

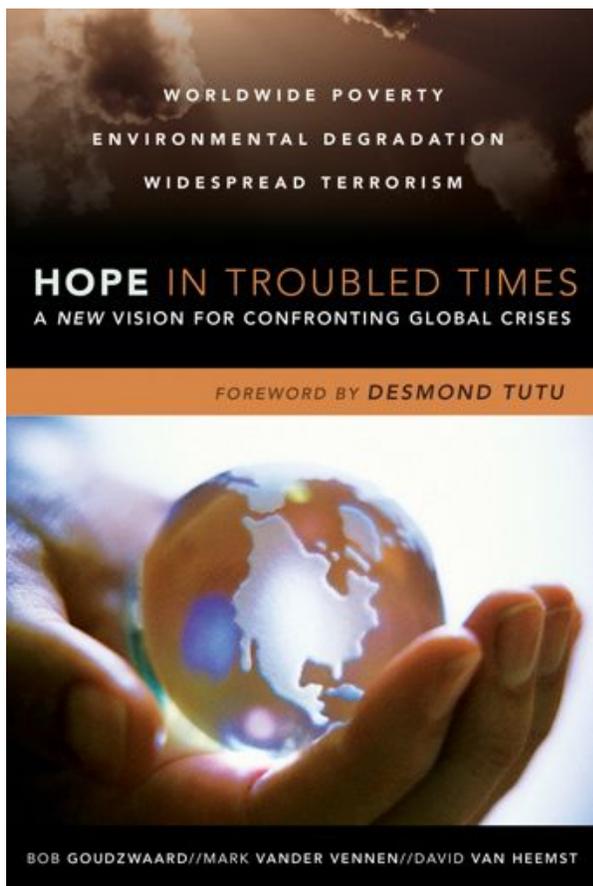
# Paths to Hope in Troubled Times

Bob Goudzwaard  
Mark Vander Vennen

Daring to Hope

Towards A New Vision  
of Common Security

The Gospel and Global  
Climate Change



*"I accept the invitation offered by the authors, and I wholeheartedly invite you to do the same...."*

Archbishop Desmond Tutu,  
Nobel Peace Prize Laureate

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Brian McLaren

*Three addresses given at "Hope in Troubled Times", a day-long conference on themes from the book Hope in Troubled Times: A New Vision for Confronting Global Crises*

October 13, 2007  
Toronto, Ontario

# Daring To Hope

Bob Goudzwaard

Becoming older (I am now 73) has advantages, not just disadvantages. One of the plusses is that you can scan a larger part of history and perhaps even use your own experiences as an illustration. That is what I will do now, in relation to the theme “Daring to Hope” and to the vision urgently needed to confront present global crises. At first glance it may seem strange to find hope for today by going back in time. But I hope to show that a circuitous path like this can be meaningful for all of us, especially if we are willing to explore those personal memories which may have a deeper, general significance.

## Three Memories

The first memory I will recap dates from the year 1944. 1944 was perhaps the darkest year of the Second World War, and my own country, the Netherlands, was occupied by German troops. I can still feel the hunger I felt then, and even more the fear of the soldiers marching by. Then D-Day came. I vividly recall how my father read the news bulletin of the invasion and shook his head. This, he said, is a hopeless adventure, because the Germans are far too strong. But my mother had a different opinion. Could this invasion by American, Canadian and British troops mark the beginning of the end of the German Empire? In God’s world, she said, Nazism will never have the last word. My mother, in other words, trusted that the Lord would one day liberate our country and the Jewish people from this demonic and cruel oppression. She was right!

The second memory comes from one of the visits that Bernard Zylstra, the first president of Toronto’s Institute of Christian Studies, and I made to South Africa, at the request of my own university, the Free University of Amsterdam, during the heyday of the Apartheid regime. Bernie and I were so deeply struck by the viciousness and overwhelming power of the Apartheid regime that we seriously doubted whether we could offer any help in breaking down the awful Apartheid ideology. Then came a moment—I will never forget it—when Dr. Beyers Naude, the great Christian fighter against Apartheid, took us in his old car to visit one of the black leaders. He turned, looked at the two of us

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BOB GOUDZWAARD (Ph.D), a former member of the Dutch Parliament, is Professor Emeritus of Economics and Social Philosophy at the Free University of Amsterdam. Both within and outside of his extensive political career, Goudzwaard has been deeply involved in international development issues. He is past chair of the Dutch Royal Society for Political Economics and former co-President of the European Ecumenical Commission, operating in Brussels. Most recently he chaired a two-year consultation between the International Monetary Fund, the World Bank and the World Council of Churches.

Goudzwaard has authored numerous books and is a frequent public speaker in North America. He serves as a consultant to the Center for Public Justice in Washington D.C. and Citizens for Public Justice in Toronto, and as an Associate of the Institute for Christian Studies, Toronto.

sitting in the the back seat of his car, and shouted: "Apartheid, my dear friends, is a beaten enemy!" Imagine: he declared this during the dark climax of Apartheid. On the same visit Bernie Zylstra also asked Dr. Desmond Tutu, the Archbishop who so kindly introduced our book *Hope in Troubled Times* to its readers, one of his famous pertinent personal questions: "how can you endure the ongoing heavy oppression of the Afrikaner rulers, day after day, without seeing even a glimpse of light?" The Archbishop stood up and said loudly, "Please do not forget that day after day I am upheld by the thousands of prayers of God's people!" Then he sat down. It was unbelievable, this vivid, unshaken faith in the midst of such misery. His words were spoken *de profundis*, from the depths, to quote Psalm 130. Perhaps you have read Desmond Tutu's Foreword to our book. Remarkably, he speaks from the depths of that same faith even now, inviting all of us today to choose the winning side. The reigning ideologies of our time, he predicts, will ultimately fall, just as Apartheid did! No doubt he writes these words with a deep sense of certainty.

What led Beyers Naude and Desmond Tutu to such a deep sense of certainty at the very moment when everything seemed hopeless? That is the question for you and me.

The third and final memory I will recount is the fall of the Berlin Wall. The older among us will share that memory with me. What a strange feeling to see what could not be believed: the raising of the Iron Curtain. It became concrete as the stones of the wall came down, and as people climbed over the wall to embrace each other. I myself simply could not cope with what I saw. We all knew the harshness and cruelty of the Soviet communist empire. What we observed was

simply impossible. It was the return of hope, real hope, during the darkest hour of the night, when all human expectations for a better future were at their bleakest, even to the point of dying. Yet a new perspective broke through, radically and powerfully.

### **Breakthrough of Hope**

Why do I relay these three memories? First, there is an obvious similarity between them. They are more than incidental; together they reveal something valuable about the future of all overpowering ideologies. But what is it? I became curious, and perhaps now you have become curious too.

The second reason for recounting these memories is that each of them is related to the presence or breakthrough of hope in the midst of the darkest moments of human history. This hope is not just a matter of praying and waiting for God's intervention. It is more; it is a concrete hope which is clearly able to flare up during the most troubled times. What then is its secret? And might this kind of hope have some significance in the dire circumstances of our time?

### **What About Today?**

*Hope in Troubled Times* is the title we chose for our book, and I admit that it is risky, almost audacious.<sup>1</sup> If anything is striking about the size and character of today's significant global problems, then it is the extreme stubbornness and profound resistance by which they defy the solutions used to try to solve them. Climate change, for example, is a massive, deeply troubling problem. Of course, much can be done by saving energy and developing new technologies. In and of itself, however, will that actually be enough to stop the rise of global temperature? Consider, for example, that in the last forty years the world's

industrial production grew sevenfold, while the global use of fossil fuel energy rose fivefold.<sup>2</sup> This pattern will continue for the next forty or eighty years (think of the economic expansion occurring in China, India and Brazil). Will not such increases more than overtake all of our efforts to save energy, with all of the devastating consequences that will follow? Or take the issue of world poverty. Of course some improvements have been made. But the ongoing impoverishment of people who are already weak is an undeniable fact. To quote from a recent book by Raj Patel, *Stuffed and Starved*, while one billion people in the world are eating too much, 800 million people still don't get enough to eat.<sup>3</sup> International experts now predict with certainty that the Millennium Goals for 2015 will not be reached.

Think too of the rise of violence. Not only does it flare up in Darfur, Iraq, Afghanistan and the Middle East, but it has also crept into the international scene in a new way. The world's big powers are already engaged in a rat-race to guarantee for themselves future access to the last remaining oil stocks and natural resources of the earth, even under the North Pole. The big powers are on or even over the brink of threatening violence if their so-called vital interests are damaged. Did not Alan Greenspan recently openly declare: of course Iraq is about oil?<sup>4</sup> What then does hope mean in such a turbulent time and in such an uprooted international scene?

Indeed, for many of us our age may be synonymous with the end of hope. More and more people in the West are turning away from today's massive world problems, not so much because they have lost interest but because they feel that these are matters which lie entirely outside of their control.

I have described three memories from the past. How can such memories take on existential significance for us here and now? That hope emerged in times so different from ours. At first glance, it may seem impossible that those events may have any meaning for us today.

### **Two Conditions**

As authors of *Hope in Troubled Times* we were aware from the beginning that this would be our most significant problem. More precisely, we knew that at least two conditions had to be met before one can translate hope from the past into hope for the present and the future. First, we had to show convincingly that these and similar expressions of hope in the past were not idealistic. On the contrary, underneath them burned an utterly realistic perception of reality, an intuitive sense that in one way or another all ideologies that have dominated national or global history, such as the Nazi ideology, the Apartheid ideology or the Communist ideology, always prepared for, even created for themselves the moment of their own unavoidable collapse. We had to show that ideologies work in that way because of their own internal logic, their own self-generated historical dynamic. Then a second condition had to be met, however. We had to show clearly and convincingly that many, perhaps all, of today's urgent global problems have at their core strong ideological roots, roots which at least partly cause the harshness of today's problems. Incidentally, this also implied that we had to oppose the mainstream popular conviction that we now live at the end of all ideology, as Francis Fukoyama has argued.<sup>5</sup>

We felt deeply that only if these two conditions were met could we then speak of real hope in our troubled times, a hope

which is not artificially created but which rests upon clear historical evidence. To prevent possible misunderstanding, this is not a hope which lies outside of a living Christian faith. In fact, the memories I recounted suggest the opposite. But it is a hope that looks primarily to the evolution of reality itself, with a spiritually deepened awareness, just as one found in a Beyers Naude and still finds in a Desmond Tutu.

During our process of thinking and writing our conviction grew that these two conditions can be met. That meant a lot to us, because if they can be met, then they may present a key to open the door of hope, to finding some real solutions to the pressing issues of our time.

### **The Demise of Ideologies**

As to the first condition, I can be relatively brief. We found that historically each ideology that followed its own dynamic course displayed at least five or six developmental phases, beginning with its moment of conceptualization and ending with its last phase, the phase of final breakdown. Each ideology has an absolute goal which it wants to realize at all costs and by all means. What makes the collapse of each significant ideology unavoidable is the fact that absolute goals always require means or instruments to accomplish the goals in practice. We found that the stronger the goal, the stronger the dependency on the means or instruments needed to reach the goal. Sooner or later, however, these means or instruments begin to elude the control of their adherents, as if they have a life of their own. In Communism the Plan became sacrosanct, in Nazism it was the will of the Leader (Führer), and in Apartheid it was the National Party. All of these means morphed into tyrants who or which had to be followed regardless of the consequences. Behind every great ideology

therefore burns the fire of some kind of idolatry, which is the necessity to follow unconditionally one's own self-selected deliverers or saviors. However, idols always betray their makers. They always become corrupt, as in the German *Götterdämmerung*, the Twilight of the Gods. As people become aware of the profound false tyranny of the gods, sooner or later their collapse is unavoidable.

But what about the second condition, namely that our present time is filled with ideologies, with absolute goals, and that they awaken or intensify most of our present urgent global problems? That condition presented us with the greatest burden.

### **Looking to Reality Itself**

Allow me to illustrate by telling you something about the problems I personally encountered in analyzing the possible ideological roots of today's global problems related to economy, finance and the environmental crisis. For me the main problem, which I became aware of only gradually, is that it would be irresponsible for me to simply state that the goal of ever-increasing material prosperity has become an absolute goal in already rich western societies, that this ideology was and still is the ideological root of many of our problems, and then look for practical evidence to support this view. Doing that would mean that I would be imposing my own view on an existing concrete reality. That approach would be fraught with risks, not only for me but also for my readers. Instead, I had to follow a much more difficult path, namely to begin not with my own ideas about what was happening in reality, but with reality itself, observed from true and empirically verifiable experiences. This attitude of radical openness to reality is also a matter of faith, and this too

became clear to me only gradually. My friend Julio de Santa once wrote that it is the living God Himself Who is somehow working and present in reality. A similar conviction once drove my good friend Bernard Zylstra to try to understand our complex reality as it really is by digging down into its deepest characteristics, because only in that way can one hope to reach a level where spiritual dimensions come to the fore. It is also at that level that the Word of God begins to speak to us unavoidably in reality, perhaps then also beginning to clarify possible ways ahead. It may illuminate actual solutions that have the flavor of real hope.

### **Economic Paradoxes**

It was with this expectation that I began by analyzing the most obvious dimensions of our present social, economic, financial and environmental reality. I started by looking at those dimensions which are usually left unexplained, namely economic realities that have an enigmatic or paradoxical nature. Why does poverty increase even in the richest countries? Why do we observe globally, but again most strongly in the richest countries, an erosion of care, both for people and the environment? What is the origin of the enormous growth of the financial markets in our time, of the expansion of money and of money-derivates, an expansion which eludes every form of control? Why is there so much haste and stress in the most modern societies, even though people in them have far less need to be fast-paced and stressed than people living in poor societies? The prediction in the 1970s had been that, for people in the rich countries, the largest social problem in the 1990s would be the possession of too much leisure time. Do these various real, growing and often painful paradoxes perhaps have common roots, roots which can deepen our understanding of

reality itself?

In studying the roots of these and other paradoxes in our time, something becomes increasingly evident. Underneath all of these paradoxes lurk powers and convictions that in one way or another are all based on a reduced view of humankind, the environment and society. They all reflect a dynamist, mechanist or technocratic worldview. Modern men and women often put their ultimate faith in what technology, economy and monetary power will do for them. As soon as they do so, however, they implicitly give permission to these powers to seep into their minds and perceptions. Even the brightest men and women can therefore become caught in a web of illusions which mislead them, illusions which can then close off ways of finding real and lasting solutions to our most pressing global problems.

Consider the paradoxes I mentioned. Poverty today increases mostly in cultures and societies which permit or even applaud material self-acquisition by the already rich (by both persons and countries). Such acquisition usually goes hand in hand with the exclusion of others from the benefits. Care for people and nature easily erodes in a societal context where the most productive sectors of the economy are constantly permitted to take the lead, including in setting the wage and salary standards of the so-called weaker sectors. And if society makes finance and money crucial because of its ongoing greed, sooner or later the financial markets begin to impose their will upon that society. They begin to dominate all real economies and the course of our societies themselves. Indeed, our major problems often have ideological roots, roots which often act as barriers against genuine, hopeful solutions.

## **Finding Ways Out**

But does such an analysis offer concrete hope in our time? We think so, and I will use my remaining time to illustrate, alongside of the last chapter of the book, what ways out become apparent on this basis.

The ways out we suggest are concrete. On the basis of this analysis, it will also not surprise you that they have a spiritual or, more precisely, an anti-ideological component. Our economic problems are not just economic problems. Because they are first and foremost matters of the heart and the mind, of how peoples and societies choose meaning, their roots lie outside of the technical and financial domains.

Consequently, real solutions will never reflect new pre-selected ultimate goals which must be achieved at all costs and by all available means. That would again imply that faith in our own will, power and knowledge will do the job. Real solutions have the character of ways out. They orient themselves to walking down a "Way", not to achieving a "Goal". Perhaps we can even say that the practical solutions we need resemble taking steps down a path, first steps down a Way which holds open the promise that the way will widen as we, step by step, move down it. To quote Psalm 119, in the translation of Martin Buber, "I have seen an end to everything, but your Way is very wide".<sup>6</sup>

For example, one of our concrete suggestions is to actually follow the directive, already formulated in the Torah, that the permanent indebtedness of the poor is inhuman and ungodly (for only God is eternal), and that repayment of long-standing past debts by the poor countries should no longer be enforced. It is a matter of justice that the prolonged debts of the poorest countries, which now have an intergenerational character, should be

cancelled once and for all. This step is more than a matter of justice: it is also a matter of good economy. It can even be seen as a step towards a healed global economy. Such a first step will result in blessings, not only in terms of more economic opportunities for those poor countries themselves, but also of fewer migrant flows to the North and less need for the countries of the South to burden their own environment. Such a first step could then pave the way for a second step: a more enduring cooperation in doing justice and practicing good stewardship between the countries of the North and the willing countries of the South.

This is not utopian. It becomes a genuine possibility if we in the rich North develop a concrete economic and political willingness to relativize our own material economic growth, breaking with our desire to give priority to the unlimited expansion of all modern markets. Our own market-oriented economic growth is now exceedingly close to a tyrannical idol which must be followed wherever it goes. By contrast, striving together for a blossoming world economy is much closer to the path of shalom. In a blossoming economy, economic fruits include the availability of meaningful work for all, basic economic and social provisions for the weak, and substantial increases in care for global, national and local environments. Loosening the cords and ties of our present ideologies is the heart of every real way out, whether at the macro or micro level.

## **Pie in the Sky?**

But is this not pie in the sky? All of this may look like an effort to convert even the most adamant opponents, such as the governments and banks of the rich countries (as they come together on debt issues, for example, in the so-called Club of Paris). Will they ever

undertake a turn? May I remind you of the powerful resistance thrown up by governments and the big banks against the idea of the cancellation of debts only a few years ago. Their resistance remained entrenched until, according to the *Guinness Book of World Records*, the longest human chain in history was formed in the context of the so-called Jubilee campaign. Thousands of people from civil society movements and the churches stood hand-in-hand as they surrounded the G7 meeting in Frankfurt. And that became the place of breakthrough: there the G7 accepted the possibility of debt cancellation, and they agreed to some initial, if modest, implementation.

There is indeed hope, but we ourselves have to choose the ways of light instead of the ways of stumbling around or racing through the tunnels of our growing comfortable darkness.

### **The Periscope Principle**

We formulate three tactical principles at the end of the book along these lines. They are the periscope, minesweeper and rope-ladder principles. The heart of the periscope principle is that we badly need, also for ourselves, a broader and deeper view of reality than is possible in a closed rational universe. We compare our current situation to life in a submarine, where life and work are largely oriented to generating speed in the most efficient way. But a submarine needs a periscope to view the horizon, in order for the submariners to see where they are and to become aware of potential dangers. We have the same need today. At this very moment we are at great risk of making ourselves deaf to the cries of people and the suffering of creation, as long as we surrender to the artificial, continuously cultivated illusion that we need to maintain and increase the speed of our own economy and technological

development in order to solve the problems. Instead, we need to open up our horizon to what is at stake in reality itself, and from there choose ways of justice, stewardship and compassion. Isn't it remarkable that so many movements today, especially of younger people, have sprouted up which have chosen this as their starting point: to dare, in a time of globalization, to take the ways of peace and care for the poor, and to give concern for the environment priority over our own self-determined economic goals? Inherently these young people often have a deeper insight into true normativity than most richer and older Christians. They follow in their hearts the periscope principle of scoping out a widened horizon of faith and reality.

### **Choose the Winning Side**

Numerous inspiring examples are already available at the micro level. All over the world smaller and larger communities have decided together to voluntarily give priority, in either their production or consumption (or sometimes in both) to meeting real communal and environmental needs rather than personal luxury needs. Step by step, movements such as the Focolare movement have already seen the blessings of such an approach. Similarly, the minesweeper and rope-ladder principles are close to what millions of people around the world already feel and experience. These principles become put into practice wherever people begin to understand that the most exhibitionist forms of power and wealth today are bloated, internally hollow and often on the brink of a collapse of their own making. As a result, they hold no promise for a better future.

They have understood that it is far better, to quote Desmond Tutu again, to choose the winning side: the side of oppressed minorities or majorities, the side of threatened

forests and coral reefs, the side of cultures and economies which continue to be excluded from any kind of benefit by the greedy. For in the end they will, according to Gods promise, inherit the earth.

## Daring to Hope

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### ENDNOTES

<sup>1</sup> Bob Goudzwaard, Mark Vander Vennen, David Van Heemst, *Hope in Troubled Times: A New Vision for Confronting Global Crises*, with a Foreword by Desmond Tutu (Grand Rapids, Mich: Baker Publishing Group, 2007).

<sup>2</sup> See “The Gospel and Global Climate Change,” page 22 and note 6 for the reference.

<sup>3</sup> As quoted in *Time*, October 8, 2007. Raj Patel, *Stuffed and Starved: The Hidden Battle for the World Food System* (Toronto: HarperCollins Canada, 2008).

<sup>4</sup> See the transcript of a debate between Alan Greenspan and Naomi Klein entitled “Alan Greenspan vs. Naomi Klein on the Iraq War, Bush’s Tax Cuts, Economic Populism, Crony Capitalism and More”, Democracy Now, September 24, 2007, retrieved at [http://www.democracynow.org/2007/9/24/alan\\_greenspan\\_vs\\_naomi\\_klein\\_on](http://www.democracynow.org/2007/9/24/alan_greenspan_vs_naomi_klein_on).

<sup>5</sup> Francis Fukuyama, *The End of History and the Last Man* (Toronto: HarperCollins Canada, 1993).

<sup>6</sup> Psalm 119:96.

# Towards A New Vision of Common Security

Mark Vander Vennen

## A Story

Let me begin with a story describing what drew me into the area of peace and conflict. In the early 1980s I moved into a Catholic Worker home for the homeless in the inner city in Pittsburgh, Pennsylvania. Our ghetto neighborhood looked something like Rotterdam after it had been bombed in World War 2. The landscape was overwhelmed by charred shells of burned-out buildings. I remember visiting Esther and Otha Austin, a lovely African-American couple, about 70 years of age, one day in their home. It was winter, and we sat in their living room around what was their source of heat—a steel bucket within which burned a few chunks of coal. There was no need for a ventilation system, because when you looked up you saw large swatches of blue sky. Theirs was a place of snow falling among furniture. This was a neighborhood of abject poverty.

About a mile away stood the tallest building in Pittsburgh, the 55-story U.S. Steel Building. At the time it was the international headquarters of Rockwell International, which was then the third-largest military contractor in the U.S. Some of the most advanced weaponry used in the Vietnam war was designed there. This was now at the height of the Cold War, and literally billions of dollars flowed through that building. One could not help but be struck by the contrast: billions of dollars were flowing beside abject poverty. I was reminded of a line by the poet Gabriella

MARK VANDER VENNEN (MA, M.Ed, R.S.W.) serves as the Executive Director Salem Christian Mental Health Association. He has worked extensively with both survivors and perpetrators of violence. His essays have appeared in numerous periodicals and he is a frequent public speaker on issues of violence and reconciliation. Vander Vennen has been actively engaged in peace and conflict issues for over 25 years, and he has worked in partnership with Bob Goudzwaard on numerous projects since 1982, including editing and translating *Beyond Poverty and Affluence: Towards A Canadian Economy of Care*, Bob Goudzwaard and Harry de Lange, with a Foreword by Maurice F. Strong (Toronto: University of Toronto Press, 1994).

Mistral: “they circle but never find each other/bread and hunch-backed hunger.” I felt constrained to act in some way. So I joined a group called Christian Peacemakers, and we undertook a number of activities at Rockwell, at all times unwaveringly committed to nonviolence.

Frequently at Rockwell a conversation would go like this. Someone would walk up to us and say, “I see from your literature that you’re Christian, well I’m a Christian too and I believe that by working at Rockwell and by building nuclear weapons I am helping to speed up the apocalypse”. That is an exact

quote, repeated numerous times. We met with Larry Norman; Larry is considered to be the “grandfather” of contemporary Christian music. He proudly told us that he had never before voted in a U.S. election, but he voted for Ronald Reagan in 1980, because Reagan would “help to bring us closer to the apocalypse”.

These experiences drove me onto a journey through Scripture, history and current events. I needed to be able to say something to these people, who were my brothers and sisters in Christ. They were quoting to me from the book of Revelation, and they had a specific view of the state of Israel in their chilling view of the apocalypse.

That journey has carried on for over 25 years, and I would like to share just a small portion of it with you this morning, under the topic “Towards A New Vision of Common Security”.

### **Oversimplifications**

Given my brief time, and at the risk of oversimplification, I will focus on just one aspect of a new concept of common security. A viable vision of common security requires a great deal of nuance and flexibility of approaches and responses; a comprehensiveness that is almost always underestimated. There are some strong peacebuilding processes that have been developed over the last 20 years that involve rejigging the relationship between so-called political realism and the field of conflict transformation.<sup>1</sup> They form a crucial part of any new vision of common security, but I am not able to talk about them today. So I hope you will not accuse me of oversimplification. In fact, in my view, the current approaches to security, whether in Iraq, Afghanistan or Darfur, suffer from a continual application of oversimplifications.

### **Military Technological Development and Economic Growth**

I will focus on one area that to us, in the writing of our book *Hope in Troubled Times*, and in my own contribution to it, seems to be left out of the current policy debates, at all stages, whether before, during or after a given conflict. That is the role of technological development in driving military and political practice, and the embeddedness of that military technological development in the economic prosperity of the West. I shall illustrate by briefly describing three new weapons systems and global arms trade.

### **New Weapons Systems**

#### *Bio-Electromagnetic Weapons*

An enormous amount of military research and development in the last several years has gone into what are called “bio-electromagnetic weapons”. These weapons essentially use microwaves to alter the neurological patterns of people. Already in 1998, in an article entitled “The Mind Has No Firewall”, U.S. Lieutenant Colonel Timothy Thomas, recognizing that such weapons were already under development in both the U.S. and Russia, implied that the mind is the next battlefield.<sup>2</sup> The false thinking is that temporarily altering the mind—or using electromagnetic waves to cause temporary intense pain, such as on the skin—is a more humane form of combat. There are reports that prototype systems are currently being used in Iraq.<sup>3</sup> These reports are not confirmed by the Pentagon, but they are confirmed by some U.S. soldiers who are operating the devices. One soldier has said that occupied Iraq has become a “saturation environment” of electromagnetic radiation.<sup>4</sup> Soldiers also report, however, that the use of these devices is affecting US soldiers themselves, causing headaches, disorientation, loss of impulse control, spacing out, rage, and other

symptoms.<sup>5</sup> The use of such weapons is against international law. But nowhere does the appropriateness of such weapons enter the public debate, including by those who subscribe to the so-called just war theory.

### *Depleted Uranium*

Depleted uranium is a heavy metal used on American and other weaponry since the first Gulf War. Depleted uranium gives weaponry a harder surface and improved penetration. It is radioactive, and the radioactivity has a half-life of 4.5 billion years. 325 tons of depleted uranium were dropped in the First Gulf War. 800 to 1,000 tons were dropped in the Afghanistan bombing, and between 1,000 and 2,000 tons were dropped in the invasion of Iraq.<sup>6</sup> There is controversy about the health effects of depleted uranium. But the scientific evidence is growing that the impacts can be devastating and can alter genetic structures. Of the 700,000 American soldiers deployed in the first Gulf War, 240,000 of them are now on permanent disability, many suffering from the mysterious “Gulf War Syndrome”.<sup>7</sup> It is said that 378 American soldiers died in the Gulf War. But 11,000 veterans of that war have died since the war ended.<sup>8</sup> These are soldiers who were young and in good health at the beginning of the war. There is an alarming rate of birth defects of children of Gulf War veterans. In a small US government study, 67% of children born of Gulf War vets had serious illnesses or birth defects; uranium was found in the fathers’ semen which then was transmitted to the mothers of their babies.<sup>9</sup>

There is some evidence that Saddam Hussein used some chemical weapons in that war, and that usage may play a role in the Gulf War Syndrome. Further, there is no firm evidence of a link between depleted uranium and the Gulf War Syndrome. But the scientific

evidence is moving strongly in that direction. It is noteworthy that parallel symptoms and birth defects are found in Yugoslavia, Afghanistan, and Iraq—the places where depleted uranium has been used. In each of these places, as with the American veterans, the birth defects now happening rival the birth defects that have been occurring in Chernobyl since its tragic radiation leak.

### *Complex 2030: Nuclear “Reliable Replacement Warheads”*

The Bush administration is seeking Congressional funding for a complete overhaul of existing U.S. nuclear facilities, geared towards producing a “reliable replacement warhead”. The stated goal is to return US nuclear weapons production to Cold War capabilities. This is despite the fact that each year the Secretaries of Energy and Defense have certified to the President that the current 10,000 nuclear warheads are “reliable”. The project, called Complex 2030 (2030 indicates the date in which it would be complete), would cost \$150 billion. Some advocacy for the project is coming from Congress people who are promoting the economic and job potential of the project for their constituents.<sup>10</sup>

### **New and Deadly “Friendly Fire”**

All of this—the use of bio-electromagnetic weapons, the use of depleted uranium, the proposed “Complex 2030”—is against international law, various arms control agreements and treaties, and in some cases U.S. military law. Yet the ideology of guaranteed security, as we have called it in our book, provides the rationale by which these technological developments are given complete room to be implemented and used, with almost no questions asked. Policy and norms of justice, respect for the dignity of people, and environmental integrity do not

inhibit them. In our view, idolatry is present here. Military technological development seems to veer almost completely out of control, with virtually no constraints. Further, sacrifices are required in order to achieve guaranteed security. How else do we explain the acceptability of these new and far more deadly forms of “friendly fire” against our own youth? I have not even mentioned what is being called the signature wound of the Iraq war, “Traumatic Brain Injury”, caused by the effects of improvised explosive devices on the brain, or current intensive developments in the weaponization of space.<sup>11</sup>

We have somehow been seduced or tricked by the notion that these developments bring peace and security. The world spends \$1 trillion dollars annually on armed forces, while the U.S. government spends 42% of its fiscal budget on military-related matters.<sup>12</sup> It simply cannot be said that insecurity today is due to a lack of military capacity. I am reminded of couples I sometimes see for therapy. Some end up stuck in their marriage because, when something isn’t working, they don’t know what else to do but to try the same failed approaches over and over again, harder and harder each time.

### **Global Arms Trade**

Consider further five statistics about global arms trade:

- 1) According to the U.S. Congressional Research Service, the five members of the United Nations’ Security Council (the United States, Russia, Great Britain, France and China) delivered 86.7% of the world’s arms exports in 2004. When other European nations are added, the figure is 93%.<sup>13</sup>
- 2) The United States exports more arms than the rest of the world’s nations combined, often for reasons more economic than strategic. Weapons manufacturing is its most heavily

subsidized industry, after agriculture.<sup>14</sup>

3) In 2003, 80% of the United States’ top arms clients in the developing world (20 of 25) were countries which the United States’ State Department had declared either undemocratic or known for poor human rights records.<sup>15</sup>

4) In 1999 the United States supplied arms to 92% of the world’s conflicts, sometimes to opposing sides.<sup>16</sup>

5) From 1998 to 2001, the United States, Great Britain and France earned more income from arms sales to developing countries than they gave in aid.<sup>17</sup>

### **An Engine of Economic Growth**

The theme I want to draw out is that these developments—new weapons research and development, and global arms trade—have become deeply embedded in our globalized economies. Prior to World War 2, one could still distinguish between a war-time and a peacetime economy. No longer is that the case. Weapons development is now an indispensable, structural component of the economic and industrial growth of the West. That means that developing greater common security is inconceivable without a corresponding drop, however small or large, in the material prosperity of the West. Reducing our dependence on lethal weapons of indiscriminate destruction will slow down economic growth. There can be no sustainable peace without a conscious or deliberate relaxation of our obsession with a constantly increasing GDP. By the same token, making our economies sustainable is inconceivable without a simultaneous commitment to peacebuilding.

### **A New Shared Vision**

But it is precisely here that a new shared vision for common security begins. Just as we have argued in our book that a deliberate

choice to slacken the pressure for economic growth, for the sake of others and the environment, could relieve the extraordinary pressures on our economies and bring significant economic benefits, so too choosing to slacken economic growth could have significant benefits for security and peace. This is what we refer to in the last chapter of the book as the rope-ladder principle. A step-by-step turn away from one ideology—the ideology of unending material progress—can help to make possible a turn away from another ideology—the ideology of guaranteed security. That is why I am so enthused about the Honourable John McKay's Bill C-293, the "Development Accountability Act", which requires Canadian aid to go directly to people in need, not diverted to efforts whose purpose in the end is to enhance Canadian economic growth and/or Canadian and NATO security or "vital interests".<sup>18</sup> It is a fundamentally anti-ideological bill, with simultaneous impacts in the direction of economic sustainability and peace.

A new approach to common security therefore involves accepting levels of military vulnerability while at the same time, and in coordination, meeting the needs of people and the environment. A new, non-ideological approach to common security involves gradually decreasing our dependence on weapons of lethal destruction and increasing our ability to meet human and environmental needs. But this should not surprise us. This is precisely what God expected of his people throughout Scripture. God's people were to practice Jubilee, where everything on the margins of society—the poor, the environment, the isolated—is brought back into the centre. Jubilee made the uninterrupted accumulation of wealth impossible. *At the same time*, and as part of Jubilee, God's people were required to accept

military vulnerability, such as a refusal to acquire the most technologically advanced weapon of the day—the horse and chariot. Micah 1:13 calls Israel's acquisition of the horse and chariot "the beginning of sin to the daughter of Zion." Today, just as then, doing Jubilee and accepting vulnerability are acts of faith. They require questioning our fundamental commitments. What is the meaning of life? How do we understand safety and prosperity?

### **The Realism of Peace**

This is a realistic approach, because ideologies, in the end, do exhaust themselves. They do not carry the day, even in such places as the Middle East. It is blatantly clear that advanced military technology development and unprecedented military capacity not only do not bring peace but create greater threats. Jesus' statement "Those who live by the sword die by the sword" is a fundamentally realistic and descriptive truth, born out by history, including in the Middle East. Its converse, namely that those who live by peace are given life, is a source of genuine hope. There is also concrete evidence for the truth of this, including in the Middle East and in other war-torn areas of the world today.

Eliminating weapons of lethal destruction and taking a step back from uninterrupted economic expansion is a step of realistic faith—faith that in taking steps down this path of peace and prosperity we will be met at some level by the living God. That is my faith today, and I'm so thankful that it's shared by so many courageous people, here and throughout the world.

## Towards a New Vision of Common Security

### ENDNOTES

<sup>1</sup> See, for example, John Paul Lederach, *Building Peace: Sustainable Reconciliation in Divided Societies* (Washington D.C., United States Institute of Peace Press, 1997) as well as his *The Journey Towards Reconciliation* (Scottsdale, PA: Herald Press, 1999) and *Moral Imagination: The Art and Soul of Social Change* (New York: University of Oxford Press, 2004). See too Jarem Sawatsky, "Extending the Peacebuilding Timeframe: Revising Lederach's Integrative Framework", *Peace Research*, vol. 37, #11, May, 2005, pp. 123-130, as well as Mary B. Anderson, *Do No Harm: How Aid Can Support Peace—or War* (Boulder, CO: Lynne Rienner Publishers, 1999).

<sup>2</sup> Timothy L. Thomas, "The Mind Has No Firewall", *Parameters*, Spring 1998, pp. 84-92.

<sup>3</sup> See, for example, Bryan Bender, "US Testing Nonlethal Weapons Arsenal For Use In Iraq: Program Fuses High Technology with Psychology", August 5, 2005, *Boston Globe*; Steven Komarow, "Pentagon Deploys Array of Non-Lethal Weapons", *USA Today*, July 24, 2005, retrieved at [http://www.usatoday.com/news/world/iraq/2005-07-24-nonlethal-weapons\\_x.htm](http://www.usatoday.com/news/world/iraq/2005-07-24-nonlethal-weapons_x.htm); "Electromagnetic Weapons: Come Fry With Me", *The Economist*, January 30, 2003; Lester Haines, "US fires up crowd-roasting microwave gun: 'Less than lethal' Silent Guardian unveiled", January 25, 2007, *The Register*, retrieved at [http://www.theregister.co.uk/2007/01/25/microwave\\_weapon](http://www.theregister.co.uk/2007/01/25/microwave_weapon); Peter Clarke, "Microwave Beam Weapon Reportedly To Be Deployed in Iraq"; Eetimes Online, Global News for the Creators of Technology, August 21, 2004, retrieved at <http://www.eetimes.com/news/latest/showArticle.jhtml?articleID=47900605>; "Star Wars in Iraq", a documentary on the U.S. use of experimental weapons in Iraq, produced by Maurizio Torrealta and Sigfrido Rannuci for Italy's RAI TV; and William Thomas, "Microwaving Iraq with 'Pacifying' Rays", January 26, 2005, retrieved at <http://www.envirosagainstar.org/know/read.php?itemid=2301>.

<sup>4</sup> William Thomas, "Microwaving Iraq with 'Pacifying' Rays", p. 1.

<sup>5</sup> *Ibid*, p. 2.

<sup>6</sup> As noted in, among other sources, Leuren Moret, "Depleted Uranium: The Trojan Horse of Nuclear War", *World Affairs: The Journal of International Issues*, July 1, 2004, pp. 9, 14, 15. Some estimates are as high as 2,200 tons used in the Iraq invasion.

<sup>7</sup> *Ibid*, p. 10.

<sup>8</sup> *Ibid*, p. 10.

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<sup>9</sup> Ibid, p. 10.

<sup>10</sup> For more on “Complex 2030”, see Friends Committee on National Legislation (FCNL), “U.S. Nuclear Buildup: A Return to MAD?”, Washington Newsletter, May 2007, No. 717, pp. 1-8, available at [www.fcnl.org](http://www.fcnl.org). FCNL works tirelessly on Capital Hill, interacting with legislators on various issues, using as a resource its research. The FCNL’s outstanding, careful research is taken largely from reports provided by the Congressional Research Office.

<sup>11</sup> Some estimate that as many of 30% of U.S. Iraq war veterans suffer from Traumatic Brain Injury. There is currently an intense debate in Poland and the Czech Republic about whether to agree to a U.S. request to serve as installation sites for the planned U.S. missile defense shield.

<sup>12</sup> The Stockholm International Peace Research Institute notes in its *SIPRI Yearbook 2005* (Chapter 8) that 2004 was the first year that world military expenditures exceeded \$1 trillion. The U.S. government spending estimate is made by FCNL, and it includes interest payments on past military-specific debt (Friends Committee on National Legislation, Washington Newsletter, March, 2006, No. 705, p. 5). The Newsletter notes:

In total, we estimate the U.S. spent \$783 billion in FY05 for past and present military activities. This included funding for the Defense Department, Energy Department nuclear weapons programs, military-related activities of other agencies, foreign military financing and training, the wars in Iraq and Afghanistan, mandatory spending for military retirement and health care, and the estimated portion on the national debt which can be attributed to past wars and military spending (\$170 billion) (p. 5).

<sup>13</sup> Richard F. Grimmett, “CRS Report for Congress: Conventional Arms Transfers to Developing Nations, 1997-2004”, August 29, 2005, Congressional Research Service, The Library of Congress, p. 82.

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<sup>14</sup> See Federation of American Scientists, “Fast Facts”, p. 1, retrieved online at [http://fas.org/asmf/fast\\_facts.htm#WorldMilitaryExpenditures](http://fas.org/asmf/fast_facts.htm#WorldMilitaryExpenditures), as well as the Federation’s “Eliminating Taxpayer Subsidies for Arms Sales”, retrieved at <http://fas.org/asmf/campaigns/subsidy.html>. Arms trade is typically exempt from free trade agreements.

In its report “Arms Trade Insider”, The Council for A Livable World has identified a process whereby arms procurement and arms exports are driving each other upwards—in other words, a process whereby the United States is in an arms race with itself. The report notes that after, and occasionally even before, new weapons roll off the assembly line, they are offered to foreign customers. Each overseas sale of top-line U.S. combat equipment represents an incremental decrease in U.S. military superiority. This gradual decline in military strength spurs politicians, the military and the defense industry to press for higher military spending to procure increasingly sophisticated equipment superior to weapons shipped overseas. This latest technology is again offered to foreign customers, and the cycle begins anew. (#51, August 9, 2001, as noted in Anup Shah, “The Arms Trade is Big Business”, retrieved at <http://www.globalissues.org/Geopolitics/ArmsTrade/BigBusiness.asp#GeopoliticalandEconomicAgendas>).

<sup>15</sup> Frida Berrigan and William D. Hartung, with Leslie Heffel, World Policy Institute, “U.S. Weapons at War 2005: Promoting Freedom or Fueling Conflict?”, June, 2005, p. 2, retrieved at <http://www.worldpolicy.org/projects/arms/reports/wawjune2005.html>.

<sup>16</sup> Federation of American Scientists, “Fast Facts”, p. 1. In 2003 the figure was 72% (Frida Berrigan and William D. Hartung, “U.S. Weapons at War 2005”, p. 2). In “Globalized Weaponry”, Tamar Gabelnick and Anna Rich note that “profit motives in the military industry have resulted in arms export decisions that contravene such U.S policy goals as preserving stability and promoting human rights and democracy (*Foreign Policy in Focus*, Vol. 5, #16, June 2000, p. 3), retrieved at <http://www.fpif.org/briefs/vol5/v5n16arms.html>.

The practice of “arming the enemy” has intensified after the events of September 11, 2001. Arms trade export barriers have been relaxed in order to help arm countries in the fight against terrorism. Arms trade restrictions were lifted with both Pakistan and India, for example, both of whom possess nuclear weapons, and each of whom has careened perilously close to war with the other. The U.S. Ambassador to India was positively gushing over the new markets open to American arms manufacturers as a result of this relaxation. As another example, after September 11, 2001, Congress permitted arms sales to Azerbaijan despite the fact that it was at war with Armenia. To “balance” this, it also sold military aid to Armenia.

<sup>17</sup> As noted in a report entitled “The Arms Industry” by Control Arms, retrieved at [http://www.controlarms.org/the\\_issues/arms\\_industry.htm](http://www.controlarms.org/the_issues/arms_industry.htm), p. 1.

<sup>18</sup> See “Bill C-293 General Background Briefing Note”, retrieved at <http://www.johnmckaymp.on.ca/nm-show.asp?story=287>.

# The Gospel and Global Climate Change

Bob Goudzwaard

Isn't it audacious to speak about "The Gospel and Global Climate Change"? Perhaps you suspect that I have forgotten what day it is: isn't Sunday the time for sermons? Rest assured that I do not intend to give a sermon. My plan is first to explore the issue of accelerated climate change, especially its cultural roots, and then try to make a link to the heart of the Gospel.

Let me, however, make a preliminary remark about the suggestion, occasionally made by politicians, that the Bible does not speak to issues like climate change. I doubt that very much. In the last book of the Bible, the book of Revelation, we find pictures of severe natural plagues and disasters, calamities strongly reminiscent of ones happening in our own time—floods, the pollution of rivers and devastation wreaked upon the soil. The book of Revelation sometimes accompanies these descriptions with the comment that the people were not willing to repent (see Rev. 9:20-21). What does the word "repentance" mean in this context? Commentaries on the Book of Revelation usually interpret "repentance" only in a spiritual, supernatural sense. But isn't it likely that these plagues or disasters are actually rooted in human misbehavior? Texts such as these could thus take on special poignancy today. They enjoin all peoples to repent in very "natural" terms—by changing their patterns of use, of sharing, perhaps even of production and consumption. That implies that we ought not

to read the Book of Revelation as a closed or fatalistic book. On the contrary, it may hold open the possibility of conversion and change, even change in human economic and political styles and attitudes.

## Climate Change

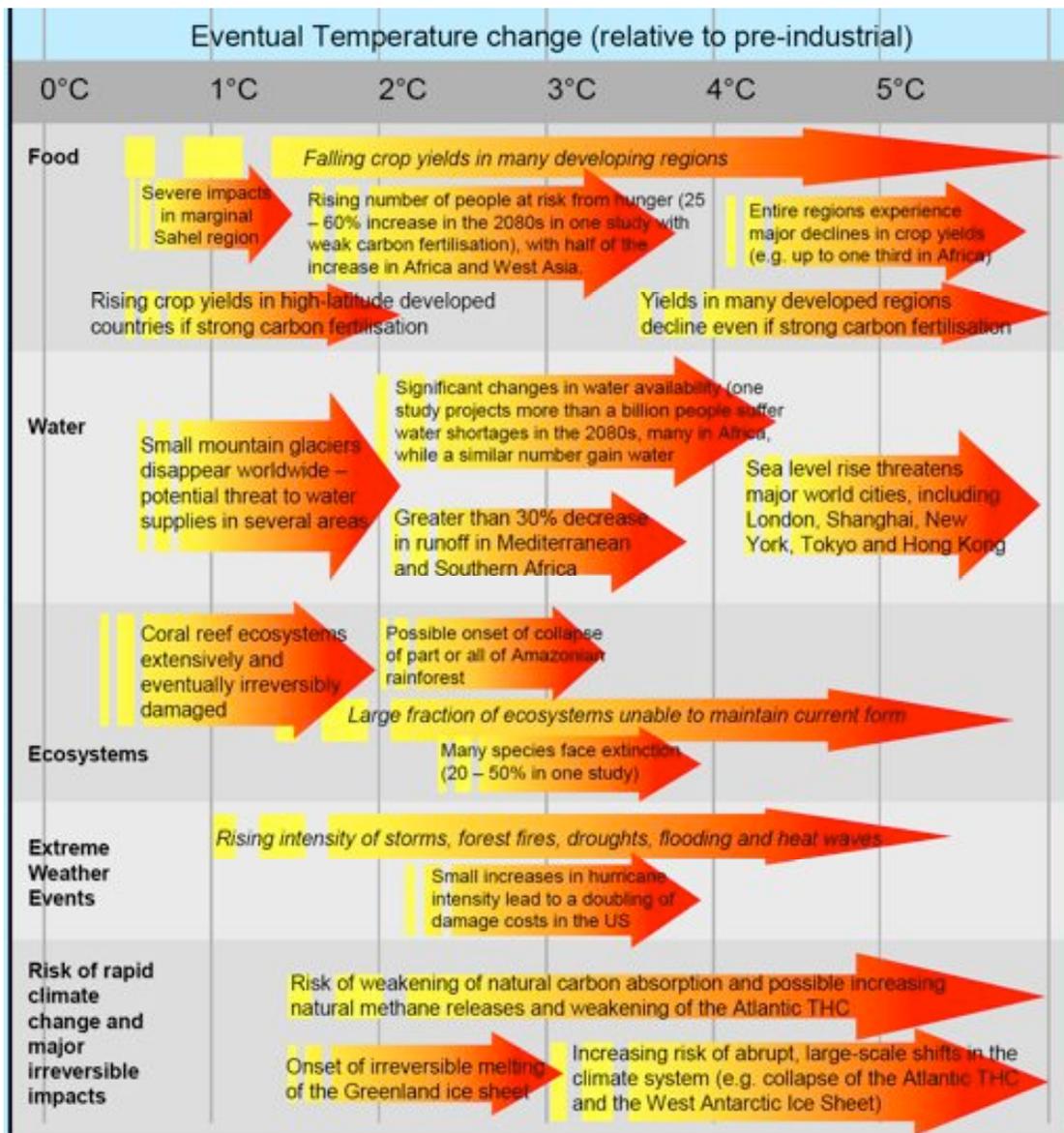
Let us now dig into the issue of climate change itself. I trust that we have all done some homework, that we have read at least some articles in the press about the causes of global warming. Perhaps most of us have seen Al Gore's impressive movie, "An Inconvenient Truth". That means that I can simply remind you that the gradual warming of the earth is closely linked to the growth of so-called greenhouse gases in the atmosphere, specifically carbon dioxide (CO<sub>2</sub>). In turn, greenhouse gas growth is inextricably tied to the worldwide use of fossil fuel energy (coal, oil and gas). The world's rising level of industrial production is dependent upon the use of fossil fuel energy.

Greenhouse gases have always been present in the atmosphere, but only after 1750, at the beginning of the industrial revolution in Europe, did their concentration in the atmosphere sharply increase. Sir John Houghton, the ex-chairman of the UN Panel on Global Climate Change, states in his Faraday lecture that since the beginning of the industrial revolution the amount of carbon dioxide in the atmosphere has increased over 35%.<sup>1</sup> It is now at its highest concentration in hundreds of thousands of years. Houghton estimates that if no action is taken to curb the emissions caused by oil, gas and coal usage, then carbon dioxide concentration will rise to two to three times its pre-industrial level during the 21<sup>st</sup> century. This implies a potential rise of average global temperature of between 2 and 6 degrees Celsius.

## Stern Review: The Economics of Climate Change

The so-called Stern Review, an outstanding report commissioned by the British Government and compiled by the most qualified scientists of that country, contains a chart which projects some of the consequences:<sup>2</sup>

The lowest prediction is a temperature rise of two degrees Celsius over the entire century. The chart shows that even that rise will mean an increasing number of people at risk of hunger, especially in the northern deserts of Africa; the disappearance worldwide of all small mountain glaciers; a potential threat to water supplies in a number of areas; and extensive and eventually irreversible damage to coral reef systems. Moving to a temperature rise of a three to four degrees



Celsius, the chart suggests that hunger in Africa may increase from 25% to 60%, water supply in Africa and the Mediterranean will drop over 30%, and many species, from 20% to as much as 50% of current species, will face extinction. Hurricane intensity will double and the Amazon rain forest will partially collapse. Further, the melting of the Greenland ice sheet will become irreversible, which will bring with it the end of the permafrost. This in turn will bring huge amounts of hydrocarbon (methane, CH<sub>4</sub>) into the atmosphere, a greenhouse gas which is 25 times more effective than carbon dioxide.

Pacific islands and low coastal areas are already threatened by rising sea levels, but with a 5 degree temperature increase rising sea levels will threaten major world cities, such as London, Shanghai, Tokyo and New York.

These are alarming—very alarming—predictions. They are not, however, the projections of people who live in a fantasy world, but rather the result of careful interdisciplinary research by teams of scientists with substantial expertise. Moreover, their findings are supported by a number of international reports, such as the Intergovernmental Panel on Climate Change Fourth Assessment Report “Climate Change 2007: Synthesis Report,” (November, 2007), and the United Nations Development Program’s 2007 Annual Report, “Making Globalization Work for All”.<sup>3</sup>

All of this implies that the time has come to act decisively. Did not many people experience a sense of shock when watching Al Gore's “An Inconvenient Truth”? When even President Bush declares that climate change must be tackled in some way, then we can assume that we live in the presence of a

real peril—after all, he is not a president who is prone to doomsday thinking. So international panels have been formed, and a number of proposals have been and are being formulated (from Kyoto, 1997, to Bali, 2007) to try to dampen the predicted consequences of global climate change.

### **Proposed Solutions**

The main direction of these proposals is clear. The current solutions can be separated into three broad categories. The first is to reduce greenhouse gas emissions by, for example, reforestation. Forests absorb carbon dioxide from the air to support their growth. The second category of solutions is to reduce the use of fossil fuel energy (coal, oil and gas) by implementing alternative, non-fossil fuel-based types of energy. Proposals include increasing the production of nuclear energy or promoting the use of less risky forms of energy production, such as wind and water power, biomass energy, hydrogen energy and geothermal energy (improved use of the heat inside of the earth). These proposals seek to improve “carbon efficiency”. Carbon efficiency can be stimulated directly, such as through subsidies, and indirectly, such as through price controls or tax measures. As an example, the Stern Review heavily favors the introduction of a high “carbon tax”.

Other proposals in this category call for new international, regional or global markets, some of which already exist. For example, the need to purchase “emission rights”, such as the right of a country to discharge into the atmosphere a specified number of tons of carbon dioxide, may discourage the use of fossil fuel energies.

The third category—you will note that I am traveling at high speed through some of the current proposals—is to reduce the use of

energy in relation to all that is produced and consumed, to decrease energy usage per product. This is the path of “energy efficiency”. Energy can be saved in the spheres of both production and consumption. Here too direct measures are possible, such as through legal restrictions and prohibitions, as well as indirect measures, such as through the price system and a green tax system. For example, such measures would encourage the employment of more human energy (labour) rather than capital in the processes of production, transportation and distribution.

### The Kaya Identity

So far, so good, I am inclined to say. Personally, I strongly favor most of these proposals, because they can make a significant difference.

This difference can be illustrated with the so called Kaya identity.<sup>4</sup> The four columns to the

section of the identity, the first two columns (more people and more products per capita) add to CO2 emission levels; the second two columns (less energy use per product, and less use of fossil fuels in the production of energy) can serve to decrease emissions. The last two columns, carbon intensity and energy intensity, show what some countries have done, or have not done, between 1992 and 2002 to deal with carbon dioxide emissions. The chart shows, for example, that the U.K. reduced its carbon intensity by 1% and its energy intensity by 2.3%, even as its population grew by 0.2% and its Gross Domestic Product (GDP) per capita grew by 2.4%. The result was that its carbon dioxide emissions increased by 0.2%. Meanwhile, China, despite significant decreases in energy intensity (6.4%), increased its carbon dioxide emissions by 3.7%, largely as a result of its 8.5% increase in GDP per capita.

### The Kaya Identity (1992-2002)

| <b>CO2 emissions</b> | <b>=</b> | <b>population</b>   | <b>X</b> | <b>GDP population</b>  | <b>X</b> | <b>energy use GDP</b>    | <b>X</b> | <b>CO2 emissions energy use</b> |
|----------------------|----------|---------------------|----------|------------------------|----------|--------------------------|----------|---------------------------------|
| <i>%CO2 growth</i>   | <b>=</b> | <i>%pop. growth</i> | <b>+</b> | <i>%GDP per capita</i> | <b>+</b> | <i>%energy intensity</i> | <b>+</b> | <i>%carbon intensity</i>        |
| UK: 0.2%             | =        | 0.2%                | +        | 2.4%                   | -        | 2.3%                     | -        | 1%                              |
| US: 1.4%             | =        | 1.2%                | +        | 1.8%                   | -        | 1.5%                     | -        | 0%                              |
| China: 3.7%          | =        | 0.9%                | +        | 8.5%                   | -        | 6.4%                     | -        | 0.5%                            |
| EU: 0.2%             | =        | 0.3%                | +        | 1.8%                   | -        | 1.2%                     | -        | 0.7%                            |
| World: 1.4%          | =        | 1.4%                | +        | 1.9%                   | -        | 1.7%                     | -        | 0.1%                            |

right of the ‘=’ sign can be read as a summary of the four components which together contribute to the total amount of carbon dioxide (CO2) emissions. In the percentages

### Is It Enough?

There is something remarkable in all of the proposed solutions I described above, and it is this that I would like to draw to your attention

to this afternoon, in the context of the Kaya identity. The question is whether improving the carbon and energy efficiency of all that is and will be produced and consumed is actually enough to do the job. I have serious doubts on that score. These doubts do not in any way diminish the need to implement most of the measures I have outlined.

Three realities cause me grave doubt.

### **Financial Markets: The New “Big Brother”**

The first reality is the enormous speed and volume of so many economic developments occurring in the global arena today, most of them in the context of the rapid process of globalization. We live in a time of a massive expansion of a number of global markets. Here I mention not only the huge growth of transnational companies around the world, but more particularly the fantastic growth and expansion of so-called financial markets. The amount of financial derivatives is now more than ten times the size of the combined Gross National Product of the entire world.<sup>5</sup> More international speculative capital flows around the world in a two-day period than the total amount of debt of all so-called less developed countries. We all know, I expect, how anxious most national governments have become over the dynamics of global capital, fearing what capital flows might do to their economies and societies. Often countries reduce their taxes on capital and capital movements simply out of fear of what this new “Big Brother” might do to them and their economies—as if financial markets have a life of their own. Obviously, this kind of financial dynamic does not dampen the worldwide growth of industrial production. On the contrary, it powerfully enhances production growth, with all of the consequences for rising CO<sub>2</sub> emissions that follow. National economies are haunted by the financial markets. As a

result, they continually increase their levels of production and exports in an endless search for the highest possible profitability. Is this not cause for deep concern, including in relation to greenhouse gas emissions?

### **A Multiplication Process**

Let me state this point differently. In 1994 W. Corson, in a special edition of “Future” magazine, calculated that between 1950 and 1990 the world’s population doubled, energy use rose by a factor of five and industrial production grew by a factor of seven. Figuring in world population growth over those same years, he estimated that the impact of human activity on the global South increased six-fold over that forty-year period.<sup>6</sup> Suppose now that this process of multiplication goes on for the next forty years, given so many dynamic national and international, political, economic and financial factors. Will the countervailing climate change measures I just summarized be adequate, will they be enough to have a substantial impact, even if they are implemented world wide? Or, in the terms of the Kaya identity, will not the dynamic growth of the first two factors of the equation (population growth and industrial production per capita) more than overtake the total gains achieved through improved carbon and energy efficiency?

Corson’s calculations were made for the period between 1950 and 1990. We are now halfway through the next forty year period, but the tendencies remain exactly the same. What about a third period of forty years, after 2130? Bear in mind that the rapid development of India and China (and likely Brazil) must also be factored in.

## The “Pro-Growth” Strategy

I have a second, deeper reason for serious concern about the limited scope of today’s proposed solutions. I have referred to the important Stern Review, which is focused on the negative consequences of the global rise in temperature. The report clearly insists that there is an urgent need to cut back on the level of those emissions. But it strikes me that the entire report raises no questions about the increasing volume of industrial production, especially in the richer countries. On the contrary:

Tackling Climate Change is the pro-growth strategy for the longer term. And it can be done in a way that does not cap the aspirations for growth of rich or poor countries.<sup>7</sup>

Why does the report make this statement? While other reports, such as recent Annual Reports by the World Bank and even the Al Gore movie, make hints in that direction, this statement is perhaps the most blunt. Of course, I understand that the poor countries urgently need further economic growth, simply to be able to cope with the poverty of the millions of their inhabitants. *But what makes the undisturbed continuation of industrial growth in rich countries so important, so essential, that these aspirations are not even discussed?* Did political considerations enter the scientific debate (then Prime Minister Tony Blair signed the report)? After all, there is no doubt that industrial growth per capita in the rich countries—the GDP per capita column in the Kaya identity—is one of the main sources of increased greenhouse emissions.

It would, however, be too easy or cheap to assume that the reason for this silence is political pressure. Perhaps, on the contrary,

this statement is an honest one on the part of the authors. If so, then this then raises an important question. Do the authors of the Stern Review, along with many other experts today, put their faith, their ultimate trust primarily in new technological advances and new market or taxation devices—perhaps even to such an extent that they honestly believe that the rich countries can continue to increase their material economic growth almost forever?

## A High-Speed Train

To illustrate that something like this faith may in fact be at work, consider a metaphor. The metaphor is meant to show that two entirely different views about powerfully dynamic developments within modern society can exist side-by-side. It is the metaphor of a high-speed train, like the French TGV, the train of *grande vitesse*, which travels at fantastic speeds across the countryside.

The movement of a high-speed train can be viewed from one of two positions. The first perspective I call “the view from within”. Imagine that you are traveling on a high-speed train, sitting in a comfortable chair. From that position everything looks quite stable and peaceful. You have no thought that the train may need to make an emergency stop; the journey continues without interruption. If you look outside the window, you see movement, but it is a virtual movement of the landscape itself. The landscape appears to be moving backwards, as if it is falling behind. This is an illusion, created by the fact that your own speed is your frame of reference. What is actually standing still looks like it is moving away behind you.

The second possible position is that you are standing outside the same high-speed train, a short distance from the tracks. This is “the

view from the outside". What is your impression from this vantage point? It is that this train is traveling extremely fast, perhaps too fast. You may look ahead anxiously, fearing that the train may be threatening some children who are trying to cross the tracks farther ahead.

This metaphor illustrates that at least two different opinions of dynamic processes are possible. Each is specifically related to the point of view from which one perceives the movement. Standing outside the train, feet firmly planted on the ground, the view will be very different than the view from inside the train.

Suppose that as modern people we are inclined to identify ourselves with our own dynamic patterns, and so tend to view ourselves as an intrinsic part of that dynamic world. Perhaps this was the case for the authors of the Stern Review. You will agree that we will then be inclined to judge the outside world from that dynamic point of view. That implies at least two things. First, we will see and appreciate powerfully dynamic patterns in our societies as entirely normal. Our progress can and should go on. The famous Wuppertal Institute in Germany recently stated that future technologies will make possible as much as a 90% reduction of energy use per industrial product. In its view, this will solve the climate change problem. Experts always seem tempted to lean on even more far-reaching technological or market solutions.

Viewing the world only from the perspective of our own internal dynamics and capabilities usually has a second consequence. Increasingly, we will be inclined to see what is not moving as rapidly as us as lagging behind and therefore, to some extent, as

abnormal. We may even begin to feel irritated by what or who is falling behind. How easily, for instance, we tend to perceive poor countries as underdeveloped, as straggling behind. Many people see poor men and women in modern societies as simply underperforming. In relation to the environment, the dominant view usually does not honor the earth's inherent limitations. Rather, nature or the environment should get out of the way. If the environment seems to pose limits on what we wish or desire, then we will be inclined to look at such limits as merely temporary barriers which our own technology or scientific achievements will overcome.

Clearly, burning behind all of this is a contemporary variety of the classic Enlightenment belief in human progress. Only this can explain the deep reluctance of so many people to entertain even the slightest consideration that sometimes we may need to take a step back rather than move forward. Perhaps we easily forget that as modern people we are brought up and educated in a rational universe of largely self-made, progress-related institutions, with the result that we naturally prefer the view from the inside, even to the profoundly dangerous point of identifying our own dynamic world with the real world. We then too easily make the operation of the market mechanism, for example, the ultimate orientation point within our dynamist universe.

### **The Re-Entry of Faith**

This leads to the third reflection, which emerges from the view from the outside. It is not formulated by intelligent Western scientists but by the Asian churches of the South. They testify to what they see around them: the consequences of our deep attachment to our own self-made high-speed

train in their life, environment and society. Let me quote some parts of a declaration written in Bangkok in 1999. It was written in the heat of the Asian Crisis by delegates of churches from the South as a letter to the churches and the societies of the North:<sup>8</sup>

**Letter to the Churches of the North**

*Is there not in the Western view of human beings and society a delusion, which always looks to the future and wants to improve it, even when it implies an increase of suffering in your own societies and in the South? Have you not forgotten the richness which is related to sufficiency? If, according to Ephesians 1, God is preparing in human history to bring everyone and everything under the lordship of Jesus Christ, his shepherd-king—God’s own globalization!—shouldn’t caring for and sharing with each other be the main characteristic of our lifestyle, instead of giving in fully to the secular trend of a growing consumerism?*

How remarkably, even naturally, the faith perspective now enters into the picture! This is a perspective written from the heart. Many people in the South feel forced into a kind of economic adaptation and modernization which they would never choose for themselves. Often they ask themselves: won’t this new type of dynamism demolish our culture and history?

We also sense in this letter a deep concern about our own modern, secularized Western attitudes. The word “sufficiency” surfaces in relation to our own consumption, and it is wonderful to see that in the view of the churches of the South, “sufficiency” is not related to pain and misery but to richness, to the joy of saturation.

In my view the pieces of the puzzle come together here. Climate change problems should lead us to reflect on the course of

modern society as a whole from the perspective of restraint and shalom. There is both an external and an internal need to question the present course of production and consumption in relation to the profound vulnerability of human beings, of ecosystems and of the limited load-bearing capacity of the earth. If the train of production, consumption, and energy use forges ahead with us on board, with such extreme velocity and momentum, then what and who will survive?

For me, the upshot is that climate change

solutions will fail if they do not therefore have a spiritual component, perhaps even an element of repentance at the outset. Let us be clear: it is not by accident that the second perspective, the view from the outside, starts from what is given to us and from what needs to be preserved, rather than from something we have made and produced with our own hands. The view from the outside is intrinsically creational. Only by putting first what is given to us by our Creator, and by granting priority to what needs to be preserved, can we begin to relativize the work of our own hands. Our own material progress is still seen by many people, including by millions of Christians, as the holy shrine of our entire existence and civilization.

**What Then Shall We Do?**

What then shall we do? I shall make two concluding remarks.

First, there is a profound need to openly, even forcefully challenge the powerful illusion in our societies that our own technological progress and economic growth can save us. A spiritual battle must be fought against worldviews which do not start with respect for what the good Lord has given us to care for and preserve. The current political and economic order of thinking—first we need growth, and only then will we have the resources to provide care—is wrong. It must be attacked as thoroughly irresponsible. Christians especially, and Christian churches, have a task here. God willing, and they themselves willing, they can lay bare the deeply secular roots of the present illusions of our age. With the support of a growing number of more critical experts, they can help to build the capacity to break through the public lie that more material consumption in already rich countries will lead to more happiness. Precisely the opposite is true. This means that the message is primarily positive, not negative. The negative or shadow side of the message is that the more we continue down the present path of unlimited material expansion, the more we will plunder the earth, overburden vulnerable ecosystems, and engage in a rat-race for the final dregs of the world's depleted energy reserves, even if the price is war in remote areas. But the positive side is that a greater measure of peace, of shalom for all, can come through the timely acceptance of levels of economic saturation in material consumption and disposable income. Remarkably, more realistic horizons for our economies will emerge as a result. It may sound strange, but in the end working and consuming less will do more good for us, our children and the environment than endlessly trying to work harder, produce more and consume more. The principle of enough, of saturation, is an underdeveloped concept in

economics and politics. But it can indeed open a door where other efforts fail.

My second remark is that there is hope for the future, in very practical terms. Hope cannot be derived from our own detailed blueprints for a relatively distant future. Real hope is not produced as a product but rather given through a kind of birth. It comes not primarily from us but much more to us. The sole condition is that our societies and communities consistently follow, step-by-step, a Way—a way which is guided by principles of care for the weak, and which, from the outset, contains elements of joy and relaxation. Stepping forward by stepping back (the Hebrew word for this is *bechinom*, “giving up”) is the unavoidable first step in the essential transformation of our own rich economies into truly sustainable economies.

### **A National Covenant**

Let me become more specific. Imagine that, out of concern for the beautiful but vulnerable creation, and for the future of our own children, a public willingness emerges in modern rich societies like Canada, Great Britain, the Netherlands and perhaps the United States, to jointly refrain from further annual percentage increases in material consumption and personal income, especially when and where such increases lead to higher emissions of greenhouse gasses. This could form the basis for a national covenant, a covenant between employers and employees, chambers of commerce, the government, churches and civil groups and movements, to accept a general zero-ceiling in the growth of material consumption per capita. Such a covenant could then form the economic starting point for a gradual conversion of our national economies to more sustainable economies, somewhat similar to the way in which the

British economy converted into a war economy between 1940 and 1945. Reduced material consumption growth frees up labour and resources to be used in other ways, namely to make a number of new investments or re-investments. Such investments could reduce the levels of environmental and ecological damage in each production sector, and would at the same time increase social capital, specifically in creating public space for care of the weak and vulnerable. Such a covenant would also make capital available to decrease the debt burden of the poor countries. Currently their debts compel them to pursue continually higher exports, which in turn require higher energy usage, resulting in increased greenhouse gas emissions. Finally, such a step creates additional economic room to stop deforestation and plant new forests, and to introduce everywhere, such as on the roofs of our houses, new forms of clean energy.

As this begins to work, and as it proves to be successful in terms of creating new forms of employment here and fewer burdens on the shoulders of the poor countries, important consequences will follow. Gradually we would bring down the material and energy activity levels of modern rich societies (the forgotten GDP growth column of the Kaya identity)—and so substantially decrease greenhouse gas emissions. A further hidden blessing will be that the current burdens of working too hard—stress, burn out—will significantly decrease, perhaps even disappear.

Shalom through joint self-restraint is economically feasible. In fact, restraint is highly desirable if it is done with an eye to the needs of others and the profound suffering of the earth. It is estimated that the number of special “holy days” in medieval

times amounted to one-sixth of the total working days available. Far more time was taken off than in our over-productive modern societies. Is this not an almost entirely forgotten wisdom?

### **Blossoming Economies**

Put differently, our economic horizon should not be the expansion but rather the blossoming of economic life, or more precisely (given the differences between cultures and nations) an orchard of blossoming economies, as the World Alliance of Reformed Churches has called it.<sup>9</sup> The metaphor of the tree surfaces here. In the internal economy of a tree all cells are fully involved in promoting healthy, blossoming growth; each is needed and none is excluded. That inclusive type of growth is possible only because no tree has ever set out to expand infinitely in size, as we are still inclined to do in the rich countries. At a certain point in its growth, a tree displays a built-in wisdom to redirect its growth energies towards the production of fruit instead of height. If a growing tree remained focused solely on maximizing its height, it would cause damage to other living cells, perhaps even suffering and pain in God’s entire creation.

Suffering and pain in God’s entire creation—these words remind us of what St. Paul wrote centuries ago to the Christians in Rome. In Chapter 8 he describes the groaning of the entire created universe, clearly not just people but also animals, like coral reefs and polar bears. But the groaning of the universe is not without hope, because it happens as if in the pangs of childbirth. A new world is coming. “The created universe waits with eager expectation for God’s children to be revealed” (Rom. 8:19). These are deep, remarkable words. They imply that the

suffering earth looks to us today with expectation, waiting for us, in the hope that we will begin to live up to and uphold the standards which make us recognizable to the groaning creation as God's true sons, daughters and children.

## The Gospel and Global Climate Change

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### ENDNOTES

<sup>1</sup> Available at [www.faraday-institute.org](http://www.faraday-institute.org).

<sup>2</sup> Sir Nicholas Stern, "Stern Review: The Economics of Climate Change," Executive Summary, v. The full report and Executive Summary can be retrieved at [http://www.hm-treasury.gov.uk/independent\\_reviews/stern\\_review\\_economics\\_climate\\_change/sternreview\\_index.cfm](http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/sternreview_index.cfm)

<sup>3</sup> Retrieved at <http://www.ipcc.ch> and [www.undp.org/publications/annualreport2007/IAR07-ENG.pdf](http://www.undp.org/publications/annualreport2007/IAR07-ENG.pdf).

<sup>4</sup> Taken from the Stern Review, Part 3, pp. 177-179.

<sup>5</sup> Hedge Funds Research, Citigroup, and the Bank of International Settlements, BIS in Basel; quoted by the NRC Handelsblad, Economy section, February 24, 2007.

<sup>6</sup> Cited in Charles Vlek, Lucia Reich and Gerhard Scherhorn, "Duurzamer consumeren, een economisch- psychologische analyse" (More Sustainable Consumption: An Economic-Psychological Analysis), in *Van Grenzen Weten, Aanzetten tot een Nieuw Denken over Duurzaamheid (On Knowing Limits: Impulses To New Thinking About Sustainability)*, ed. by Koo van der Wal and Bob Goudzwaard (Budel: Damon/Pugwash, 2006), p. 123.

<sup>7</sup> Sir Nicholas Stern, "The Stern Review on the Economics of Climate Change", Executive Summary, p. ii.

<sup>8</sup> The letter is reprinted in its entirety in "Globalization and Christian Hope: Economy in the Service of Life", ed. Leo Andringa and Bob Goudzwaard, trans. by Mark Vander Vennen (Toronto: Public Justice Resource Centre, 2003) pp. 23-15. The consultation was organized by the South Asian Council of Churches, the World Council of Churches and the World Alliance of Reformed Churches.

<sup>9</sup> See their report "Covenanting for Justice in the Economy and the Earth, offered to the General Council of the World Alliance of Reformed Churches, Accra, 2004. Retrieved at [http://warc.jalb.de/warcajsp/side.jsp?news\\_id=159&navi=1](http://warc.jalb.de/warcajsp/side.jsp?news_id=159&navi=1).

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The addresses in *Paths To Hope in Troubled Times* were delivered at “Hope In Troubled Times”, a one-day conference in Toronto co-sponsored by the Institute for Christian Studies, Citizens for Public Justice and Christian Reformed Home Missions. Respondents and workshop leaders were the Honourable John McKay, Member of Parliament for Scarborough-Guildwood, David Copelin, award-winning playwright, and Caroline Morgan Di Giovanni, Co-Chair of the Campaign Against Child Poverty and former member of Metro Toronto City Council. The moderator was Janet Somerville, former General Secretary of the Canadian Council of Churches. David Van Heemst, co-author of *Hope in Trouble Times*, was unable to participate, due to the recent birth of triplet daughters.



*Paths To Hope in Troubled Times*  
is available online at

The Institute for Christian Studies  
[http:// www.icscanada.edu/resources](http://www.icscanada.edu/resources)

and

Citizens for Public Justice  
<http://cpj.ca>

The book *Hope in Troubled Times: A New Vision for Confronting Global Crises*, with a Foreword by Desmond M. Tutu, is available at the Institute for Christian Studies, Citizens for Public Justice, Baker Publishing Group (1-800-877-2665; <http://www.bakerpublishinggroup.com>), your local bookseller and online at Amazon and Chapters/Indigo.