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The Human Journey

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CLEARLY, WHEN WE SPEAK of bodies, we are speaking of ourselves, and furthermore our bodies as they are embedded in technology. Rather than thinking of ourselves as abstractions, our selves are a rich mix of dimensions that defy separation—they exist together in ways that our words and concept struggle to understand. The central issue is human identity. It's about the struggle to arrive at the meaning of being human today, or theological anthropology. The struggle to arrive at human meaning is the grappling with our own human creativity, particularly in its technological expression. This struggle is at the heart of our being today; it grows out of our very nature as we try to discern the future of our culture.

This chapter presents another “take” on our bodyselves—a natural outreach for our thinking, even as it extends far beyond the scope of this book.

A note about terminology is in order. We commonly talk about “human being,” but this can be confusing. The word “being” is both a noun and a verb form. It can refer to us as creatures, members of the species *Homo sapiens*. So, we can say, “She is a human being.” It also refers to the activity of *being* human. So, we can say, “Human *being* is a challenge to us,” which means the same as “*Being* human is a challenge to us.”

Both “being human” and the “human being”—are a process, a *becoming*. Human beings could just as well be referred to as “human becomings.” We are “becomings.” We are caught up in the process of human becoming, and we are struggling to understand what it means to become human.

WE ARE WRITING A PERSONAL NARRATIVE, A MEMOIR

What kind of venture is this, which describes its theme as “becoming human?” We can grasp its meaning in terms of “memoir.” We are all writing our own memoir.

What is memoir? Vivian Gornick offers an explanation.¹ Memoir is not fiction, neither poetry nor novel nor a piece for the theater. It must be creative, to be sure, but it is not fiction. Memoir is not journalism or science. It does not presume to be so detached in its objectivity that it simply reports some truth “out there,” with no personal involvement for the writer. Memoir is not just the facts. Nor is memoir autobiography, in which it is perfectly acceptable, as Gornick says, to fall “into the pit of confessionalism or therapy on the page or naked self-absorption.”

In contrast, the memoir describes a situation—my situation, our situation—and tells a story that makes sense of the situation. One facet of our situation is our genes and culture. Humans as creators and technological crisis are coordinates that map our situation. Journalism and science can place the situation at center stage and put the sense of meaning of that situation aside. Fiction, on the other hand, can take liberties—poetic license we call it—in describing both situation and its possible meaning. Autobiography, for instance, can focus entirely on what happened to me and how I reacted to it.

Memoir must take a different tack. What makes a compelling memoir is a credible description of its author’s situation, as well as a clear sense of the self who struggles in that situation. Further, it is the forging of an interpretation that can respond to the “So What?” question of the self in the situation—an interpretation that grapples with the meaning of the self’s entanglement in its situation. When we speak of memoir, we are dealing with what Gornick also calls *personal narrative*.

What do religion and science have to do with memoir and personal narrative? They have everything to do with it, because science is a fundamental element of our situation today, and religion is challenged to tell a

1. Gornick, *The Situation and the Story*.

story that will make sense of that situation. There is more to our situation than science, but there is very little in our situation today that does not have a thread of connection to science and its consequences. Each one of us is challenged to tell the story that offers the sense of our situation. Not all of us will bring religion into this story, but many of us will. In this respect the religious effort is part of the larger human effort to discern meaning. Whether religious or not, we are comrades, brothers and sisters together writing our personal narrative in the attempt to make sense of our situation.

Memoir reminds us that the sense we are looking for is not abstract, far removed or “other” from us; it is the meaning of ourselves that we are after. Each of us and all of us together are engaged in this personal narrative. When we struggle for our own meaning, it is then that a new awareness of our situation dawns on us. This new awareness becomes our principal statement about our situation. We are discovering—it is being revealed to us—that our experience in the world is moving us toward new understandings and interpretations of who we are. We are in the process of discovering that we are indeed caught up in a process of becoming that requires fresh ideas, fresh images of ourselves. The images of us as creators and as created co-creators are emerging in this process of self-discovery.

BOTH CREATED AND CREATOR?

A sense is emerging that we are creators, by our very nature and experience. However, we are as much *created* as *creator*. The scientific story tells us that the processes of nature have created us, by means of evolution. We did not give ourselves our physical-chemical-biological composition, nor did we give ourselves brains and the culture that they make possible and necessary. When we turn to our religious traditions, we will see that they speak of our being created by God. These natural processes that have engendered us are declared to be the instrumentality of the divine Creator.

Since we are created as we are, the conclusion to be drawn is that we are *created* creators. There is linkage, however, between the source of our being created and our own creativity. I try to capture the fullness of this linkage by using the term, “created co-creator.” To the degree that evolving nature has created us, our own creating is taken up into that nature, so that we are nature’s own creators, co-creators with the evolutionary process that has engendered us. If we view ourselves as created by God, as the religious traditions tell us, we are God’s co-creators.

We find ourselves in a strange situation. We are aggressive, forward looking, intent on making plans and carrying them out. But we are finding that in our aggressiveness, we are on the receiving end of a process that we did not plan or even foresee. We sense that we are undergoing transformations that do not fit with our accepted self-images, our received interpretations of what it means to be human. This is truly our situation—in which we are becoming human in ways that we cannot ourselves easily comprehend or take the measure of. And once this awareness dawns on us, we recognize that this process of becoming did not begin just yesterday—it has been years, decades, even millennia in the works. We did not know it, because we had to discover it. Once we begin to discover it, we have to forge the ideas that can interpret it for us and tell what its meaning is. We are attempting to tell a story that makes sense of our situation and journey. This is the stuff of memoir.

WHO IS THE MEMOIRIST?

The author of this narrative is you, me, all of us. What is being said, what is being narrated, is the journey of awareness that we are becoming different beings, new beings who cannot be contained by older ideas of who we are. We require new images and ideas that are up to the task of telling us who we are becoming.

A memoir requires a clear sense of the self, of the “we” whose voice inhabits the personal narrative. We who are caught up in this journey of becoming are not abstract ciphers; we are not faceless members of some massive horde. What must we say about ourselves, we who are memoirists of human becoming? Here I lay down a few basic points.

We first of all recognize that we are somewhat off-balance and unsure. We are ourselves undergoing transformations whose end we cannot see: we are caught up in a process of discovery. Our journey of becoming is not a trip to the grocery store with a prearranged list of items to guide us from one aisle to the next, nor is it like a business meeting that we chart ahead of time with an agenda in one hand and Robert’s Rules of Order in the other. A better image is that of a driver in a car racing along the interstate highway at seventy miles an hour with a map in one hand, to find the destination, and a service manual in the other, to diagnose and repair defects in the car at the same time. This is our vulnerability, and it is intrinsic to our nature as co-creators.

VULNERABILITY AND AMBIVALENCE

We write our narrative out of our vulnerability in this situation—little wonder that we are also anxious writers. We are ambivalent. On the one hand, we are eager to reach our destination, but, on the other, we are not happy at the prospect of our own ignorance as to where that destination lies and what the conditions of the highway are. It is not always pleasurable for us to undergo transformations that we cannot control or even predict. Our own personal ambivalence is reflected in the larger community and society, because we do not all respond in the same way to the prospect of transformation.

For some of us, the scientific accounts have rendered the religious views unbelievable; scientific understanding has displaced the religious—at least on the surface. Others, contrariwise, are so uncomfortable with the naturalistic accounts of science that they opt for religious interpretations at the expense of science—also at least on the surface. This ambivalence, in my view, is on both sides. The secularists hold on to high valuation of human being that has its roots in our religious traditions, while those who oppose evolutionary interpretations of human being continue to go for medical treatment whose cornerstone is evolutionary biology.

We are also ambivalent about the idea of “human becoming,” because we often prefer stable, unchanging states. We often would like to think of human nature as something fixed and reliable. Some believers in the Bible would rather read Genesis 1 as if the theory of evolution had never been formulated. At the same time, a secular thinker like Francis Fukuyama, in his thoughtful book *Our Posthuman Future*, argues that biotechnology is dangerous because it threatens to alter human nature. This is illustrative of our vulnerability in that we are undergoing transformations whose end we cannot see and are often caught up in the process of discovery.

For instance, many people would rather not struggle with new values of life that are engendered by current options in reproductive technology, because they prefer to think of sexuality and procreation as if those technologies had never emerged.

We should not try to hide from ourselves or from the outside world that we the memoirists are off balance, ambivalent, vulnerable, anxious, and caught in the crossfire of differing opinions and values within ourselves. Recognizing this about ourselves is essential for the substance of our personal narrative and for its credibility. In fact, this is what our memoir is

about—how we respond to our situation of vulnerability and ambivalence *as well as* how we interpret its meaning.

THE FRAGMENTS

Finally, we recognize that even though we seek the largest meaning possible for our personal narrative, we access that larger meaning through fragments. Saint Paul recognized this when he said that we see through a glass darkly (1 Cor 13:12, KJV). God as the voice out of the whirlwind told Job very clearly that his understanding was fragmentary (Job 38:1—40:2 and 40:6—41:14).

Jews, Christians, and Muslims among us will want to bring God into the memoir. These three religions find their common point of contact in Abraham, whose place as a father of faith is grounded in his willingness to devote his life to a journey whose outcome he could not know. He knew God as the one who called him to travel. In Christian traditions, Martin Luther and the Eastern theologians stand out as theologians of fragments. Luther understood that all talk about God was through a glass darkly. He spoke of the hidden God whose nature is known only through the fragment of Jesus Christ and his cross. The Eastern theologians, epitomized in Dionysius the Areopagite, recognized that finally it is not possible to speak about God—this is known as *apophatic* theology. When we do speak about God it is against a background of unspeakableness. Even theologians in the tradition who seemed to speak a great deal about God, such as Augustine, Anselm, and Thomas Aquinas, went to great lengths to remind us that our talk about God is not straightforward and direct, but rather analogical. How could it be otherwise, since God is infinite and our minds are finite?

Science gives us helpful images for this point. Think of our knowledge of the universe and its evolution. We are infinitesimally small creatures on a small planet revolving around one of a billion billion stars. The universe is now so vast that it is not possible to communicate its breadth. We came on the scene at least 12 billion years after the universe got its start, and by most estimates the universe is not even half way through its evolution. Yet we seek the knowledge of this universe, both its present state and its origins and its ending. The image comes to mind of a corpuscle in my bloodstream, or a cell in my body, seeking to understand me, from my conception to my death and everything in between.

We have only fragments for the basis of our knowledge, but the fragments are real. The writer of the memoir knows that the fragment we have is our own life, our own situation, our own journey. The memoirist knows that the only chance of real and trustworthy knowledge requires honest attentiveness to the fragment that is us and that our only chance of discovering the truth is by being faithful to the fragment we have been given—our experience of the journey that is becoming human.

Our journey of becoming human lies through this unexhaustiveness of nature. Job called it the whirlwind, Luther spoke of theology of the cross, Kierkegaard insisted that only indirect discourse is appropriate on this journey. Our personal narrative, our memoir, begins with recognizing that our situation is a fragment, convinced that attention to that fragment and the search for its meaning is not only our best hope, it is the substance of becoming human.

Our memoir must be about the human journey, about the struggle to arrive at the meaning of being human today. It is a journey searching for new symbols by which to interpret an experience that is formative for our times. This journey is also a journey of becoming human. Here we want to examine religion-and-science in this larger context of what it means to become human in our time.

The image of ourselves as creators stands out as a centerpiece of our reflections. There is an emerging image of who we are that is coming from our human experiences, particularly our scientific endeavors and technology. Who we are is not firmly fixed in our minds, is still much debated, and has yet to find a consensus. At the same time, the image is very real. This image is scientific in that it is provoked and undergirded by scientific evolutionary views of human development, but the image is also a matter of common human experience throughout much of the world. However, the scientific understanding and the common experience are brought into the spotlight because of an intense crisis of creativity in which we find ourselves. It often happens this way, that when we are in crisis, in danger of losing what is familiar and valuable to us and also feeling the lure toward unexplored territory, we gain a clarity about ourselves that is lacking in more tranquil times.

Common Experience

Our experience is that we are able to do things that are novel: that we are able to change the world around us and the world within us in ways that seem new. We can test a pregnant woman, determine the condition and genetic development of the life she is carrying within her and contemplate a number of interventions for the sake of mother or unborn child. We can rearrange the molecules of the earth's natural resources to develop new substances, such as nylon, plastics, or synthetic skin and bone. We regularly fabricate life-sustaining environments that enable men and women to travel and work in outer space. We rearrange genetic structures so as to enable goats to give milk that is especially beneficial to humans, or pigs to grow organs that are friendly for transplant to humans. We have created a cyberworld.

Such experiences are not all brand new; some have been available for decades. They point to our experience of imagining and actually creating alternative worlds. We rearrange matter; we can put the pieces of nature's jigsaw puzzle together in unusual ways in order to create new combinations and realities. These experiences reveal our complex and intimate interrelationships with technology—a key part of the story of human becoming we shall explore later. Just as striking as these technological marvels are our imagining and creating of alternative social and political worlds. In my lifetime, for example, I have witnessed the emerging alternative world in which gender roles have been rearranged, as well as the relations between the races. The social world called “family” has undergone transformation, so much so that it is simply no longer possible to impose the older norm of the nuclear family in which a father comes home from work to greet two children who have spent the day under the nurturing care of a stay-at-home mother—that is now one form of family, not the norm. And, of course, I have lived through the era when the socialist and communist movements attempted to reshape entire societies in dramatic ways—and, as in the case of China, have not failed.

At the core of these examples is the experience of ourselves as “creators.” These examples flesh out the conviction with which I began telling the human story. Everything I cover here is intended to clarify and interpret this experience. This experience is not tangential to our lives today, not a secondary element, but rather it is central. I believe it is an essential component of becoming human in our present times.

Scientific Perspectives

Scientific understandings throw light on this experience of ourselves as creators; they underscore its essential character. We have evolved as creatures of genes and cultures. I am not suggesting a dualism, as if one could draw a line down our middle and say to one side we are genes, to the other, culture. Furthermore, adaptation to the physical and social environment is a third member of any equation that includes genes and cultures. These are only categories of analysis; in actuality, they are so integral to one another that it is a serious error to think of them in terms of dualism.

To say that we are genes is to acknowledge our physical-chemical-biological constitution as one pathway by which we become human. Physically and chemically, we reveal our ancestry in the galaxies and stars in which the elements of our planet and our bodies originated. We are creatures of stardust, some like to say. Biologically, we declare our kinship with all life forms that emerge in the primal soup, or the primal steam vents, or whatever original conditions are denoted by the various theories of life's origins. In recent years, we have been reminded how much of our DNA we share with chimpanzees, or even with earthworms. Genes speak not only of our constitution and our journey to the position of *Homo sapiens*, they also speak of the present programs that govern so much of our development. In my childhood, I learned that genes programmed eye color; now we know that predisposition to certain illnesses and defects, even moods and personality, have an element of genetic programming. Even our mortality, our growing old and dying, is written into our genetic composition.

Genes are essential, but genes alone do not a human being make. Our evolution has given rise also to a fully biological organ called the brain or central nervous system. The brain is the seat of learned and taught behaviors and the symbols by which we interpret our learning and teaching—that is what we mean here by the term culture. Culture is as essential to us as genes are. If you have watched a calf being born in the barnyard, you may be impressed, as I am, at how quickly, in a matter of minutes and hours, the calf gets to its feet, walks, finds its mother's milk, and gets a start in life. In our contemporary agricultural system, there is, to be sure, some cultural involvement in that calf's birth—the learning and teaching involved in artificial insemination, enhanced feeding, and the like. How different, however, from the birth of my granddaughter a number of years ago. Not only was prenatal medical care necessary for the mother, but father and mother together also took classes in birthing and caring for infants. At each

well-baby visit, the doctor not only gives a verdict of “fine” or “needs some special attention,” but also a report on the percentile of height and weight into which the baby fits for her age group. A modicum of child development theory is conveyed, so that baby Rory received the optimum stimulation for her developing brain and psyche. If human babies received no more cultural attention than the calf, they would die at an early age. Many babies today are sick and dying because they do receive so little cultural attention. Without the culture, their genes would give out.

Medical centers are a symbol of the intense cultural intervention we exercise through our practice of medicine, aimed at keeping our biology functioning, so that our culture can maintain its quality. What goes on at our hospitals is culture intervening in our biology. And since culture has emerged from biology, the practice of medicine is actually a stage of biology intervening in itself. The calf is a mature adult in little more than a year, whereas human development specialists would say that it takes nearly thirty years today to produce a well-functioning adult human being. It does not take our biology thirty years to grow up; our culture requires the three decades in order to acculturate the person for competent, mature living, which accounts for the importance of universities.

Think back to the experience of ourselves as creators. The popular scientific sketch I have just drawn adds to our experience, in that it clarifies that the component of creativity, of being creators, is written in our biology. Our genes, to be sure, exhibit flexibility and unpredictability, but it is our brains and the development of our culture that is shaped by creativity just as surely as our biology is shaped by prior programming and environment. Our culture—learning and teaching—is as fundamental to us as our genes, but with a far smaller element of prior programming. For instance, I marvel when I read about prehistoric humans. How did they learn which plants and animals were suitable for eating? How did the Maya, for example, come to know that corn is an imperfect food unless it is prepared with the introduction of lime, whereupon it becomes fully nutritional?

Culture evolves, of course, just as biology does, although according to different, non-Darwinian laws. Some years ago, I visited the magnificent Museum of Mining at Bochum in the Ruhr region of Germany. Half of this museum is devoted to the history of mining and the other half to the technology of mining. In the historical exhibits, the cultural evolution is set forth vividly from the prehistoric scraping of the earth to the digging of shafts in the earth to the industrialized mining procedures of the last two to

three centuries. The climax comes in the depiction of entire villages being relocated so that the ground beneath them can be mined, only to be replaced when the extraction is completed. The huge machines for these operations not only extract the ore, but also carry out several steps of processing before the ore is loaded on trains for the final manufacture. Our experiences of being creators today may be enabled by our primordial genetic-cultural constitution, but it takes the form that we know today because we stand where we do in the evolutionary development of our cultural capabilities. The exhibits of this museum set forth in striking panorama—from prehistoric scraping to contemporary village-replacement—the capability of our brains to imagine the alternative worlds that we then create by means of our cultures.

THE CRISIS OF TECHNOLOGICAL CIVILIZATION

This leads us directly to the element of crisis, which is the third strand that contributes to the awareness of ourselves as creators. I use the term, crisis of technological civilization. In our contemporary experience, technology is central to what I have referred to as culture. Learned and taught patterns of behavior and the symbols that interpret them are nowhere more prominent and powerful than in our technology. Technology has always been with us, from the times of crude stone tools, to the present. But today we live in a new technological situation that can be described this way: through technology we have superimposed our culture over nearly all the natural systems of our planet. Theologian H. Richard Niebuhr, following Bronislaw Malinowski, spoke of culture as an “artificial, secondary environment, which we superimpose on the natural.”²

It comprises language, habits, ideas, beliefs, customs, social organization, inherited artifacts, technical processes, and values. The word “artificial” is misleading, but Niebuhr’s idea is to the point.

The image that comes to mind is that of the clear plastic overlays that we frequently use. We may place a map upon a table and lay upon that map a clear sheet that depicts the river system of the area, over that a sheet that depicts the hills and mountains, and over that one that depicts the population density or the pockets of air pollution, or the like. The original map is there, underneath it all, but we access the map through the overlays. In some such manner, I see our technology in relation to the natural world. The

2. Niebuhr, *Christ and Culture*, 32.

difference is that we cannot easily remove our technological overlays and return to the original map. Domesticated livestock animals, for example, cannot be instantly return to their pre-human state. The Colorado and Rio Grande Rivers cannot be restored to their prehistoric flows. In nearly every area of the world, it would be impossible for human beings who inhabit our planet to live once again, or be once again, as they were in the 1800s. We speak of globalization, and we must acknowledge that it is unlikely that we could turn back into a preglobalized condition, in which the races and nations would live in isolation from one another. It is unlikely that we could ever resuscitate the identical gender roles that marked the interactions of men and women in the era in which I was growing up.

The examples I cite have become hot issues for debate. They are elements of a crisis after all. I intend no value judgments at the moment, however, just description. The critical point to be made is that sometime within the last fifty years or so we reached the point where the domination of natural systems by human cultural systems became a necessity for human survival. For decades, our technological overlays enabled a decline in the mortality rate and the lengthening of human life—an increase in the population. Now, however, the technological overlay not only *enables* the human population, it is a necessity for the *survival* of that population. If we forcibly removed our technological interaction with the rest of nature, millions, even billions, of people around the world would perish.

This describes what I mean by the term technological civilization. What is the crisis? How is it to be defined? We must pause for a moment to consider how our techno-culture works. Technology requires continuous conscious awareness, knowledge, planning, competent operation, monitoring, and evaluation—in short, as philosopher Hans Jonas has put it, it requires constant accountability. Technology does not just happen and go its way on its own, as the calf emerges from the cow's belly and steps out into the barnyard. Every time we flip an electrical switch or turn on our faucets, we should remember how fully dependent the flow of light and water is upon massive amounts of human engineering and operational competence—we often call it infrastructure.

Furthermore our technology must not only work on its own, it must interface with millions of other systems in the natural world. Synchronizing with the environment is an inescapable requirement. The crisis of technological civilization resides in the fact that for all of our knowledge and expertise, we are not fully competent to maintain our secondary

environment, nor are we able to interface adequately with the other systems of nature. An example: because of our lack of understanding and foresight, our technological capability to enhance the growth of beef cattle with the use of antibiotics fosters resistance in bacteria that threatens human beings. Here we see the intertwining of lack of competence and the failure of our cultural systems to interface properly with other systems in nature. The bacteria are simply doing what they do very well—evolving, adapting, coping with their environment. We knew this all along, but we did not take it into account. This reminds us that other systems of nature are dynamic, constantly evolving—a characteristic that is difficult for us to engineer continuously into our cultural systems.

Technology is rooted in the intrinsic nature of *Homo sapiens*, it is the work of our culture, the product of our brains, as they go about doing what comes naturally to them, imagining alternative worlds and acting on that imagination. Technology is an overlay upon the other systems of nature and comes as naturally to humans as anything else. It is as natural to us as making honey is natural to bees. Technology is natural in this respect. It is not “artificial,” as Niebuhr said. Furthermore, it is a natural expression of our nature as creators. If we are not fundamentally creators, this crisis would not exist. This is truly a civilizational crisis, because if we look carefully, we see that nearly every trouble that we experience today has its origins in our culture and our difficulty in conducting our culture adequately.

The crisis of technological civilization is thus quintessentially a crisis of culture and therefore ultimately a human crisis, the crisis of human creators. The crisis has its origins in that which is our distinctive gift, our highly developed brains and their culture. To say that we are incompetent in the exercise of our culture and inadequately synchronized with the rest of nature is to say that in a significant way we are incompetent to be human, incompetent to exercise our gifts, and that we are indeed out of sync with other systems of nature. The crisis therefore challenges us to understand who we are in the scheme of things, specifically, in the natural world. What is the purpose of culture? How are we to conduct it in accord with its purpose? The crisis presses us to gain a sense of our own identity so that we are enabled to respond to these questions.

As I suggested earlier, crisis is revelatory. When we are in danger, when we are threatened with loss, a shaft of light is thrown on what is essential to us, on what matters most to us. In this shaft of light, we encounter

the ambiguity of our own human becoming. We hope as well that this light will point us toward adequate responses to that ambiguity.

SAMPLE