Where is Arcadia in the 21st century? Ancient poets found it in the Rus, or countryside, in a pastoral place where the cultivated mingled with the uncultivated, or in sacred groves that were uninhabited but managed unobtrusively by eccentric sibyls or priests. In 18th-century America, the Founding Fathers found it
in the agrarian archetype of the virtuous small town, with its meeting-house and gentleman farmers with thumbed copies of Plato and the Bible on their shelves. This is an enduring ideal for Americans, as the work of late-20th-century writers such as Wendell Berry show. In the 19th century, the poets and painters found Arcadia in what they thought were wild landscapes—the Alps, the Lake District, the Rocky Mountains of Albert Bierstadt, the prairies of Frederic Remington. They did not realize that such landscapes were the product of the careful work of Swiss and Cumbrian farmers, of a continent full of Native American hunter-gatherers and gardeners of considerable ecological sophistication. To the Romantics, the human impact on nature was always a loss of innocence, a violation. Thus their attitude to Arcadia was elegiac, as they foresaw the encroachments of the city, the dark satanic mills. Twentieth-century poets such as T. S. Eliot and Ezra Pound found Arcadia, by sardonic reversal, in the city, where the evening is laid out on the sky “like a patient etherized upon a table,” and where the faces in the Paris metro are like “petals on a wet, black bough.” In the 21st century, we will find Arcadia in a Rus that is both suburban and subrural, not so far away from the groves of the bucolic poets, of Virgil and Horace, Tu Fu and Li Po, Kalidasa and Hafiz, Miklós Radnóti and Boris Pasternak.

But this landscape will be a post-, not a pre-, technological one. It will be a landscape in which the technology is perfecting itself into invisibility, and where form has ceased to follow function but rather elaborates itself into new, delicate, intelligible structures that create new functions, functions that we suddenly recognize from the cultural past—a temple, a folly, a bower, a tomb. There are times when the present breaks the shackles of the past to create the future—the modern age, now past, was one of those. But there are also times, such as the Renaissance and our own coming 21st century, when it is the past that creates the future, by breaking the shackles of the present.

In North Texas, where I live, there is a strange zone of savannahs, residential real estate, and huge artificial lakes, very tangled and unkempt in places (and then suddenly tamed or as suddenly let go wild again), where a whole new ecology is evolving—plant and bird species from Louisiana, the eastern forests, the Gulf coast, the Yucatán. It must extend for hundreds of square miles around the Dallas-Fort Worth Metroplex. Each year I walk there I find a different dominant weed species, and huge flocks of birds. It is a mélange of original Texas prairie and low forest, ghost towns with little cemeteries, tract housing, sculpture parks and wildlife preserves, radio and TV towers, and the fantastical margins of the huge new lakes. Such landscapes are everywhere in America, but nobody sees them: they are what one passes through to get to Yellowstone. I have seen them around Oklahoma City and Tulsa.

> Frederick Turner is Founders Professor at the University of Texas at Dallas. A poet, environmental philosopher, translator, and cultural critic, he is the author of many books, including Natural Classicism: Essays on Literature and Science (1985) and The Culture of Hope: A New Birth of the Classical Spirit (1995). Copyright © 1998 by Frederick Turner.
and Atlanta and Columbus, Ohio, throughout central Florida, northern Virginia, Maryland, New Jersey, and the southern half of New England. This half waste-dump, half theme-park place, this Disneyland of the incomplete, has its detractors. It is in doubtful taste; indeed, it is kitsch, for its irony is aimed not at itself but at the censoriousness of its critics. Friendly bikers customize their Harleys in backyards still heaped with dead leaves from last winter’s flash flooding. A tiny garden of clubferns and dragonflies nestles in the mud-soaked foam rubber of a seat cushion lost from a boat in a fishing accident. A thousand white birds settle on the lake, or a gigantic blue heron, as massive as a pterosaur, lumbers up into the air. Coydogs, part coyote, part dog, howl there at night. It is a landscape not in harmony with itself, not like our conventional idea of nature. It is changing all the time. It is the domain of nonlinearity, of dissipative systems that flourish on the flow of decay, of perverse consensual fetishisms, of emergent structures and fractal depth; it is drawn by strange attractors rather than pushed by causes and laws. Only a new language, from the laboratories of chaos and complexity theory, can accurately catch its strangeness and aesthetic difficulty. And this hadean Arcady is often the domain of death, where the middle class goes to die.

Our distaste for the emerging Rus is an essentially modernist distaste. Modernist landscape plans, the cities of Mies van der Rohe and Le Corbusier, always seem to lie stunned beneath an endless halcyon-blue sky. There are no puddles in the streets, no high winds and fogs and damp feet and wet dogs shaking themselves over the carpet. Our fundamental tastes in landscape are enormously influenced, often at second or third hand, by the landscape designers, by the Capability Browns and Frederick Law Olmsteds of the world, and at present we are torn between the postmodernist vision of the sublime technological landscape and the environmentalist wilderness. But a near-century of radical art in this continent, beginning with the Armory Show and cycling through expressionism, op, pop, and conceptual, has brought us full circle to where earthworks artists such as James Turrell have restarted the romance with landscape left unfinished by the Hudson School. And there is a new breed of landscape designers—including Julie Bargmann, Richard Hansen, Kristina Hill, Anuradha Mathur, Dilip da Cunha, Joan Nassauer, William Wenk, Billy Gregg, and Achva Stein—who are looking at transitional landscapes that include human beings and that are happily undergoing continuous change. They are redesigning—or, rather, gently retrofitting—old mining sites, city parks, whole suburban districts, freeway margins, residential areas, university campuses, museum grounds, and Governor’s Island in New York harbor.
These designers don’t, for instance, like underground drains, and often include surface rainwater in their landscaping. They like sophisticated low-tech systems of French drains, wet meadow bands, micro-prairie restoration, “wetland to be viewed from a lawn.” This idea, of using runoff from streets, parking lots, runways and roofs, and treating what was a menace and a waste as a resource and a source of renewal, has the deepest implications. One of them is the notion that human waste itself is not the end of the world.

Such designers are willing to work with the tastes of people who like lawn ornaments, swing sets, outdoor barbecues, and neatly mown grass. The human “œconomy” is part of the ecosystem too. A similar spirit moves the New Urbanist architects and town planners, who don’t mind making “sentimental” Currier and Ives gestures, because these are things that make people really want to come and live in their Seasides and Celebrations. This approach marks an important transition in the role of the artist, from the Romantic/modernist hectoring genius to the wise servant of the people. Perhaps it will take a century for local mid- dle-American subrural tastes to refine themselves to the point that an average Mediterranean town has already reached. But there is no other way of getting there than the slow way, and that way will have some very endearing eccentricities of its own that we will want to keep.

One of the key ideas in the new approach is the notion of disturbance. The root of the word is turb, the same turb that we find in turbulence. When midwestern restoration ecologists such as Robert Betz, Keith Wendt, and William Jordan realized not long ago that restored prairies could be as good as the real thing, some of them started to yearn for buffalo to stomp about in the grass and kill some of the existing vegetation, creating deep prints that would contain tiny puddles, and allow seeds of the rarer species to take root. This was disturbance. True biodiversity seems not always to occur in stable and homogeneous habitats. Rather, it happens in places of varying degrees of disturbance, where there are many opportunities for biotic specialists to flourish. Many of the classic prairies and forests are the ones ravaged periodically by fire. The Amazon rainforest got its marvelous biodiversity over the millennia through a series of catastrophic world climate oscillations between dry, cool ice ages and hot, wet interglacials. It is the wild swings of salt and fresh, wet and dry, storm and calm that make sea-
coasts so fertile a field of genetic experiment.

Cities and other human settlements, with their herbaceous borders, arborets, roof gutters, sewers, warehouses, wharfs, market gardens, university horticulture departments, zoos, pet shops, and waste dumps are actually hotbeds of biodiversity. An entirely novel species of mouse has recently evolved in a small town in northern Italy, providing biologists a rare spectacle of species development. Steve Packard, a prairie restorationist, has been creating “oak openings” on waste lots in the suburbs of Chicago. Perhaps we are already becoming, if sometimes inadvertently, the breeders, gardeners and husbanders of nature, rather than the despoilers of it that we have often been.

We are undergoing a major transition in our basic cultural model of the human relationship with the rest of nature.

To sum it up in a sentence, it is a transition from a heroic, linear, industrial, power-based, entropic-thermodynamic, goal-oriented model, to a tragicomic, nonlinear, horticultural, influence-based, synergetic, evolutionary-emergentist, process-oriented model. The heroic model postulates a human struggle with nature culminating in human victory, while the tragicomic model postulates an ongoing engagement within nature, between the relatively swift and self-reflective part of nature that is human, and the rest. The linear model imagines one-way causes and effects; the nonlinear model imagines turbulent interactions in which the initiating event has been lost or is at least irrelevant. The industrial model requires a burning; the horticultural model requires a growing. The power-based model’s bottom line is coercion; the influence-based model’s is persuasion and mutual interest. The entropic-thermodynamic model involves an inevitable and irretrievable expense of free energy in the universe and an increase of disorder when any work is performed; the synergetic-evolutionary model seeks economies whereby every stakeholder gains and new forms of order can emerge out of far-from-equilibrium regimes. The goal-oriented model imagines a perfect fixed or harmonious state as its end product, and tends paradoxically to like immortal, open-ended narratives; the process-oriented model knows that the function of an ending is to open up new possibilities, and it prefers beginning-middle-end narrative structures; it knows that nothing in the universe is ever perfect and immortal, and that death comes to everything.

The new rural settlers of America have the responsibility to create an artificial landscape as rich, satisfying, and deeply natural as the ones left to us by Roman, English, and French gentlemen when they created the classic landscapes of Tuscany, the Cotswolds, and the Loire. Perhaps one day there will be an American Rus as satisfying and apparently eternal as those are now. But meanwhile, for the perverse and the poetic, there may even be a special pleasure in the landscape of disturbance itself.
The landscape disturbance index was calculated for all the 100×100 m cells in Terceira Island and mapped (Fig. 1). Although it closely follows the distribution of different land uses, it allowed obtaining a continuous landscape of disturbance values for the entire island. For the 72 sites sampled across the different land uses, the index ranged from $D = 14.38$ (the lowest disturbed site) to $D = 75.58$ (the highest disturbed site).