MICHAEL M. CROW

Overcoming Stone Age Logic

hrough a remarkable manipulation of limited knowledge, brute force, and an overwhelming arrogance, humans have shaped a world that in all likelihood cannot sustain the standard of living and quality of life we have come to take for granted. Our approach to energy, to look at only one sector, epitomizes our limitations. We remain fixated on shortterm goals and a simplistic model governed by what I call "Stone Age logic": We continue to dig deep holes in the ground, extract dark substances that are the remains of prehistoric plants and animals, and deliver this treasure to primitive machines for combustion to maintain the energy system on which we base our entire civilization. We invest immense scientific and technological effort to find it more efficiently, burn it more cleanly, and bury it somewhere we will never have to see it again within a time horizon that might concern us. Find it, burn it, bury it. Our dependency on fossils fuels would be worthy of cavemen.

Fortunately, we seem to be slowly moving out of the final decades of the Stone Age, and discussions about whether our planet will be able to continue to sustain human societies at our present scale are no longer limited to environmentalists and apocalyptic religious groups. Prominent corporate, government, academic, and environmental leaders gathered during September 2008 in Washington to consider some of the most serious challenges facing humanity in a summit convened by Arizona State University. Among the host of concerned leaders were Minnesota governor Tim Pawlenty; Ford Motors executive chairman Bill Ford

Ir.; Wal-Mart chairman Rob Walton; John Hofmeister, former president of Shell Oil and now president of Citizens for Affordable Energy; Massachusetts congressman Edward Markey, chair of the U.S. House Select Committee on Energy Independence and Global Warming; Michigan congressman Fred Upton, a member of the House Energy and Commerce Committee; and Frances Beinecke, president of the Natural Resources Defense Council.

Although there was broad agreement at the summit that Washington has abandoned its traditional environmental leadership role, leaving us reliant on a patchwork quilt of local or regional-scale solutions from cities and states, there was nevertheless a recognition that informed and carefully considered federal efforts will be essential if we are to meet our societal needs within the limits of our environment. However well-intentioned the motivation for immediate action may be, I would argue that without some grounding of public policy in the discourse of sustainability, we are likely to dig ourselves deeper into the holes we have already dug.

Sometimes mistakenly equated with an exclusive focus on the environment, the term "sustainability" tends to be used so casually that we risk diluting its power as a concept. Its implications are far broader than the environment, embracing economic development, health care, urbanization, energy, materials, agriculture, business practices, social services, and government. Sustainable development, for example, means balancing wealth generation with continuously enhanced environmental quality and social well-being. Sustainability is a concept of a complexity, richness, and signifOur universities remain disproportionately focused on perpetuating disciplinary boundaries and developing increasingly specialized new knowledge at the expense of collaborative endeavors targeting real-world problems.

icance comparable to other guiding principles of modern societies, such as human rights, justice, liberty, and equality. Yet, as is obvious from our failure to embrace the concept in our national deliberations, sustainability is clearly not yet a core value in our society or any other.

Although the general public and especially our younger generations have begun to think in terms of sustainability, the task remains to improve our capacity to implement advances in knowledge through sound policy decisions. We have yet to coordinate transnational responses commensurate with the scale of looming problems such as global terrorism, climate change, or possible ecosystem disruption. Our approach to the maddening complexity of the challenges that confront us must be transformative rather than incremental and will demand major investment from concerned stakeholders. Progress toward sustainability will require the reconceptualization and reorganization of our ossified knowledge enterprises. Our universities remain disproportionately focused on perpetuating disciplinary boundaries and developing increasingly specialized new knowledge at the expense of collaborative endeavors targeting real-world problems. If we in the academic sector hope to spearhead the effort, we will need to drive innovation at the same time as we forge much closer ties to the private sector and government alike.

The summit in Washington is heartening evidence that such collaboration is possible. The involvement of corporate visionaries such as Bill Ford and Rob Walton as well as government leaders from both sides of the aisle represents an expanded franchise not only of individuals but of institutional capabilities for response. But more flexibility, resilience, and responsiveness will be required of all institutions and organizations. Society will never be able to control the large-scale consequences of its actions, but the realization of the imperative for sustainability positions us at a critical juncture in our evolutionary history. Progress will occur when new advances in our understanding converge with our evolving social, cultural, economic, and historical circumstances and practices to allow us to glimpse and pursue new opportunities. To realize the potential of this moment will require both a focused collective commitment and the realization that sustainability, like democracy, is not a problem to be solved but rather a challenge that requires constant vigilance.

Michael M. Crow is president of Arizona State University, where he also serves as professor of public affairs and Foundation Leadership Chair. He is chair of the American College and University Presidents Climate Commitment.