

The Posthuman Condition

By Bill McKibben

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Right now, all around the world, ten thousand scientists are assembling ten thousand different pieces of the human genetic puzzle. Most of this work leads in exciting directions – toward new and better cancer drugs, a vaccine for AIDS – but such research may also lead to something much darker: to attempts at genetically engineering human beings in the womb, designing our children to make them smarter, prettier, “better.” We’ve already done such work with a long list of other mammals, and scientists right up to James Watson, the co-discoverer of the DNA double helix, now urge us to try the same trick with our kids, arguing that it is both inevitable and desirable. “Going for perfection,” Watson calls it. But in fact such genetic tampering threatens to destroy the very things that give meaning to human life. From a certain vantage point, meaning has been in decline for a very long time, almost since the beginning of civilization. Our hunter-gatherer ancestors inhabited a very different world from ours, a meaning-saturated world where every plant and animal was an actor the way people are actors, where even rocks and mountains and canyons and rivers could speak. We look at that same world and see either silent landscape or pile of resources; either it has gone mute or our hearing is nowhere near as sharp.

But the context of our lives began to shrink much more quickly in the last five hundred years. As science

offered first new explanations and then new technologies, we have traded in the old contexts that informed human lives, bargaining them away in return for freedom, for liberation. The medieval church, which ordered Western civilization, gave way to more individualized religion; we read the Bible for ourselves, or not. Static peasant life, and guild life, in which a carpenter was the great-great-grandson of one carpenter and the great-great-grandfather of another, gave way to the enormous dynamism of technology-driven capitalism: now two percent of Americans work as farmers, and our typical countryman changes jobs eight times in his life. Conservatives whimpered about the threat to order almost from the start – they knew Galileo was trouble, could sense the trajectory from him and his telescope to Nietzsche and the death of God. But radicals saw it just as clearly. Marx and Engels, of course, offered the single greatest description of this phenomenon when they wrote in 1848 that “all fixed, fast-frozen relations, with their train of ancient and venerable prejudices and opinions, are swept away, all new-formed ones become antiquated before they can ossify. All that is solid melts into air . . .”

What’s really amazing about what Max Weber called the “disenchantment” of the world was how long it took. “After every announcement of the technological conflagration, much traditional and natural reality has remained to be consumed,” writes the philosopher Albert Borgmann. So, in the last century, the invention of the car offered the freedom of mobility, at the cost of the small, coherent physical universes most people had inhabited.

The invention of radio and television allowed the unlimited choices of a national or a global culture but undermined the local life that had long persisted; the old people in my small rural town can still recall when “visiting” was the evening pastime, and how swiftly it disappeared in the 1950s, when CBS and NBC arrived. The 1960s seemed to mark the final rounds of this endless liberation: the invention of divorce as a mass phenomenon made clear that family no longer carried the meaning we’d long assumed, that it could be discarded as the village had been discarded; the pill and the sexual revolution freed us from the formerly inherent burdens of sex, but also often reduced it to the merely “casual.”

Whether all this was “good” or “bad” is an impossible question, and a pointless one. These changes came upon us like the weather; “we” “chose” them only in the broadest sense of the words. They were upon us before we could do anything about them. You may keep the TV in the closet, but you still live in a TV society. The possibility of divorce now hovers over every marriage, leaving it subtly different from what it would have been before. What’s important is that all these changes went in the same direction: they traded context for individual freedom. Maybe it’s been a worthwhile bargain; without it, we wouldn’t have the prosperity that marks life in the West, and all the things that prosperity implies. Longer life span, for instance; endless choice. But the costs have clearly been real, too: we’ve tried hard to fill the hole left when community disappeared with “traditional values” and evangelical churches, with back-to-the-land

communes and New Age rituals. But those frantic stirrings serve mostly to highlight our radical loneliness. Even the surrounding natural world no longer serves as a ground, a context; we’ve reshaped it so thoroughly, now changing even its climate, that it reflects our habits and appetites and economies instead of offering us a doorway into a deeper world.

The past five hundred years have elevated us to the status of individuals, and reduced us to the status of individuals. At the end of the process, that’s what we are – empowered, enabled, isolated, disconnected individuals. Call it blessing or call it curse or call it both, that’s where we find ourselves. Our greatest cultural artifact is probably *Seinfeld*, a television program devoted to exploring what it means to live a life that has no context, that has no meaning. The great danger, in other words, of the world that we have built is that it leaves us vulnerable to meaninglessness to a world where consumption is all that happens, because there’s nothing else left that means anything. In a way that once was unthinkable, we now have to ask ourselves, “Is my life amounting to something? Does it have weight and substance, or is it just running away into nothing, into something insubstantial?” And the only real resource that many of us have against that meaninglessness, now that the church and the village and the family and even the natural world can’t provide us with as much context as before, is our individual selves. We have to, somehow, produce all that context for ourselves; that’s what a modern life is about. There’s no use moaning about it; it may well be better than what came before. In any event,

it's who we are, where we are, how we are, what we are, why we are. We've got to answer those questions pretty much on our own.

But now *we stand on the edge of disappearing even as individuals*. Most of the backdrops have long since been dragged off the stage, and most of the other actors have mostly vanished; each of us is giving our existential monologue, trying to make it count for something. But in the wings the genetic engineers stand poised to slip us off the stage as well, and in so doing to ring down the curtain on the entire show.

It doesn't seem so at first; if anything, just the opposite. The engineers promise to complete the process of liberation, to free us or, rather, our offspring from the limitations of our DNA, just as their predecessors freed us from the confines of the medieval worldview, or the local village, or the family. They can, they promise confidently, remove the ties that bind us – the genes that allow us to fall into ill health, or that keep us from being more intelligent, or more muscular, or more handsome, or happier. It seems as if, with their splicing and snipping, they want only to remove one more of the stones that weigh us down; that without it we will bound even higher, be more truly liberated.

In fact, though, whatever you think of the last five hundred years, this is one liberation too many. We are snipping the very last weight holding us to the ground, and when it's gone we will float silently away into the vacuum of meaninglessness.

What will you have done to your newborn when you have installed into the nucleus of every one of her

billions of cells a purchased code that will pump out proteins designed to change her? You will have robbed her of the last possible chance of understanding her life. Say she finds herself, at the age of sixteen, unaccountably happy. Is it her being happy – finding, perhaps, the boy she will first love – or is it the corporate product inserted within her when she was a small nest of cells, an artificial chromosome now causing her body to produce more serotonin? Don't think she won't wonder: at sixteen a sensitive soul questions everything. But perhaps you've "increased her intelligence" – and perhaps that's why she is questioning so hard. She won't even be sure whether the questions are hers.

Here's Gregory Stock, the UCLA professor and outspoken proponent of such genetic engineering, explaining how it will work: "People will be inclined to give their children those skills and traits that align with their own temperaments and lifestyles. An optimist may feel so good about his optimism and energy that he wants more of it for his child. A concert pianist may see music as so integral to life that she wants to give her daughter greater talent than her own. A devout individual may want his child to be even more religious and resistant to temptation." In other words, having managed, in many ways against the odds, to create a context (optimism, artistry, devotion) for their lives, parents will be able to pass it on. But what a poisoned gift. Scientists – "neurotheologians," someone has called them – have pinpointed the regions of the parietal lobe that quiet down when Catholic nuns and Buddhist monks pray. Perhaps before long we will be able to

amplify the reaction. As a result, the minister's son may be even more pious than he is, but if he has any brain left to himself he will question that piety at the deepest level, wonder constantly whether it means anything or if it's so much brainwashing. And if he doesn't question it, if the gene transplant takes so deeply that he turns into an anchorite monk living deep in the desert, then his faith is utterly meaningless, far more meaningless than the one his medieval ancestor inherited by birthright. It would be a faith literally beyond questioning and hence no faith at all. He would be, for all intents and purposes, a robot.

And the piano player's daughter? A player piano as much as a human, doomed to create a particular context for herself, ever uncertain whether it is her skill and devotion or her catalogue proteins that move her fingers so nimbly, her music soured before it is made. Because the point was never the music itself; the inclination and then the effort were what created the meaning for her mother. If the mother injects all that into her daughter's cells, she robs her daughter forever of the chance to make music her own authentic context-or to choose something else (dance, art, cooking) as the act that brings her life to life.

Running is one of the contexts I've created for myself, one of the things that orders my life, that fills it with metaphor and meaning. If my parents had somehow altered my body so that I could run more quickly, that fact would have robbed running of precisely the meaning I draw from it. The point of running, for me, is not to cover ground more quickly; for that, I could use a motorcycle. The point has to do with seeking out my

limits, centering my attention: finding out who I am. But that's very difficult if my body has been altered, if the "I" and the Sweatworks2010 GenePack are entwined in the twists of the double helix. And if my mind has been engineered to make me want to push through the pain of running, or not notice it at all, then the point has truly vanished. My effort to carve out some context for myself is in vain; I might as well be *Seinfeld*, sitting on a couch and cracking wise about the pointlessness of it all.

And when it comes time for me to visit the clinic and program my own offspring how will I know why I choose what I choose? Most likely, to quote Stock once more, "enhancements of this sort by parents [will] engender mind-sets disinclined to attenuate the traits in their own children," and so "such traits may reinforce themselves from generation to generation and push the limits of genetic possibility and technical know-how." Because, that is, one late twentieth-century woman found solace and meaning in playing the piano, her descendants yea unto the generations are condemned to an ever deepening spiral of musicality, one that they did not choose and that may haunt them, depending on how much consciousness remains, with the question of why exactly they feel so compelled to compose.

We flirt, of course, with these possibilities already. When taken by people who are not in obvious medical need, drugs such as Prozac may smooth out identity, stunt emotional growth; at the very least, as many have noted, they raise the question of how you tell who you really are. But Prozac and its soma sisters remain, for the moment, pills. They are designed to help people through

bad patches. You can refuse to take them, you can stop taking them; they are not you in the sense that they would be if municipal officials loaded them into the water supply. And certainly not in the way they would be you if your optimistic father had determined he wanted double-grande optimism in his son and so worked the extra serotonin into your very wiring, syringed it in as an ineradicable tattoo.

Some of these changes may well make us more comfortable. Stock again: "If we had the power to protect our future child, we might be very reluctant to leave him or her with a predisposition for recurring bouts of dark depression." Not even "the knowledge that our child might use these distressing periods to good purpose" would "make our decision to forgo germinal interventions any easier." Most parents, he predicts, "would make the safe choices and avoid the ragged uncertainties at the edges of human possibility," a caution that would grow ever more likely with each new generation, as the fear of a passage they had never known would make parents-to-be doubly wary. But in that increasing suburbanization of our being, the chance for emotional growth, for becoming "real" in some deep sense, would dwindle ever further.

We may be among the last generations able even to undertake the exercise of questioning this new world. In the words of Richard Hayes, one of the leading crusaders against germline manipulation: "Suppose you've been genetically engineered by your parents to have what they consider enhanced reasoning ability and other cognitive skills. How could you evaluate whether

or not what was done to you was a good thing? How could you think about what it would be like not to have genetically engineered thoughts?"

If you genetically alter your child and the programming works, then you will have turned your child into an automaton to one degree or another; and if it only sort of works, you will have seeded the ground for a harvest of neurosis and self-doubt we can barely begin to imagine. If "Who am I?" is the quintessential modern question, you will have guaranteed that your children will never be able to fashion a workable answer.

1. What does "meaning" mean to McKibben?
2. *How* has life changed in the past 500-1000 years?
3. What does McKibben mean when he says, "Even the natural world no longer serves as a ground, a context"? (p2)
4. Why do we "stand on the edge of disappearing as individuals"?
5. Why is the essay entitled, "The Posthuman Condition"?