

Choosing Our Future

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My apologies to all of you.

I owe you an apology. I owe the world an apology.

All my generation owes the world an apology— for leaving things in such a mess. I'm talking about the period 1950-1990, when we were most active and our children not yet ready to take over. I really think we didn't meet the challenge.

Some of us sure tried. Let me ask you to look with sympathy on the world as it looked to us then, and the tragedy of our failure to meet the needs.

Trying in our time

Joseph Rotblat, one of the early leaders in the study of nuclear chain reactions, resigned from the Manhattan Project in 1944 when it became clear that the Nazis were not going to succeed in making a nuclear bomb. At the time, he was the only scientist to quit the bomb project on grounds of conscience. As physicians have a Hippocratic Oath telling them not to use their science against humanity, Rotblat said all scientists should be bound by the rule, science must not do harm. All honour to him. After the Manhattan Project had succeeded in producing fission bombs, and especially after the US had used them in a drastically anti-human way on two Japanese cities, many of us followed Rotblat's lead, joining organizations like the Federation of American Scientists and the Pugwash movement. We contacted our representatives, and we thought they were paying attention.

Why, when I was entering graduate school in 1946, many around the world believed in the Baruch Plan. (Not just innocent scientists and leftists either: Bernard Baruch and Dean Acheson were leaders of international finance!) Nobody talks about the Baruch Plan these days, and you may think we

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were naïve to think it ever had a chance, but you should excuse us. The governments of the United States, Canada, and Britain were on record in favour of immediately abolishing nuclear weapons and putting all nuclear efforts world-wide under the UN, confined to peaceful uses. How could we not be optimistic? But Winston Churchill’s “Iron Curtain” speech had already been delivered that same year, announcing the onset of the Cold War, so some of the spokesmen for the Baruch Plan were already swept up in the arms race. In the next two years the nuclear arms race was the primary reality.

Appalled neutrals floated the Stockholm Peace Pledge: at least let governments pledge *not to be the first* to use nuclear weapons. We leftists solicited signatures in all countries. It was an uphill struggle, with some scoffing that we were only supporting the Stockholm Pledge as long as the Soviets had no nuclear weapons. Well, the Soviets did get the Bomb and we still supported the Pledge— so scoffers fell back on calling us naïve. As I said— we tried. Maybe these campaigns helped restrain President Truman from using nukes in the Korean War?

Linus and Ava Pauling gave dozens of lectures in several countries about the damage to health and the environment from testing nuclear bombs above ground. Thousands of us joined the campaign in more modest roles. We were elated when in 1963 President Kennedy and General Secretary Khrushchev agreed to stop the tests: the “Partial Nuclear Test Ban Treaty”. We had won! The feeling was justified, in that they did stop the atmospheric tests, and the British and French did along with them. But our jubilation was flimsy: the nuclear powers didn’t stop underground tests and they didn’t stop building up their nuclear arsenals. Even as we were celebrating, nuclear weapons were being developed in India (with Canadian collusion) and Israel (with French collusion).

The mighty think tanks, the RAND Corporation and counterparts in other countries, were busy analysing the strategy of MAD: Mutually Assured Destruction. Both the Soviets and the “Western” alliance boasted that they had so much firepower that if one side made a nuclear attack the retaliation would annihilate it. This doctrine is associated with the name of Herman Kahn of the RAND Corporation (not to mention Stanley Kubrick, who deconstructed it in the bitter satire *Dr. Strangelove*), but it was already urged in the 1940s by John von Neumann. Strange feeling for me: two of my important mentors, Paul Halmos in the US and Israel Halperin in Canada, were disciples of von Neumann and admired him profoundly. Well, we all

did. Let me try to convey how totally some of us deplored his MAD doctrine.

In 1945, when US President Harry Truman had the cities of Hiroshima and Nagasaki destroyed by nuclear bombs, imagine that Emperor Hirohito had had the retaliatory strike capability. The MAD doctrine would have him press the button to annihilate Vancouver and Seattle, if not more. The MAD doctrine represented itself as defensive, for the unacceptably drastic retaliation would deter any first strike. We are promoting peace, the MAD theorists said in all seriousness, but for the system to work, the retaliation has to be unflinching. How could I, as a junior scientist, be disloyal to this mathematically argued theory from one of the world's greatest mathematicians (and a sort of grandfather to me), a theory accepted by the high command of both superpowers? Here's what I said instead: If your rival attacks you with nuclear weapons, you should put all your forces into *preventing* retaliation. To destroy two Japanese cities as Truman did was a terrible crime— and to destroy two North American cities in reprisal would have been doubling the crime.

The MAD doctrine was grotesque, as Kubrick saw; my impulse might have been to say to Herman Kahn and the rest, “Dunces! Weren't you paying attention in the last class? Go over your class notes!” For we had explained so clearly that retaliation too would be a terrible crime, and we had done it before the RAND Corporation was even founded. In *Astounding Science-Fiction*, there was Theodore Sturgeon's story “Memorial”, my story “The Nightmare”, and best of all, Sturgeon's “Thunder and Roses”, all in 1946. *Astounding* was read, too— here and overseas. We had made the point. Yet once the Cold War with its nuclear arms race had overwhelmed the brief window of coexistence, the point was lost. Just like the Baruch Plan, it dropped out of the policy debates of the 1960s, and by the 1980s it had pretty much dropped out of memory.

We shall overcome

Still we thought we were making progress in other directions. The curse of colonialism was beginning to lift, with the Empire of India freed from British rule in 1947, though the curse of Partition was as bad in its way. Algeria didn't break the colonial bond until 1962, Mozambique only in 1975. The anti-colonial movement could rightfully feel that a freer world was being made already in 1955, when the Bandung Conference brought together the

governments of half the world—including Japan, China, Indonesia, Iran, Yugoslavia, and both India and Pakistan—in opposition to colonialism and to the Cold War. They imagined a Third Bloc quelling the dangerous bluster of the Soviet Bloc and the “Western Bloc”, and they initiated the Non-Aligned Movement which in name still exists. Alas, that didn’t stop border disputes between the non-aligned; it didn’t stop the terrible slaughter of minorities by the military takeover in Indonesia in 1965; it didn’t stop the ruthless attempt by Pakistan’s leaders to subjugate East Pakistan, which despite them seceded in 1971 and became Bangladesh; it didn’t stop the fratricidal Biafra War. We knew colonial powers would foment trouble in hopes of continuing to profit from the colonies, but we couldn’t anticipate all the horrors. When the French withdrew from Indochina in 1954, it seemed like just one more in the succession of liberations. Ought we to have known that US presidents would not let this liberation stand, but would insist on attacking the newly independent countries? Maybe even if we had read Lyndon Johnson’s mind we wouldn’t have been forearmed, maybe he didn’t himself foresee that he would embark on his terrible “escalation”.

We made progress on abortion rights and sexual freedom. We didn’t do it by sitting and waiting for the establishment to reform itself, we got out on the street—a line in front of the Morgentaler clinic that used to be on Harbord Street, for example, defending it against the anti-choicers. We made progress on equal opportunity in North American society. We didn’t do it by sitting and waiting for the jubilee, we did it by putting our bodies on the line. When the Selma marchers were confronting Governor George Wallace and Sheriff Jim Clark in Alabama, quite a brigade of Toronto sympathizers rallied outside the US consulate to show support. A few of them are here today. Some of the younger activists spent several cold nights in sleeping bags on the sidewalk. I think President Johnson knew Canada was watching him, the world was watching him, and it must have helped. (Yes, that’s the same President Johnson I’m talking about. If he could heed us in 1963 on voting rights, why could he never abandon his ruthless war against Southeast Asia (even after it was lost)?)

We carried on the struggle against the concentration of wealth and power. The powerful beat us back, on almost every front. In the capitalist strongholds, since Margaret Thatcher’s day capital has been able to keep expanding its share. The division of wealth used to be much more equal in the Soviet bloc and Mao’s China; that has been destroyed, and their loss of economic equality has not been accompanied by any dawn of political freedom the way

ideologues of “the West” said it would.

We carried on the defence of individual liberties. For some of us in the United States, the big preoccupation was to resist the squalid heresy-hunt of the 1950s. The struggle included doing prison time, for Dalton Trumbo, myself, and a number of others. After the hysteria abated —Trumbo out from the blacklist, for example— I kept a special interest in civil liberties. Thus I was publicly associated with demands for the release from prison of the Uruguayan mathematician José Luis Massera, a Communist, and the Soviet mathematician Anatolii Shcharanskii, a fellow dissident of Andrei Sakharov. Shcharanskii was a near-clone of mine: as I had called on American courts to observe the US Constitution’s First Amendment, he was calling on Soviet courts to uphold the 1936 Soviet Constitution. Later, after he got out of prison, emigrated, and changed his name to Natan Sharansky, he looked less like a twin: he became a leader of the Israeli hard right, and close to Sheldon Adelson. I don’t regret at all that I stood up for his human rights in 1977. I would do the same today.

Falling short

It was up to my generation to leave the world habitable for our twenty-first-century successors. For all our efforts, some of them well directed, we failed.

For all our rallying behind whistle-blowers like Daniel Ellsberg and Karen Silkwood, the military-industrial clamp on information keeps its hold. Private Manning is in prison, and Edward Snowden can expect the same if he comes back home. Mordechai Vanunu has served 18 years of very hard time for revealing the existence of the Israeli nuclear weapons program, and he still is not allowed to leave the country. Joseph Rotblat nominated him for the Nobel Peace Prize repeatedly, and honestly, it’s a strange prize that goes to Henry Kissinger and not to Vanunu.

For all our agitation against misuse of science and technology, in organizations like Science for the People and Greenpeace, and for all the evidence that to dedicate industry to maximizing profit leads to lethal overuse of carbon fuels and lethal pollution of land and sea, the financial power and state power are an almost unbroken phalanx of devotion to profit above all. Under the so-called Free Trade Agreements, if Ontario tries to protect its cropland by an environmental regulation, a foreign corporation may sue for the profits it figures it could have made if unregulated. (By the way, can some legal

historian explain to me who empowered Brian Mulroney to give secretly negotiated commercial rights precedence in law above regulations passed by ordinary parliaments? It certainly wasn't the voters, for he negotiated FTA after going to the voters in 1984 on a platform against free trade, and Jean Chrétien finalized NAFTA after basing his 1988 campaign on opposition to it.)

So instead of passing on to the next generations a well functioning world, my cohort is leaving one that seems hell-bent for disaster. Maybe the disaster of nuclear war, maybe the disaster of environmental collapse: which will win the honour of delivering our death stroke? It is the last moment, as the Bulletin of the Atomic Scientists reminds us. Yet in this great jeopardy, when you must rouse yourselves to better efforts than we managed just to have any future, I implore you: have the wisdom and the strength not merely to survive but to survive proudly and happily. To choose the best future.

Carrying on

Sadly though we failed our mission, we tried, and we may have learned something trying. Let's see if I can at least pass on a few lessons.

First, if you're acting in a way that looks "safe and sane," you should *worry*: you may be doing something gravely wrong. When those who currently wield the power are steering the world to disaster, you know you must break some rules. Noam Chomsky insists on this— but I don't need to rely on authority, the point is clear.

I remember several years ago an incident recounted by my late friend Yen Shih. She had mentioned my name to a senior administrator, a much-admired man. He snorted, "Chandler Davis? He's an adventurer!" Yen had a sharp tongue, no doubt she came up with a tart retort. Now what might that Big Man have meant by adventurer? Probably he meant to dismiss me as an *extremist*, one of those uncivil anti-war protesters, hence not a serious colleague. Of course I relish this as an unintended compliment: U of T would be less of a university if nobody was stepping out of line, and I'm happy to fill that role.

The first guiding motto is, *Be an extremist. Push boundaries.*

Second, to take an extreme position is often necessary but it is not sufficient. This is obvious. To believe the earth is flat will make you stand out from the herd; but it's wrong, and truth is preferable. Ordinarily, if

one extreme position is right, most other extreme positions are wrong, even though extreme.

The second guiding motto is, *Be right if you can.*

Third, it's not enough to be right. It wasn't enough for the legendary Cassandra to see what was going on, because she wasn't able to affect it.

In 1846, Henry Thoreau was right to oppose his government's war on Mexico, and he did well to express his opposition by going to prison, but his going to prison didn't stop the war or end slavery.

And today, I'm very glad that the Guardian has sold all its stock in companies mining hydrocarbon fuels, but if the Koch brothers buy all those shares and buy the government permission to drill in the Chukchi Sea, the damage will be the same as if the Guardian had subsidized the drilling itself. In the real world, the Guardian is not only divesting, it is backing movements for everyone to divest. Is that enough? What more is needed? In the same real world, six Greenpeace activists have boarded the enormous Shell Oil floating drill rig bound for the Arctic. Long life to them.

The third guiding motto is, *Sometimes it isn't enough to be right if too many other guys are wrong.*

Yet sometimes you just have to stand up for the truth even if you're alone. Sure. Don't flinch.

Fourth, being right has a power of its own. Thoreau didn't just go to prison, he made a point by it, at least to a few.

Many of us got to work helping war resisters like Thoreau, especially during the Vietnam War. In the Toronto Anti-Draft Committee we welcomed draft-refusers and deserters, and this was not just compassionate. They had special value to Canadian society, bringing a special message of courage and moral clarity. I wish I had done as much for the conscientious resisters to the present wars, they are a noble lot. Thanks to all who have bucked the current. Their truth goes marching on.

So the fourth guiding motto is, *If you find yourself in the right but standing alone, give the other guys all chances to join you.* Don't insist on remaining a solitary Cassandra.

Now we get less obvious.

Fifth, sometimes a seemingly centrist position is really the right way.

In other words, a bold extreme position like Thoreau's sometimes looks deceptively like a centrist compromise. Extremism not only is not sufficient, it isn't even always a usable criterion. I'll show you three ways this can happen, of increasing subtlety.

Example 5_a. If you're surrounded by Serbs hollering that all the Kosovars should go away and leave the land to the Serbs, and Kosovars hollering that all the Serbs should go away and leave the land to *them*, and if you are so brave as to try to be a peace-maker, you may superficially be seen as taking an intermediate position between two extremist camps. That is not so. To make peace in a quarrel is not a blend of the quarrelling positions, it is a qualitatively different position.

Example 5_b. When the student protests were at their height around 1970, extremist "crazies" at Columbia or Sir George Williams or Stanford, seeing how the universities served the ruling class, might announce their aim to destroy the library or the computer lab. The armed power of the state would oppose them. We radical academics were on the spot. Were we really so wishy-washy that we took the middle ground? I argued that we were not. The conservatives wanted to preserve institutions as they were; the crazies wanted to destroy them; we should want to *transform* them, and that is not any kind of compromise or average between preserving them and destroying them.

Example 5_c. Do we believe what scientists say? On the one hand, some skepticism is always in order, if only because human knowledge is never quite perfect. On the other hand, we want collective intelligence and not only solo intelligence to be brought to bear on problems, and that means that one scientist must be able to believe another. To achieve this, it seems to follow that we must always trust what a qualified scientist says, otherwise we would be sabotaging the process of compiling collective wisdom. If only it were that simple! But it's not. Especially nowadays, when a medical researcher can get a huge payday for a much-prescribed pill, but can be defunded or fired for exposing a pill's dangers; and when a government environmental scientist can be forbidden to talk to the public about the dangers, or fired; and when developing genetically modified crops gets vastly better funding than impartially evaluating their effects. We seem to be stuck with two extreme policies: to believe what is published in the scientific literature, in order that there be a collective body of knowledge; or to believe none of it, because the social structure that generates and legitimates it is corrupt.

Knowing that compromise positions are suspect, we might be tempted to go to the establishment-trusting extreme or to the denialist extreme. But hold on! They are both plainly wrong, and there *is no* coherent "middle ground" of sort of half-trusting the scientific literature. We have to work hard to build, alongside the established apparatus of scientific societies, pub-

lication counts, citation indexes, and the like, a parallel canon of scientific discourse we have real confidence in. This is not the unthinking centrism which disempowers us. It is a monstrously big challenge, and we face it every day.

So the fifth guiding motto is, *It's harder to find your way than the first four guiding mottoes make out.*

I didn't say I had answers to all questions, and sure enough, I am leaving us with plenty to keep us busy.

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