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The Way of Ignorance*

In order to arrive at what you do not know
You must go by a way which is the way of ignorance.
T. S. ELIOT, "EAST COKER"

OUR PURPOSE HERE is to worry about the predominance of the supposition, in a time of great technological power, that humans either know enough already, or can learn enough soon enough, to foresee and forestall any bad consequences of their use of that power. This supposition is typified by Richard Dawkins's assertion, in an open letter to the Prince of Wales, that "our brains...are big enough to see into the future and plot long-term consequences."

When we consider how often and how recently our most advanced experts have been wrong about the future, and how often the future has shown up sooner than expected with bad news about our past, Mr. Dawkins's assessment of our ability to know is revealed as a superstition of the most primitive sort. We recognize it also as our old friend hubris, ungodly ignorance disguised as godly arrogance. Ignorance plus arrogance plus greed sponsors "better living with chemistry," and produces the ozone hole and the dead zone in the Gulf of Mexico. A modern science (chemistry or nuclear physics or molecular biology) "applied" by ignorant arrogance resembles much too closely an automobile being driven by a sixyear-old or a loaded pistol in the hands of a monkey. Arrogant ignorance promotes a global economy while ignoring the global exchange of pests

^{*}Written as a preliminary paper for a conference of the same title at the Land Institute, Matfield Green, Kansas, June 3–5, 2004. The purpose of the conference is stated in my first paragraph.

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and diseases that must inevitably accompany it. Arrogant ignorance makes war without a thought of peace.

We identify arrogant ignorance by its willingness to work on too big a scale, and thus to put too much at risk. It fails to foresee bad consequences not only because some of the consequences of all acts are inherently unforeseeable, but also because the arrogantly ignorant often are blinded by money invested; they cannot afford to foresee bad consequences.

Except to the arrogantly ignorant, ignorance is not a simple subject. It is perhaps as difficult for ignorance to be aware of itself as it is for awareness to be aware of itself. One can hardly begin to think about ignorance without seeing that it is available in several varieties, and so I will offer a brief taxonomy.

There is, to begin with, the kind of ignorance we may consider to be inherent. This is ignorance of all that we cannot know because of the kind of mind we have—which, I will note in passing, is neither a computer nor exclusively a brain, and which certainly is not omniscient. We cannot, for example, know the whole of which we and our minds are parts. The English poet and critic Kathleen Raine wrote that "we cannot imagine how the world might appear if we did not possess the groundwork of knowledge which we do possess; nor can we in the nature of things imagine how reality would appear in the light of knowledge which we do not possess."

A part of our inherent ignorance, and surely a most formidable encumbrance to those who presume to know the future, is our ignorance of the past. We know almost nothing of our history as it was actually lived. We know little of the lives even of our parents. We have forgotten almost everything that has happened to ourselves. The easy assumption that we have remembered the most important people and events and have preserved the most valuable evidence is immediately trumped by our inability to know what we have forgotten.

There are several other kinds of ignorance that are not inherent in our nature but come instead from weaknesses of character. Paramount among

these is the willful ignorance that refuses to honor as knowledge anything not subject to empirical proof. We could just as well call it materialist ignorance. This ignorance rejects useful knowledge such as traditions of imagination and religion, and so it comes across as narrow-mindedness. We have the materialist culture that afflicts us now because a world exclusively material is the kind of world most readily used and abused by the kind of mind the materialists think they have. To this kind of mind, there is no longer a legitimate wonder. Wonder has been replaced by a research agenda, which is still a world away from demonstrating the impropriety of wonder. The materialist conservationists need to tell us how a materialist culture can justify its contempt and destructiveness of material goods.

A related kind of ignorance, also self-induced, is moral ignorance, the invariable excuse of which is objectivity. One of the purposes of objectivity, in practice, is to avoid coming to a moral conclusion. Objectivity, considered a mark of great learning and the highest enlightenment, loves to identify itself by such pronouncements as the following: "You may be right, but on the other hand so may your opponent," or "Everything is relative," or "Whatever is happening is inevitable," or "Let me be the devil's advocate." (The part of devil's advocate is surely one of the most sought after in all the precincts of the modern intellect. Anywhere you go to speak in defense of something worthwhile, you are apt to encounter a smiling savant writhing in the estrus of objectivity: "Let me play the devil's advocate for a moment." As if the devil's point of view will not otherwise be adequately represented.)

There is also ignorance as false confidence, or polymathic ignorance. This is the ignorance of people who know "all about" history or its "long-term consequences" in the future. And this is closely akin to self-righteous ignorance, which is the failure to know oneself. Ignorance of one's self and confident knowledge of the past and future often are the same thing.

Fearful ignorance is the opposite of confident ignorance. People keep themselves ignorant for fear of the strange or the different or the unknown, for fear of disproof or of unpleasant or tragic knowledge, for fear of stirring up suspicion and opposition, or for fear of fear itself. A good example

is the United States Department of Agriculture's panic-stricken monopoly of inadequate meat inspections. And there is the related ignorance that comes from laziness, which is the fear of effort and difficulty. Learning often is not fun, and this is well-known to all the ignorant except for a few "educators."

And finally there are for-profit ignorance, which is maintained by with-holding knowledge, as in advertising, and for-power ignorance, which is maintained by government secrecy and public lies.

Kinds of ignorance (and there must be more than I have named) may thus be sorted out. But having sorted them out, one must scramble them back together again by acknowledging that all of them can be at work in the same mind at the same time, and in my opinion they frequently are.

I may be talking too much at large here, but I am going to say that a list of kinds of ignorance comprises half a description of a human mind. The other half, then, would be supplied by a list of kinds of knowledge.

At the head of that list let us put the empirical or provable knowledge of the materialists. This is the knowledge of dead certainty or dead facts, some of which at least are undoubtedly valuable, undoubtedly useful, but at best this is static, smallish knowledge that always is what it always was, and it is rather dull. A fact may thrill us once, but not twice. Once available, it is easy game; we might call it sitting-duck knowledge. This knowledge becomes interesting again when it enters experience by way of use.

And so, as second, let us put knowledge as experience. This is useful knowledge, but it involves uncertainty and risk. How do you know if it is going to rain, or when an animal is going to bolt or attack? Because the event has not yet happened, there is no empirical answer; you may not have time to calculate the statistical probability even on the fastest computer. You will have to rely on experience, which will increase your chance of being right. But then you also may be wrong.

The experience of many people over a long time is traditional knowledge. This is the common knowledge of a culture, which it seems that few

of us any longer have. To have a culture, mostly the same people have to live mostly in the same place for a long time. Traditional knowledge is knowledge that has been remembered or recorded, handed down, pondered, corrected, practiced, and refined over a long time.

A related kind of knowledge is made available by the religious traditions and is not otherwise available. If you premise the falsehood of such knowledge, as the materialists do, then of course you don't have it and your opinion of it is worthless.

There also are kinds of knowledge that seem to be more strictly inward. Instinct is inborn knowledge: how to suck, bite, and swallow; how to run away from danger instead of toward it. And perhaps the prepositions refer to knowledge that is more or less instinctive: up, down, in, out, etc.

Intuition is knowledge as recognition, a way of knowing without proof. We know the truth of the Book of Job by intuition.

What we call conscience is knowledge of the difference between right and wrong. Whether or not this is learned, most people have it, and they appear to get it early. Some of the worst malefactors and hypocrites have it in full; how else could they fake it so well? But we should remember that some worthy people have believed conscience to be innate, an "inner light."

Inspiration, I believe, is another kind of knowledge or way of knowing, though I don't know how this could be proved. One can say in support only that poets such as Homer, Dante, and Milton seriously believed in it, and that people do at times surpass themselves, performing better than all you know of them has led you to expect. Imagination, in the highest sense, is inspiration. Gifts arrive from sources that cannot be empirically located.

Sympathy gives us an intimate knowledge of other people and other creatures that can come in no other way. So does affection. The knowledge that comes by sympathy and affection is little noticed—the materialists, I assume, are unable to notice it—but in my opinion it cannot be overvalued.

Everybody who has done physical work or danced or played a game of skill is aware of the difference between knowing how and being able. This difference I would call bodily knowledge.

And finally, to be safe, we had better recognize that there is such a thing as counterfeit knowledge or plausible falsehood.

I would say that these taxonomies of mine are more or less reasonable; I certainly would not claim that they are scientific. My only assured claim is that any consideration of ignorance and knowledge ought to be at least as complex as this attempt of mine. We are a complex species—organisms surely, but also living souls—who are involved in a life-or-death negotiation, even more complex, with our earthly circumstances, which are complex beyond our ability to guess, let alone know. In dealing with those circumstances, in trying "to see into the future and plot long-term consequences," the human mind is neither capacious enough nor exact nor dependable. We are encumbered by an inherent ignorance perhaps not significantly reducible, as well as by proclivities to ignorance of other kinds, and our ways of knowing, though impressive within human limits, have the power to lead us beyond our limits, beyond foresight and precaution, and out of control.

What I have said so far characterizes the personal minds of individual humans. But because of a certain kind of arrogant ignorance, and because of the gigantic scale of work permitted and even required by powerful technologies, we are not safe in dealing merely with personal or human minds. We are obliged to deal also with a kind of mind that I will call corporate, although it is also political and institutional. This is a mind that is compound and abstract, materialist, reductionist, greedy, and radically utilitarian. Assuming as some of us sometimes do that two heads are better than one, it ought to be axiomatic that the corporate mind is better than any personal mind, but it can in fact be much worse—not least in its apparently limitless ability to cause problems that it cannot solve, and that may be unsolvable. The corporate mind is remarkably narrow. It claims to utilize only empirical knowledge—the preferred term is "sound science," reducible ultimately to the "bottom line" of profit or power—and because this rules out any explicit recourse to experience or tradition or any kind

of inward knowledge such as conscience, this mind is readily susceptible to every kind of ignorance and is perhaps naturally predisposed to counterfeit knowledge. It comes to its work equipped with factual knowledge and perhaps also with knowledge skillfully counterfeited, but without recourse to any of those knowledges that enable us to deal appropriately with mystery or with human limits. It has no humbling knowledge. The corporate mind is arrogantly ignorant by definition.

Ignorance, arrogance, narrowness of mind, incomplete knowledge, and counterfeit knowledge are of concern to us because they are dangerous; they cause destruction. When united with great power, they cause great destruction. They have caused far too much destruction already, too often of irreplaceable things. Now, reasonably enough, we are asking if it is possible, if it is even thinkable, that the destruction can be stopped. To some people's surprise, we are again backed up against the fact that knowledge is not in any simple way good. We have often been a destructive species, we are more destructive now than we have ever been, and this, in perfect accordance with ancient warnings, is because of our ignorant and arrogant use of knowledge.

Before going further, we had better ask what it is that we humans need to know. We need to know many things, of course, and many kinds of things. But let us be merely practical for the time being and say that we need to know who we are, where we are, and what we must do to live. These questions do not refer to discreet categories of knowledge. We are not likely to be able to answer one of them without answering the other two. And all three must be well answered before we can answer well a further practical question that is now pressing urgently upon us: How can we work without doing irreparable damage to the world and its creatures, including ourselves? Or: How can we live without destroying the sources of our life?

These questions are perfectly honorable, we may even say that they are perfectly obvious, and yet we have much cause to believe that the corporate mind never asks any of them. It does not care who it is, for it is not

anybody; it is a mind perfectly disembodied. It does not care where it is so long as its present location yields a greater advantage than any other. It will do anything at all that is necessary, not merely to live, but to aggrandize itself. And it charges its damages indifferently to the public, to nature, and to the future.

The corporate mind at work overthrows all the virtues of the personal mind, or it throws them out of account. The corporate mind knows no affection, no desire that is not greedy, no local or personal loyalty, no sympathy or reverence or gratitude, no temperance or thrift or self-restraint. It does not observe the first responsibility of intelligence, which is to know when you don't know or when you are being unintelligent. Try to imagine an official standing up in the high councils of a global corporation or a great public institution to say, "We have grown too big," or "We now have more power than we can responsibly use," or "We must treat our employees as our neighbors," or "We must count ourselves as members of this community," or "We must preserve the ecological integrity of our work places," or "Let us do unto others as we would have them to do unto us"—and you will see what I mean.

The corporate mind, on the contrary, justifies and encourages the personal mind in its worst faults and weaknesses, such as greed and servility, and frees it of any need to worry about long-term consequences. For these reliefs, nowadays, the corporate mind is apt to express noisily its gratitude to God.

But now I must hasten to acknowledge that there are some corporations that do not simply incorporate what I am calling the corporate mind. Whether the number of these is increasing or not, I don't know. These organizations, I believe, tend to have hometowns and to count themselves as participants in the local economy and as members of the local community.

I would not apply to science any stricture that I would not apply to the arts, but science now calls for special attention because it has contributed so

largely to modern abuses of the natural world, and because of its enormous prestige. Our concern here has to do immediately with the complacency of many scientists. It cannot be denied that science, in its inevitable applications, has given unprecedented extremes of scale to the technologies of land use, manufacturing, and war, and to their bad effects. One response to the manifest implication of science in certain kinds of destruction is to say that we need more science, or more and better science. I am inclined to honor this proposition, if I am allowed to add that we also need more than science.

But I am not at all inclined to honor the proposition that "science is self-correcting" when it implies that science is thus made somehow "safe." Science is no more safe than any other kind of knowledge. And especially it is not safe in the context of its gigantic applications by the corporate mind. Nor is it safe in the context of its own progressivist optimism. The idea, common enough among the universities and their ideological progeny, that one's work, whatever it is, will be beneficently disposed by the market or the hidden hand or evolution or some other obscure force is an example of counterfeit knowledge.

The obvious immediate question is, How soon can science correct itself? Can it correct itself soon enough to prevent or correct the real damage of its errors? The answer is that it cannot correct itself soon enough. Scientists who have made a plausible "breakthrough" hasten to tell the world, including of course the corporations. And while science may have corrected itself, it is not necessarily able to correct its results or its influence.

We must grant of course that science in its laboratories may be well under control. Scientists in laboratories did not cause the ozone hole or the hypoxic zones or acid rain or Chernobyl or Bhopal or Love Canal. It is when knowledge is corporatized, commercialized, and applied that it goes out of control. Can science, then, make itself responsible by issuing appropriate warnings with its knowledge? No, because the users are under no obligation to heed or respect the warning. If the knowledge is conformable to the needs of profit or power, the warning will be ignored, as we know. We are not excused by the doctrine of scientific self-correction from worrying

about the influence of science on the corporate mind, and about the influence of the corporate mind on the minds of consumers and users. Humans in general have got to worry about the origins of the permission we have given ourselves to do large-scale damage. That permission is our problem, for by it we have made our ignorance arrogant and given it immeasurable power to do harm. We are killing our world on the theory that it was never alive but is only an accidental concatenation of materials and mechanical processes. We are killing one another and ourselves on the same theory, If life has no standing as mystery or miracle or gift, then what signifies the difference between it and death?

To state the problem more practically, we can say that the ignorant use of knowledge allows power to override the question of scale, because it overrides respect for the integrity of local ecosystems, which respect alone can determine the appropriate scale of human work. Without propriety of scale, and the acceptance of limits which that implies, there can be no form—and here we reunite science and art. We live and prosper by form, which is the power of creatures and artifacts to be made whole within their proper limits. Without formal restraints, power necessarily becomes inordinate and destructive. This is why the poet David Jones wrote in the midst of World War II that "man as artist hungers and thirsts after form." Inordinate size has of itself the power to exclude much knowledge.

What can we do? Anybody who goes on so long about a problem is rightly expected to have something to say about a solution. One is expected to "end on a positive note," and I mean to do that. But I also mean to be careful. The question, What can we do? especially when the problem is large, implies the expectation of a large solution.

I have no large solution to offer. There is, as maybe we all have noticed, a conspicuous shortage of large-scale corrections for problems that have large-scale causes. Our damages to watersheds and ecosystems will have to be corrected one farm, one forest, one acre at a time. The aftermath of a bombing has to be dealt with one corpse, one wound at a time. And so the

first temptation to avoid is the call for some sort of revolution. To imagine that destructive power might be made harmless by gathering enough power to destroy it is of course perfectly futile. William Butler Yeats said as much in his poem "The Great Day":

Hurrah for revolution and more cannon shot! A beggar upon horseback lashes a beggar on foot. Hurrah for revolution and cannon come again! The beggars have changed places, but the lash goes on.

Arrogance cannot be cured by greater arrogance, or ignorance by greater ignorance. To counter the ignorant use of knowledge and power we have, I am afraid, only a proper humility, and this is laughable. But it is only partly laughable. In his political pastoral "Build Soil," as if responding to Yeats, Robert Frost has one of his rustics say,"

I bid you to a one-man revolution— The only revolution that is coming.

If we find the consequences of our arrogant ignorance to be humbling, and we are humbled, then we have at hand the first fact of hope: We can change ourselves. We, each of us severally, can remove our minds from the corporate ignorance and arrogance that is leading the world to destruction; we can honestly confront our ignorance and our need; we can take guidance from the knowledge we most authentically possess, from experience, from experience, from experience and the state of thetradition, and from the inward promptings of affection, conscience, decency, compassion, even inspiration.

This change can be called by several names—change of heart, rebirth, metanoia, enlightenment—and it belongs, I think, to all the religions, but I like the practical way it is defined in the Confucian Great Digest. This is from Ezra Pound's translation:

The men of old wanting to clarify and diffuse throughout the empire that light which comes from looking straight into the heart and then acting, first set up good government in their own

states; wanting good government in their states, they first established order in their own families; wanting order in the home, they first disciplined themselves; desiring self-discipline, they rectified their own hearts; and wanting to rectify their hearts, they sought precise verbal definitions of their inarticulate thoughts [the tones given off by the heart]; wishing to attain precise verbal definitions, they set to extend their knowledge to the utmost.

This curriculum does not rule out science—it does not rule out knowledge of any kind—but it begins with the recognition of ignorance and of need, of being in a bad situation.

If the ability to change one self is the first fact of hope, then the second surely must be an honest assessment of the badness of our situation. Our situation is extremely bad, as I have said, and optimism cannot either improve it or make it look better. But there is hope in seeing it as it is. And here I need to quote Kathleen Raine again. This is a passage written in the aftermath of World War II, and she is thinking of T. S. Eliot's poem The Waste Land, written in the aftermath of World War I. In The Waste Land, Eliot bears unflinching witness to the disease of our time: We are living the death of our culture and our world. The poem's ruling metaphor is that of a waterless land perishing for rain, an image that becomes more poignant as we pump down the aquifers and dry up or pollute the rivers.

But Eliot [Kathleen Raine said] has shown us what the world is very apt to forget, that the statement of a terrible truth has a kind of healing power. In his stern vision of the hell that lies about us..., there is a quality of grave consolation. In his statement of the worst, Eliot has always implied the whole extent of the reality of which that worst is only one part.

Honesty is good, then, not just because it is a virtue, but for a practical reason: It can give us an accurate description of our problem, and it can set the problem precisely in its context.

Honesty, of course, is not a solution. As I have already said, I don't think there are solutions commensurate with our problems. I think the great problems call for many small solutions. But for that possibility to attain sufficient standing among us, we need not only to put the problems in context but also to learn to put our work in context. And here is where we turn back from our ambitions to consult both the local ecosystem and the cultural instructions conveyed to us by religion and the arts. All the arts and $sciences\,need\,to\,be\,made\,ans we rable\,to\,standards\,higher\,than\,those\,of\,any$ art or science. Scientists and artists must understand that they can honor their gifts and fulfill their obligations only by living and working as human beings and community members rather than as specialists. What this may involve may not be predictable even by scientists. But the best advice may have been given by Hippocrates: "As to diseases make a habit of two things-to help, or at least, to do no harm."

The wish to help, especially if it is profitable to do so, may be in human nature, and everybody wants to be a hero. To help, or to try to help, requires only knowledge; one needs to know promising remedies and how to apply them. But to do no harm involves a whole culture, and a culture very different from industrialism. It involves, at the minimum, compassion and humility and caution. The person who will undertake to help without doing harm is going to be a person of some complexity, not easily pleased, probably not a hero, probably not a billionaire.

The corporate approach to agriculture or manufacturing or medicine or war increasingly undertakes to help at the risk of harm, sometimes of great harm. And once the risk of harm is appraised as "acceptable," the result often is absurdity: We destroy a village in order to save it; we destroy freedom in order to save it; we destroy the world in order to live in it.

The apostles of the corporate mind say, with a large implicit compliment to themselves, that you cannot succeed without risking failure. And they allude to such examples as that of the Wright brothers. They don't see

that the issue of risk raises directly the issue of scale. Risk, like everything else, has an appropriate scale. By propriety of scale we limit the possible damages of the risks we take. If we cannot control scale so as to limit the effects, then we should not take the risk. From this, it is clear that some risks simply should not be taken. Some experiments should not be made. If a Wright brother wishes to risk failure, then he observes a fundamental decency in risking it alone. If the Wright airplane had crashed into a house and killed a child, the corporate mind, considering the future profitability of aviation, would count that an "acceptable" risk and loss. One can only reply that the corporate mind does not have the householder's or the parent's point of view.

I am aware that invoking personal decency, personal humility, as the solution to a vast risk taken on our behalf by corporate industrialism is not going to suit everybody. Some will find it an insult to their sense of proportion, others to their sense of drama. I am offended by it myself, and I wish I could do better. But having looked about, I have been unable to convince myself that there is a better solution or one that has a better chance of working.

I am trying to follow what T. S. Eliot called "the way of ignorance," for I think that is the way that is appropriate for the ignorant. I think Eliot meant us to understand that the way of ignorance is the way recommended by all the great teachers. It was certainly the way recommended by Confucius, for who but the ignorant would set out to extend their knowledge to the utmost? Who but the knowingly ignorant would know there is an "utmost"to knowledge?

But we take the way of ignorance also as a courtesy toward reality. Eliot wrote in "East Coker":

The knowledge imposes a pattern, and falsifies, For the pattern is new in every moment And every moment is a new and shocking Valuation of all we have been.

This certainly describes the ignorance inherent in the human condition, an ignorance we justly feel as tragic. But it also is a way of acknowledging the uniqueness of every individual creature, deserving respect, and the uniqueness of every moment, deserving wonder. Life in time involves a great freshness that is falsified by what we already know.

And of course the way of ignorance is the way of faith. If enough of us will accept "the wisdom of humility," giving due honor to the everrenewing pattern, accepting each moment's "new and shocking/Valuation of all we have been," then the corporate mind as we now have it will be shaken, and it will cease to exist as its members dissent and withdraw from it.

(2004)