At first, we needed nature so much that we worshipped it. Now we need it less and less. We cannot undo the consequences of this liberation; we can go only forward, further and further away from the need that once obsessed us toward the freedom that now disorients us.

Civilization is the antidote to our dependence on nature. However, for much of human history we remained so vulnerable to the natural forces outside and within us that we continued to picture the divine in the image of the natural forces that held us in their grip. This sense of weakness, fear, and reverence was terrifying, but it was not tragic. We found respite in our powers of invention. Inventing institutions and machines, we began to overcome our helplessness. Recognizing that our minds could outreach our frail bodies and our demeaning circumstance, we came to imagine a God who, like us, rises above nature.

As a result of this growth in power, our experience of nature has fallen apart into four pieces, each marked by a distinctive attitude toward the natural world and a characteristic contest of aspirations. Only one of these four parts of our contemporary dealings with nature bears the marks of our early neediness and terror. Only another one of the four is tragic.

First, there is the delight of the gardener. We treat nature as a setting for escape from strife and striving into aesthetic freedom. That the object of this freedom should be something we found rather something we made only increases its charm. Why not convert whole sections of the earth into global parks for the solace of people exasperated by the disappointments of society? We worry how much we can afford to subtract from production for the sake of recreation,
anxiously calculating the terms of trade of tundra for oil wells or of jungle for paper. The truth, however, is that as we increase in wealth and dexterity and as population growth levels off, we can turn more places into gardens. Is not Japan, contrary to all expectation, the country with the largest portion of its national territory covered by virgin forest?

Second, there is the responsibility of the steward. We view ourselves as managers, in trust for future generations, of a sinking fund of non-renewable resources. We balance the call of consumption against the duty of thrift. It is an anxiety founded on an illusion. Necessity, mother of invention, has never yet in modern history failed to elicit a scientific and technological response to the scarcity of a resource, leaving us richer than we were before. If the earth itself were to waste, we would find a way to flee from it into other reaches of the universe. We would later revisit our abandoned and unlovely planet to re-fertilize and re-inhabit it before its fiery end. Will the waters dry? Will the oil end? It is useful to be worried and therefore prudent. It is foolish to deny that no such event has yet proved a match for ingenuity.

Third, there is the infirmity of the mortal. Only a small fraction of the world's population is now likely ever to be threatened by the natural disasters that so bedeviled our ancestors -- a smaller number by far than the number of the victims of any of the major diseases that continue to afflict us. Even floods and draughts have begun to yield their terrors to technological precaution, commercial substitution, and rural depopulation. There is, however, one area of experience in which we continue to suffer as humanity always suffered until it used mind to gain power over nature: our dealings with disease and death. Terrified and distracted, doubting both our own powers and higher providence, we work to cure the illnesses that waste us, and dream of undying life.

Fourth, there is the ambivalence of the titan. Now that we need nature less, we face a conflict our helpless forefathers were spared. We are able to question the effects of our actions on the animate and inanimate nature surrounding us. We wonder whether we should not sacrifice our self-centered desires for the sake of a more inclusive fellow feeling. Yet we are not gods, only demigods, too strong to be indifferent,
too weak to forego exercising the prerogatives of our power over the forms of life, or even of lifeless being, with which we share our world. Here, at last, is a conflict we cannot hope to settle, only to endure, to understand, and to direct.

Our experience of nature is now torn into these four shreds. Where and how, in the resulting confusion, can we find guidance? What should we do with our halting triumph over need for nature? In what direction should we push our advance? And what constraints should we honor as we do so?

Not gray abstractions, deaf to the paradoxes of experience, but a simple conception, close to the ground of the history that has brought us to our present power, is what we require. The capacity to remain open to the future -- to alternative futures -- proves decisive. Consider two sides of the same view. One side speaks to our mastery of nature outside us; the other, to our experiments with nature within us.

We are unquiet in nature because the mind concentrates and focuses a quality diffuse in nature: the mind is inexhaustible and therefore irreducible and uncontainable. No limited setting, of nature, society, or culture, can accommodate all we -- we the species, we as individuals -- can think, feel, and do. Our drivenness, including our drive to assert power over nature, follows from our inexhaustibility. We should not, and to a large extent we cannot, suppress, in the name of delight, stewardship, or reverence, the initiatives by which we strengthen our command over nature.

We nevertheless have reason to stay our hands from time to time and gradually to extend the areas of the planet and the parts of each human life that we set aside for activities free from the tyranny of the will and the dictates of society. By dividing our time between restless conquest of nature and artless reencounter with it, rather than trying to subordinate prometheanism to piety, we can guard against brutalizing ourselves.

Consider another aspect of the same view. Our societies and cultures make us who we are. However, there is always more is us -- in us, humanity, and in us, individuals -- than there is or can be in them.
They are finite. We, with respect to them, are infinite. We have no greater interest than in so arranging society and culture that they leave the future open, and invite their own revision.

Under democracy, this interest becomes paramount, for democracy grants to ordinary men and women the power to re-imagine and to remake the social order. That is why under democracy prophecy speaks louder than memory. That is why democrats discover that the roots of a human being lie in the future rather in the past. In a democracy, the school should speak for the future, not for the state or for the family, giving the child the instruments with which to rescue itself from the biases of its family, the interests of its class, and the illusions of its epoch.

These ideas can inform our efforts to fix, through genetic engineering, the nature within us. Nothing should prevent us from tinkering with our natural constitution, inscribed in genetic code, to avoid disease and deformity. The place to stop is the point at which the present seeks to form human beings who will deliver a future drawn in its own image. Let the dead bury the dead is what the future must say back, through our voices, to the present. To let the future go free would show more than power. It would show wisdom.