually grossly different from one another. They present instead subtle, fine-grained differences of meaning and implication. Catching the nuance, “discriminating” aptly, is highly sensitive to present attitudes, understandings, and probable reactions by others. Perhaps the best metaphor is to say that judgment always relies on the agent’s “reading” of the situation. Judgment, often thought of as practical reason, is better construed as practical interpretation: a dialogic hermeneutics of question and answer, a narrative praxis of interdependent desire, motivation, and choice.

Because the ingredients of judgment can be understood, they can also be taken account of and compensated for, so that one person’s judgments are not totally incomprehensible or inaccessible to others, nor need the judgments of one person be a foreign imposition on others. Judgment, in the sense I intend here, is not imposed but rather imbibed and shared. This interpretive dimension of judgment protects against the dangers of radical subjectivity. Judgment is not a narcissistic act of projecting the self onto a plastic, silent world. Judgment always takes place in medias res, where meanings, customs, traditions, and standards of appropriateness are already in place. Judgment can always be challenged by these “facts”; their reality, their solidity resists the imposition of judgments that are wildly out of keeping with the situation. While there is no impersonal method or logic to use to guide judgment infallibly, it is not the case that good judgment cannot be distinguished from bad judgment, nor that the interpretations of the values embedded in a common form of life, which judgments represent, cannot be challenged as misleading or lacking in depth or insight. Witness the current presidential campaign, where many shallow interpretations and judgments are being called out. Spark joy.

Finally, judgment tends toward accommodation, consensus, and compromise precisely because of its dialogic and communally embedded character. Judgment is conserving in that it tends to conserve, preserve, and repair the fabric of norms, ideals, and values that binds the community together. This, too, makes judgment dangerous, for it cannot easily disengage itself from its moorings in ongoing practices and forms of life and thus may be unable to detect and respond to profound injustice under its own nose. This danger is mitigated somewhat in a pluralistic society by the fact that relational judgment must reach its own kind of reflective equilibrium by reference not only to the values embedded in one localized practice or one institution, but also by reference to the values embedded in diverse venues in the society as a whole. Relational judgment
tends to mislead mainly when it suffers from too narrow a compass, when it fails to integrate the values of wider communities and social practices. Without solidarity—global, intergenerational, interspecies—the social control mechanisms of a post-fossil carbon political economy may well beggar our current moral imagination and our liberal political and legal traditions. That fate is not yet sealed, however. With solidarity, climate change transition can rediscover possibilities of meaning and forms of life that have largely been suppressed lately. We can be nudged out of our most mindless and self-destructive behavior as a species by the architecture of desire. But we can talk ourselves into a future worthy of the name only with the architecture of ecological judgment and its just democratic practice.

As befits the spring issue we have an eclectic and colorful bouquet of essays on offer in the following pages. In reaction to the growing and deepening bad news about changes in the atmosphere and oceans, debates have arisen over the assignment of responsibility and the proper nature of the remedy, with many strong proponents of intensified artificial and technological interventions, such as geoengineering and genomic editing, weighing in. The well-known Australian conservationist and “farmosopher” Glenn Albright takes a critical look at the discourse of the Anthropocene and finds it problematic in many ways. Ben Mylius, a legal scholar active in the Earth Jurisprudence movement, finds that bringing diverse forms of scientific and cultural knowledge into contact can transform our understanding of the objective world in surprising ways. Noting that ecological economists speak of “decoupling” economic growth from the economic side effects on climate change, geographer and urban policy expert Meg Holden creatively and poignantly explores the parallels between our relationships with nature and with each other. The next two articles shift continents and gears. Michael Engelhard, sharing a chapter from his forthcoming new book, Ice Bear: The Cultural History of an Arctic Icon (University of Washington Press), takes us to Europe and tells the story of Knut, a polar bear who became a celebrity in life at the Berlin Zoo and a cultural icon in death. Back in the states, jack-of-all-trades Charles Carlin introduces us to his truck, Elrod, that goes on and off road in the west powered by recycled cooking oil. In his version of oil exploration, Carlin gives dumpster diving a new meaning and finds common ground on conservation with those he meets in rural America.

This month’s reviews and reflections offer many lenses through which the humans and nature relationship is perceived and nature is minded. Nature writer, poet, and filmmaker Maya Khosla reflects on the essential role of fire in forest ecology. Plant ecologist Susan Tweit discusses how important words and expressions are in shaping our thoughts and feelings about the natural world. This essay continues a theme raised by Anja Claus in Minding Nature 9.1 (January 2016). John Torday, whose scientific work is on the cellular basis of evolution, connects the dots between Thoreau’s philosophical insights and natural intuitions and recent work in science concerning biological metabolism, especially in lung ecology.
development and function. This is an instructive example of Symbiocene thinking. Painter Adrienne Beth Jenkins discusses the ideas and aesthetics of her work in the artistic tradition aiming to re-connect our spiritual essence with material form. Finally, Allison Grant provides a profile and discussion of the art of photographer Doug Fogelson, whose techniques and images overlay the richness and spiritual depth that can be found in the natural world with the wondrous yet often destructive effects of human synthesis.

The Last Word goes to a lively conversation between Jim Ballowe and Gavin Van Horn touching on City Creatures and Gavin’s new forthcoming book with John Hausdoerffer called Wildness: Relations of People and Place. The Center for Humans and Nature is running wild in the city.

NOTES