Futures of Identity, Racism, and Diversity*

Jim Dator University of Hawaii II.S.A

Assumptions about the Future

The question I wish to explore in this article is: what are the futures of racism and human diversity from a global perspective. But before I do that, I need to make clear some of my assumptions.

My first assumption is that by "the futures" I mean twenty to fifty years from now. I do not mean tomorrow, or the next decade or so. Neither do I mean one hundred and certainly not one thousand years ahead.

My second assumption is that by using the term "the futures", in the plural, I mean to indicate the following:

- 1. That it is impossible to "predict" THE future. It is not possible to say precisely what *will* happen, or what the world *will be* like, twenty to fifty years from now. It is foolish to try, and it is even more foolish-and dangerous—to believe anyone who purports to predict the future.
- 2. However, what is possible, and necessary, is to forecast many alternative futures to try to understand and explore many of the futures before us. Moreover, these alternatives futures are not merely variations around a single set of assumptions, but rather are profoundly different possibilities based on different assumptions of the way the world works, and of how the trends and events shaping the futures might emerge and fade, swell and shrink, and interact in the coming years.
- 3. Among these many alternatives, there is no such thing as "the most likely future." Indeed, I encourage you to view the idea of a likely, default, or highly proba-

ble future with great suspicion — as an assumption that is more likely to be harmful, causing serious misunderstanding, than as the norm from which a few so-called "wild card" futures might emanate. In my understanding, all futures before us are more or less "wild cards". While that which is often thought to be "the most likely future" is indeed among the possible alternatives, it is, in fact, no more likely than many alternatives.

My third set of assumptions arises from what I consider to be "the three components" of the futures. By that I mean the next twenty to fifty years will emerge from three factors in relation to the past and present.

First of all, some percentage of the totality of the futures will be things that exist in the present. Indeed, some percentage of the futures will be things that existed in the past as well as the present. I call this component of the futures "continuities" - those things that have been important parts of all societies from the beginning of time to the present, and hence into the futures.

To the extent most of the futures will be basically the same as the past and present, we need only to study history and contemporary sciences to understand the most important features of the futures. Indeed, to the extent we are successful and learned people, we can trust our own knowledge, experiences, and intuitions to anticipate, and to help others anticipate, what is most important about the futures.

However, some percentage of the totality of the futures may be different from the present, but very similar to, and perhaps even identical with, some or many factors in the past. If most, or the most important parts, of the futures have been experienced in the past, but

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are not existent, or not significant, in the present, then we have a problem. The problem is that we are animals who learn primarily by doing and feeling, and not by thinking and imagining. As a lifelong student and teacher, I can assure you the things that have made the most impression on me are the things that I did, or that happened physically to me, not the things that I read about or someone told me about. I of course have learned a great deal from reading and lectures, but when push comes to shove, I fall back on what I have directly experienced, whether I want to or not. We all do. That is the way we are biologically disposed to learn and act. On the other hand, well-produced mediated experiences - film, video and electronic games - often make an even greater impact that direct reality even though they are entirely fanciful.

Nonetheless, a good and deep knowledge of history is essential to anticipating the futures IF most of the futures will be like some aspect of the past, but not of the present. The more we can learn about these aspects of the past that will be dominant in the futures, the better prepared we should be intellectually if not emotionally.

But what if most of the futures are novelnot part of the present, not part of any past, but very important in the futures? Then we may be in deep trouble, personally and socially. We can rely confidently neither on our knowledge of history, nor on our understanding of the present, nor our own experiences to anticipate the futures. So if most of the futures will be novel, we may be incapable of anticipating or shaping it effectively.

At the very least, we may have to ask those people who engage in futures studies for whatever help they can give us. Yet very few people even know that futures studies exists while others have very low, though often uninformed, opinions of it. And since almost all formal institutions of education everywhere in the world totally ignore futures studies, and overwhelmingly stress history and contemporary sciences, we are in very serious trouble, individually and socially, IF the most important features of the futures are in fact novel.

As I believe they are.

What do you believe? Is most of the futures a continuation of the present and past? Is there nothing new under the sun? Or is human experience cyclical so that while the present is a poor guide to the futures, the past might be better? Or are the defining features of the futures mainly novel—without precedence—as I have become convinced?

For hundreds of thousands of years, humans lived in societies where past, present, and future were essentially the same. Knowing the ways of the past and abiding unquestionably by them was certainly the best policy for the present and the futures. There indeed was nothing fundamentally new under the sun. Whatever worked before would probably work again. It made good sense to follow the ways of the ancestors without question. It was dangerous indeed to innovate and try something new.

But beginning a few thousand years ago, and especially a few hundred years ago, some humans have created societies where there is more and more discontinuity between past, present, and futures. Indeed, whether we like it or not (and whether we humans can in fact tolerate it or not), more and more humans live in societies characterized by perpetual and increasing social and environmental change.

I am by no means sure that humans can survive and thrive in the futures we are creating by the unintended consequences of our many diverse actions. I am not even sure humans *should* survive, so extraordinary are we as a consequence of our massive technological capabilities in contrast with our puny intellectual, and even more puny ethical, abilities to assume responsibility for the new worlds we are creating for us and especially for future generations.

Once upon a time, for the overwhelming preponderance of human history, humans lived in societies that were characterized by 80% continuities, 15% cycles, and only five percent novelties at best.

Now I believe the figures are reversed: 80% of our futures may be novel, 15% cyclical, and only 5% continuous with the past and present.

At least that is my assumption after years of working in the fields of futures studies, and it

is the basis of my talk today.

Now with this a prologue, let me turn to the matter at hand, the futures of racism and human diversity worldwide.

Continuities

First, continuities. What aspects of racism and diversity are likely to continue into the futures?

Well, as long as our present biological make-up is retained (and that is by no means a given as you will see) ethnic identity and racism also will continue. Racism is a variation of ingroup loyalty and identity, and of out-group suspicion. It has a biological (as well as a strong cultural) basis, I believe. Humans are one of the many manifestations of biological evolution. We share many biological and hence behavioral features with other organisms, and with our closest primate cousins. Kinship identity, ingroup loyalty, and out-group avoidance and suspicion are some such features.

During most of the long sweep of history, humans have lived in genetically homogeneous groups, acquiring new genes only occasionally. For most of human experience, humans avoided contact with out-groups if possible, or tried to scare them away if they could. If that did not work, then they might try to kill Others. And if that did not work, they might have sex with them, thus bringing them into their gene pool and community. Humans also developed elaborate visiting and gift-giving ceremonies in order to interact harmoniously with those Others they could not entirely avoid.

But avoidance of strangers was always the preferred policy. And it remains the preferred policy of most humans even today, even though it is not an effective policy for most of us.

But we are cultural animals and to some extent rational animals as well, and so we can and do develop ways to tolerate and even enjoyably interact with Others. More and more of us seem happy to have sex with the Others too, thus creating, as a by-product, new ethnic divisions and cultures along the way. That certainly is the preferred response to ethnic diversity in Hawaii, where I live. Out-group marriage

has been the norm in Hawaii for quite some time, creating a complex and ever-changing mosaic of cultural groups.

While humans' hierarchical dominance tendencies are pretty frail compared to some of our primate cousins and other mammals, nonetheless we do tend to rank-order humans and human groups, and even if we find ourselves among the low men on the status totem pole, as it were, we comfort ourselves with the fact that others may be lower still, and that we share an identity with others of our station in life. Some of course might strive to move up the hierarchy to a better position in the ranking but most just want equity among whoever they consider to be their peers.

It is possible that these features will continue into the futures–racism (in the sense of outgroup discrimination and in-group preference); cultural attempts to deal peacefully with the fact of diversity and to make tolerance and outgroup acceptance widely-practiced virtues; and a ranking of humans that finds some privileged at the top and others disadvantaged at the bottom.

But that is about all I can say for continuity. Who the in and out groups will be may be quite different in the futures from who they are now. What we consider to be an "ethnic" group and what is not may change as well. And who is on top and who on the bottom also may differ in the different alternative futures before us.

Cycles

So what of cycles? It seems clear that cycles do play a big part in human experience. Some feel they are the biggest part. While I reluctantly have come to admit that cycles are more important than I once believed (or want) them to be, I am not myself willing to go so far as to make cycles the dominant drivers of the futures.

There are clearly economic and other social cycles that seem to be driven by technological innovation, rapid diffusion, maturity, decline, obsolescence, and eventually new technological innovations. There seems clear evidence for social oscillations between progres-

sive and conservative views. Certain diseases seem highly periodic. The eagerness to engage in wars and violence, on the one hand, and then the desire to remain at peace, on the other, also seems to follow the course of some diseases: First a few and then huge numbers of people are eager to fight and do enthusiastically engage in battle while some few refuse to fight and suffer because of it. Then suddenly most of the fighters stop fighting and remain at peace, seemingly immune to new calls for war until some years later, other people catch the fighting bug again and the cycle starts once more.

And there is no doubt that the regularity of the ebbing and flowing of sun spots can be correlated to a lot of cyclical behavior. Some cultural traditions are entirely based on cycles, some of enormously long periodicity.

Thus, though the victims of racial prejudice may come and go with former victims later becoming major perpetrators of hate and prejudice, and while what is considered a group deserving hate at one time may be totally invisible as a definable group at another (or in another culture), the rise and fall of racism *per se* continues.

Specifically in relation to the focus of this discussion, there is good reason to believe that indigenous peoples who have historically been and/or currently are hated and mistreated might very well become dominant in some alternative futures, perhaps transferring their aggression on to their former tormentors, or, more likely, to new objects of scorn. There is ample historical justification for holding that view.

But I would like to direct your attention to some of the novelties that might be major features of the futures. It is here that we have the most to learn about the futures of identity, racism, and the positive enjoyment of difference, I believe.

Novelties

Humans shape their sense of personal and cultural identity by interaction with other humans, with the natural environment, and with the wild and domesticated animals around them. Most humans develop strong attachments towards some people—they may even say they "love" someone—and strong hatreds towards others. Certain aspects of their environment—a tree, a rock, the Earth itself—might also be objects of deep love or hatred, while the dairy farmer's feelings for his cows, the cowboys love of his horse, and the child's deep attachment towards her dog (and apparently vice versa) are well known.

There is a saying in English that admonishes, "Don't beat a dead horse" with the strange implication that it is OK to beat a live one.

But recently, humans have begun to develop attachments and antipathies towards technologies. We learn of people clubbing their stalled automobile, shooting a Coke machine that took their money but didn't give them a cold drink, or going into a deep depression when their computer crashes, depressed as much over the loss of their beloved computer as of the data it held.

Until recently, while humans often expressed strong emotions towards their technologies, none of the technologies themselves were intended to have-or to simulate-strong emotions towards humans. But this has changed. For several years now, humans have demonstrated deep attachments towards computer programs that are programmed to simulate empathy and concern by simply repeating back to a user the words the user said, or typed, to the computer. Interactive learning technologies that praise, or scold, a learner evoke powerful reactions from the learners. Tamagochis--electronic toys that required humans to "feed" and "love" them or else they would wither away pitifully and "die"--profoundly affected their owners. Now, more and more robots and computer programs are designed to sense and respond to the emotions of their users.

This phenomenon has caught the attention of Sheryl Turkle of MIT, who has written very persuasively of the effect on humans of the "second self" provoked by our "intimate machines."

But this is only the tip of the iceberg, I believe.

Strong Version of Artificial Intelligence and Biological Engineering

I am an advocate of what might be called a "strong" version of the futures of artificial intelligence and biological engineering. This has been an object of my research and writing for as long as I have been a futurist, which is to say, for over forty years. I am increasingly convinced that we humans are inevitably in the process of creating entities that mimic, extend, and in many ways exceed our own mental, behavioral. and emotional capabilities. It is a process that has been part of humanity's toolmaking history from the very beginning. It is thus in some ways fundamentally a "continuity". But it is rapidly becoming a novelty because humanity is developing technologies that interact with us in extremely powerful and emotion-provoking

As with everything humanity does, this is very problematic. Indeed, it may be the most problematic thing humans have ever done.

Even today, more and more of our world is controlled by autonomous entities that present us with decisions which we often literally must follow without question-our very lives depend on it-or which, when we do try to override them, turn out to have been the decision we too would have reached if we had only had the time, patience and sense. We increasingly use computers to make decisions for us in situations where it is too dangerous for humans to go, or where it takes humans too long to decide. Given the speed of transport, and especially the speed of light at which all information travels, we increasingly have to leave vital splitsecond decisions up to machines, just so we humans can survive.

We are making everything "smart": smart houses, smart cars, smart birthday cards, smart weapons (as well as "emotional" ones).

Even the term "artificial intelligence" is itself a swiftly-moving target. Artificial intelligence is defined by David Miller as "whatever machines haven't learned to do yet." Prof. Miller says that the sensing and decision-making capabilities of many microwave ovens or automobiles today would have been termed "artificial intelligence" twenty years ago. Now it is not,

and "artificial intelligence" is something even smarter—which a machine can not yet do (but soon will).

Susantha Goonatilake, Ray Kurzweil, Ian Pearson and many others contend that artificial intelligence that surpasses human intelligence lies just ahead of us in the early 21st Century, evolving by the very practical and almost invisible processes just described. According to them, soon, in the mid 21st Century, humans will realize that they are only one of a myriad of intelligent entities on Earth. Some humans will choose to merge with artificial intelligence to form various kinds of cyborgs. Some humans will link artificial intelligence with biologicallymodified beings, and then both to human beings and human intelligence. Some humans will insist on staying pure, unsullied, and "natural". And some artificial intelligences might be wise enough to "reject" any contamination from either human or other biosystems, recognizing that biology is just a way-station, if not ultimately a handicap, and that the only good intelligence is bio-free intelligence, electronically linked throughout the globe, over the solar system, and eventually throughout the galaxy.

At the same time, critics of artificial intelligence and biological engineering have become more vocal. One of the most influential is Bill Joy who titled a powerful piece in the high-tech Bible, *Wired*, "Why The Future Doesn't Need Us" (Joy 2000). More recently, the distinguished British scientist, Martin Rees, has joined the fray in a book whose title says it all: *Our final hour:* A scientist's warning: How terror, error, and environmental disaster threaten humankind's future in this century—on Earth and beyond (Basic Books 2003).

Even though many people and groups may be opposed to biological engineering—and there are many reasons for concern—trying to stop biological engineering is more like trying to stop abortions or recreational drug use than it is like trying to stop the development of railroads, automobile factories, or nuclear generating plants: much biological engineering is comparatively easy to do "in your kitchen", and some of it is driven by a desire to "correct" a behavioral "defect" in one's self or one's child,

and then to "improve" the performance of one's self or one's child. It is very private, very emotional, extraordinarily powerful.

The point of all this for our discussion here is that some futurists believe that humanity is about to be surrounded by all kinds of novel intelligent beings that will demand, and may or may not receive, our respect and admiration. At the present time, however much they might "love" their technologies at one level, most people treat technologies as dumb slaves that are meant to serve humans' bidding. This of course is the way humans have treated Others throughout history—as subhumans deserving scorn and abuse because of their race, nationality, skin color, smell, eye slant, accent, gender, sexual preference, and physical or mental so-called "disability."

Demands to be Treated as Equal to Humans

Robots, artificial intelligence, and genetically engineered beings may be on the verge of demanding that they be treated first as equal to humans, and then as having rights, privileges, and responsibilities on their own terms and perhaps quite different from those humans proclaim. Some people are taking these developments seriously enough to begin to anticipate the emerging rights of robots and of other forms of artificial and modified intelligence. A recent issue of *The Journal of Futures Studies*, (2001, 6: 43-108) is largely devoted to the evolution of what they call "artilects" (from "artificial intellects") and their legal rights: Sudia, F. W. "A Jurisprudence of Artilects: Blueprint for a Synthetic Citizen," Oliver,K. "A Review of 'A Jurisprudence of Artilects: Blueprint for a Synthetic Citizen," Dator, J. "Artilectual Salutations", Inayatullah, S. "The Rights of Robots? Inclusion, Courts and Unexpected Futures," Dolan, T. "Prospective Templates for Post-Homo Sapiens Public Policies."

More recently, Ray Kurzweil posted on his website on September 16, 2003 news that Attorney Martine Rottblatt, partner in Mahon Patusky Rothblatt & Fisher, filed a motion on Tuesday for preliminary injunction to prevent a corporation from disconnecting a conscious computer. The motion was argued in a mock trial in the Biocyberethics session at an International Bar Association meeting.¹

In recent decades, people with mental as well as physical "disabilities" have insisted on and gained the right to be respected as being fully human, though with various capabilities and needs different from some other humans. They remind us that no one is "normal", and thus that there is no norm from which disabled people deviate and to which they must be restored. Nonetheless, even with legislation intended to aid them, "disabled" people still face enormous prejudice and handicaps even now. However, in the context of artificial intelligence and genetic engineering, mention of people with "disabilities" immediately brings up the likelihood that there will be a wide variety of different kinds of artificial intelligence and biologically-modified entities in the futures. Some of these might be "mistakes" in the sense that they will not think or behave as intended. Since we have so much trouble dealing with people who have distinctive mental and physical features now, how much greater will be our challenge to deal fairly with the unintended, as well as intended varieties of sapiential life in the futures!

Bright Futures of Diversity

So there are many bright futures for diversity indeed, and for the expansion of tolerance and rights to entities that do not have them now, as well as to those entities that do not even exist now.

And if there is anyone who feels I am distracting from the serious matters of racism now, and in fact am trivializing the serious issue with my discussion of the rights of robots, I urge you to look into your hearts and see if the prejudice you might be feeling is in fact simply racism towards the newest and currently most helpless and dependent kids on the block.

I urge you to love and respect your robots and clones, so they will see you deserve their love and respect as well.

Correspondence

Department of Political Science and Hawaii Research Center for Futures Studies University of Hawaii at Manoa, Honolulu, Hawaii 96822 dator@hawaii.edu

Note

1. http://www.kurzweilai.net/email/news Redirect.html?newslD=2423&m=5366>.

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