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Living in a Supernatural World

If you have spent any time at all at WES, you probably know that we are very proud that we don't rely on a supernatural being to tell us how to live. We don't believe in supernatural explanations for the things happening in the world. A fair number of our members have backgrounds in science and technology. So I'm being intentionally provocative with the title of this talk, "Living in a supernatural world".

What I did was to browse through dictionary definitions of the word "supernatural" until I found one that suited my purposes. It only took two dictionaries before I found what I wanted. From Merriam-Webster's Online Dictionary:
supernatural: adjective, definition 2a.
Departing from what is usual or normal especially so as to appear to transcend the laws of nature

By that definition, the first cave person to discover how to strike two flints together and make fire on demand was living in a supernatural world. This person had light at night, warmth in the winter, cooked food, and protection from predators. We have been making our world more and more supernatural ever since. You might say that transcending our natural limitations is part of our human nature, and you would be right.

In pushing our natural boundaries outward, we have changed the world beyond recognition. Fiction writers often speak about our changing world by bringing their characters backward and forward through time to place them into a world that is radically unfamiliar to them. Mark Twain put his Connecticut Yankee in King Arthur's Court. Star Trek put people very much like us far into the future.

We don't need fiction, however, to know that we are changing the world. Night-time satellite photos show the coastlines of North America and Europe clearly outlined in city lights. Melting glaciers and the 2005 hurricane season are convincing evidence that global warming is real. We know that we have brought many species of plants and animals to the brink of extinction through loss of habitat or over-hunting. Historic buildings and statues have been eroded by acid rain.

We have changed the world, but we have also changed ourselves, and that is what I want to talk about this morning. These changes interact with each other to produce other changes, and it's difficult to pinpoint each separate source. But I want to talk about changes in three broad and rather arbitrarily defined areas, just as a way of organizing our thoughts. I'll tell you some of the ways in which we have changed our physical bodies, our sense of time, and our sense of ourselves. Along the way, I want to offer some thoughts on how we can live with these changes in the framework of Ethical Culture, with the intention of becoming better humans. I'm coming at this from a contemporary American point of view, but other cultures are going through similar changes and dealing with them in their own ways.

Our Bodies

One visit to any good historical museum will convince you that our physical bodies are different from those of our ancestors. Look at the length of the beds, the size of the clothing. On average, we're taller today, and we're certainly better fed. We have fresh strawberries and green salads in January. Our grocery stores stock bananas and mangoes as a matter of routine. Winter doesn't mean subsisting on dried apples and potatoes anymore.

Our meals aren't the only things that have become less seasonal. Now that we have climate-controlled homes, we no longer have to wilt from the summer heat or huddle by the fire in the middle of winter. Our electric lights let us rise before sunup and continue working long after dark. Earlier this year, a study published in *Current Biology* compared 21,000 people living in various regions in Germany. The study showed that the position of the sun in the sky has a smaller influence on people who live in cities than for people living in less densely populated areas.

Why does this matter? Scientists are discovering all kinds of effects related to our circadian rhythms: the effects of daylight and darkness, sleeping and waking, on the human body. For example, many studies have identified significant differences in the balance of neurotransmitters, including dopamine and serotonin, of people born in various times of the year.

These effects are more pronounced the farther you go from the equator. The effects track with the seasons, so, for example, the "winter balance" occurs October through March in the northern hemisphere and March through October in the southern hemisphere. These seasonal effects appear to last throughout a person's life. The seasonal differences in neurotransmitter levels have been linked to such traits as novelty seeking,

impulsiveness, reward dependence, and perseverance. The astrologers may have been wrong about the causes, but the effects were real. Several researchers have reported in a decline in "human seasonality", and they point to the possibility that this may be associated with our lessening dependence on natural daylight and darkness and our constant nutrition in summer and winter.

We may be standardizing our personalities in another way as well. If you sit in with a group of writers or artists long enough, sooner or later someone will begin to ponder whether Beethoven would have written his thundering symphonies if he had been taking medication for his bipolar disorder. Would Emily Dickinson have written the same poetry if she had been getting therapy for her agoraphobia? How would the Civil War have turned out if Abraham Lincoln had been taking antidepressants?

Medical science has discovered causes and treatments for many types of mental illnesses that are caused by imbalances in the body's chemicals--including the neurotransmitters that I talked about a moment ago-- and pharmaceutical treatments have alleviated a tremendous amount of human suffering.

However, these same treatments are finding their way into less drastic situations where their value is more debatable. Advertisements for the latest sleep aid, antidepressant, or anti-anxiety drug urge us to even out the highs and lows of life. We take a pill rather than address the underlying source of the sleeplessness, depression, or anxiety.

From healing disease and evening out the rough spots in life, it's a short step to using drugs to enhance our performance, give us an edge over the competition, pack more activity into our 24-hour day. But it's obvious that our physical bodies have limitations.

No matter how far our technology advances, our bodies demand proper nutrition, adequate rest, and plenty of exercise.

We have all seen the news stories about the athlete who collapses on the basketball court or goes into a steroid-induced rage. The football star who winds up crippled because he continued to play instead of giving his injuries a chance to heal. It's not just the athletes, though. We're all pushing ourselves harder these days.

As the pace of our lives picks up, many of us are getting by on less sleep. Medical researchers are discovering that the long-term effects of such deprivation go far beyond physical fitness and alertness. In one study, subjects who were deprived of sleep for extended periods of time went into a pre-diabetic state, and some researchers think that chronic sleep deprivation may contribute to obesity. Our nonstop schedules are a product of changes in how we think about time.

Our Time

It's a convenient coincidence that I'm giving this talk today, the first day of Daylight Saving Time. Our timekeeping has taken on such importance that this clock-changing day was moved three weeks earlier this year to save energy by taking more advantage of sunlight. Airlines, computer networks, television broadcasters, and millions of individuals all set their clocks ahead one hour, in a colossal act of civic cooperation.

This would have been unimaginable a few centuries ago. Before clocks became commonplace, people measured time by the position of the sun in the sky. They didn't need much more accuracy than that. Mechanical clocks made their appearance sometime during the 14th century, but they were largely toys for the wealthy.

As recently as the 19th century, people kept track of time using town clocks. Each town set its own clock to follow the position of the sun in the sky. It wasn't until railroads became commonplace that distant towns needed to synchronize their timekeeping. Train schedules would have been impossible to keep if they also had to keep track of dozens of local clock settings. Fortunately, the telegraph was coming into use about the same time, providing a way for station managers to synchronize their clocks.

President Chester A. Arthur isn't remembered for much, but in 1884, he convened an International Meridian Conference in Washington DC. Representatives from 25 countries divided the world into 24 time zones, with the Greenwich Observatory marking the zero point. Michelle Stacey noted in her article in *Harper's* magazine last year that this conference marked the beginning of a rift between timekeeping and time itself. When time zones became standardized, "noon" ceased to mark the time when the sun was at its highest point in the sky. Instead, it denoted a "mean time" that came at the same instant all across a time zone that could be hundreds of miles wide.

Modern navigational tools, especially the Global Positioning System, or GPS, have moved beyond mechanical clocks and the cycles of the sun and moon entirely. Their precision is such that they require atomic clocks, tuned to the precise vibrational frequency of the cesium atom. With the GPS, an accuracy of 1 nanosecond, or one one-billionth of a second, corresponds to a positional accuracy of 1 foot. Put into more familiar terms, if a GPS clock is off by one one-hundredth of a second, your flight into National Airport could wind up landing somewhere near Albuquerque.

Michelle Casey interviewed a group of physicists who want to abandon solar timekeeping altogether, in favor of going to an all atomic-clock based time system. Why bother with two ways of keeping time, they ask? Especially since the two systems so often diverge, making it necessary to add leap days and even leap seconds. What difference would it make if we abandoned solar time altogether, and went entirely with the unvarying metronome of the atomic clock? In a few centuries, "noon" would fall sometime during the middle of the night, but would that be so bad?

I would like to attend a convention where the atomic clock physicists and the biologists who study human seasonality and circadian rhythms got together and duked it out. The issue isn't totally theirs to decide, however. Once again, our human bodies have something to say about how we use our time.

In his book "American Mania", UCLA neuropsychiatrist Peter Whybrow cites the case of a young woman whose high-powered career required her to make frequent brief trips to locations all over the world. This woman had begun to suffer such severe anxiety attacks that her career was in jeopardy. Whybrow suggested that she cut back on her travel schedule, allow her body time to adjust to each new location, and allow herself enough time for rest. He suspected that this woman's body was protesting the extreme disruptions in her circadian rhythms, as well as the extreme stress of her job. Her body was telling her that if she didn't change things voluntarily, it was going to force the issue. This woman's' symptoms were extreme, but it is not uncommon for people who regularly disrupt their daylight and dark cycles to experience sleep disorders, mild depression, and gastrointestinal disturbances.

Even those of us who aren't world travelers are placing more time pressure on our bodies and minds. Now that we are surrounded by clocks, we can plan our daily schedules down to the minute. By using our time efficiently, we can work more activities into our days--"increase our productivity." Waiting and "down time" are endangered species, and tight scheduling leaves very little room for error.

James Gleick, in his book "Faster", describes a psychological state he calls "hurry sickness". Symptoms include always driving faster than the speed limit even when you're not late, losing your temper when the service at the restaurant is too slow, and cutting people off or finishing their sentences for them when you feel that they are taking too long to get to the point. Effects can include a constant sense of anxiety, heart disease, high blood pressure, or an impaired functioning of the immune system.

A close cousin to hurry sickness is "continuous partial attention syndrome". This occurs when we can't turn off our multitasking switch. At the same time I'm talking to you, I'm paying my bills, updating my blog, and checking my e-mail. This type of mindset makes it impossible to concentrate deeply, think things through, and engage our higher powers of reasoning and creativity.

Steven Levy, a technology writer for *Newsweek*, puts it this way:
"A live BlackBerry or even a switched-on mobile phone is an admission that your commitment to your current activity is as fickle as Renée Zellweger's wedding vows. Your world turns into a never-ending cocktail party where you're always looking over your virtual shoulder for a better conversation partner. The anxiety is contagious: anyone who winds up talking to a person infected with CPA feels like he or she is accepting an Oscar, and at any moment the music might stop the speech."

Our Selves

All of these things play into our sense of who we are and how we fit into this world. Once upon a time, our ancestors didn't have to put much thought into their identities. Who they were was largely determined for them even before they were born. Your surname answered the important questions:
Who's your daddy? Johnson, Hernandez, Sarkesian, ben Ezra, McGuire
Where are you from? Daghestani, al Maliki, der Bedrosian, London
What's your line of work? Smith, Baker, Miller, King

Even our idea of our own appearance was largely not of our own making. For most of human history, our concept of our own faces came from the occasional reflection in a quiet pool or a flat piece of metal. The wealthy and powerful could commission portraits of themselves, but these often emphasized their best features and played down their worst ones. Cameras captured the human face more realistically, and they allowed us to see our faces as they changed over time. However, we photographed only the moments we chose to preserve. Home movies showed us in action, preserving for posterity our significant moments. No longer did we have to rely strictly on memory to recall our childhood birthday parties, our weddings, the birth of our own children.

Digital cameras and cell phone cameras take this a step further.
Michael Agger writes in *Slate*:
"Kodak, with the introduction of the personal camera, taught Americans to conceive of their lives as fondly remembered events and to edit out unpleasant memories. ... With the coming of cell phone cameras, you record the best and the worst." He states that we have altered our own perception of the gravity of day-to-day routines. We are now

observers of “history”. We record the car catching fire in front of our house, send the video to our friends, and post it on YouTube. “I’m alive and I saw this.” “Check out this crazy thing that happened to me.”

If we’re not on video, do we really exist? There are people who audition time and time again for American Idol, despite their apparent lack of talent. Life outside the spotlight just isn’t worth it for them. “I sing, therefore I am.”

Cameras and video give us the false sense of acquaintance with celebrities. We see them on the talk shows, their photos are everywhere, we feel that we know these people. Michael Agger reports that whereas fans used to approach celebrities and ask for their autographs, now they just snap their pictures with their cell phones. Familiarity without actual contact.

While some people spend as much time as possible in front of the camera, others are discovering a new sense of freedom in the anonymity they have on the Internet. John Suler, a psychologist at Rider University in New Jersey, speaks of a “disinhibition effect”. Communicating online enables you to use a pseudonym and to show your real face only if you choose to. He notes that the solitary nature of online communications can lead to an exaggerated sense of self, and there is no online authority figure to tell people what they can and can’t say. This can enable naturally shy people to open up, but it can also sustain a flame war.

Marina Warner writes that people have become accustomed to a kind of permanent disembodiment, thanks to the ubiquity of digital representations of themselves. Warner notes that the predicament of Narcissus has been reversed. Narcissus did not recognize

his own image in the pool," she says, but "we now know ourselves in our mind's eye mostly by projecting internally a camera's eye view."

A well-known cartoon in the New Yorker stated, "on the Web, no one knows you're a dog". Our society is mobile, we have the freedom to reinvent ourselves, and our online avatars represent us as we wish we were. With no predefined identities, we are forced to craft identities for ourselves, and to some extent, by ourselves.

But once again, our humanity asserts itself. Tim Harford reports in *Slate* that although our new ability to communicate with anyone anywhere has made it easier to *maintain* a large number of relationships, we still seek to *establish* these relationships face-to-face in the real world. Online communication was supposed to make business travel obsolete, but in fact, it increases every year. Doing business on a global scale requires that you trust your colleagues, "something that still requires you to look them in the eyes," Harford says.

We, and our online pseudo-selves, are busily creating new kinds of communities. Wikipedia and its imitators, open-source software projects, customer review websites, and online newspaper chats allow us to contribute to the communal body of knowledge and opinion. On the one hand, this allows us to expand our horizons to include the whole world. On the other hand, we tend to seek out specialized communities of people who think like us. The annual Edelman Trust Barometer report noted that in 2006, for the first time since the report began, people relied on the recommendations of friends and acquaintances more than those of experts or mass media outlets. Several media surveys have found that people who get most of their news online tend to frequent outlets that conform to and reinforce their pre-existing points of view.

Living Ethically in a Supernatural World

No doubt, we're becoming different human beings in this supernatural world that we've made for ourselves. How does this influence our efforts to become better human beings? How do we elicit the best, not just the most?

Ethical Culture bills itself as a middle way between unquestioning belief in religious dogma on the one hand and amoral secularism on the other. I believe that Ethical Culture can also enable us to steer a middle course between mindless rejection of the changes in our world and being swept along in a mindless embrace of these changes.

In the examples I've given today of where we run up against our limitations or get ourselves into trouble, the cause usually goes back to too much or too little of something. Our desire to beat our competition leads us to overtax ourselves, make ourselves into something we're not. Our pursuit of material wealth may drive us to work longer hours, leaving little time for community and family activities. We may seek to escape the face-to-face world, cutting off personal contact with our headphones and our online personas.

We can't erase our problems by refusing to allow change. You see people trying to prevent changes using laws or force, and you can see that it's not working very well. A better approach requires us to be mindful of the effects of change and to use new developments intentionally to benefit others and ourselves.

Intentional action requires us to set priorities, and to ensure that the choices that we make bring us further along toward the things we consider most important. We make a

distinction between working long hours to complete a college degree or to build a clinic in El Salvador and working long hours because that's what all our co-workers are doing and we don't want to look like slackers. We make a distinction between giving up sleep because the new baby isn't sleeping through the night yet, and giving up sleep because we think we can move ahead by doing it all.

Using change to elicit the best means using our tools in constructive ways. Electronic communication can keep us in contact with relatives and friends in distant towns. It can put us in touch with the wider world outside our immediate communities. It can give ordinary people a voice to speak their truth. Our access to food allows us to build stronger, healthier bodies and to experience other cultures through ethnic cuisine. Medical science frees us from some of the indignities of aging, giving us more productive years in which to shape our world.

Awareness of the broader world allows us to care for the world and to use its resources sustainably. Embracing change with a sense of purpose requires us to be aware of our priorities and to devote our attention to the things that we hold most important. It's a lot of work, but a mindful engagement with our changing world is part of our progress as evolving human beings.