It is my great pleasure to be with you this evening, among such wonderful surroundings, with such wonderful company, and to be among friends and back in Europe, even though that is where I am originally from. Tonight I have been asked to make some remarks about the global environment and circumstances in which attempts over the next few years and decades to reinvent Europe are to take place. Reinventing Europe is a project which both celebrates and builds on the 50th anniversary of the Treaty of Rome, and the ongoing forward looking European adventure on which we are all embarked. Tonight, I am asked to give a short speech drawing together some themes which may be of some interest to those contemplating this re-adventure. But I am also a Canadian, and having been in Canada for over 30 years I have become used to the Canadian tradition with these forms of speech. Because we often have such a wonderful dinner, which we very much enjoy, when we sit down for the speech, some people in audience sometimes feel so disposed to get a little sleepy and so you have to keep them entertained. And so these Canadian dinner speeches usually have three distinct components. First, there is a little joke to start things off and to keep people on their toes, give them a little bit of entertainment, and this goes nicely with the wine. And then there is a serious bit in the middle which you are not meant to make too long, but in it communicate your main points, and finally there is a little uplifting bit at the end so that everyone goes home with a nice feeling and feel they have enjoyed themselves even beyond the dinner.

Let me begin with the jokes. Now there are not many jokes in Canada. In fact, I've got a good English friend who lives in Canada and he told me the following joke. He said how many Canadians does it take to change a light bulb? I said don't know and he said 1. And I said, just one, well that's not very funny. He said That's because there are no jokes in Canada, it's boring. It's not really, it's highly entertaining, even though that's a view that a lot of people have. When you look at the tradition stemming from of Marshall McLuean, Glenn Gould, Pierre Trudeau and many other forward thinking people, with sharply different views of the world it is really quite an interesting place. Anyway that is one joke.

The second joke is one which my son loved when he was about 4 years old. I used to say to him, "What do you call a deer that has no eyes?" and he would look at me and say "No Idea", and I'd say that's right, it's a no idea, and we don't have any idea and most people would start to laugh. Another joke is "Why did the chicken cross the road" and the answer is, "it went to see Gregory Peck". Why did the chicken cross the road again? It didn't cross the road it got stuck in the middle. Why? Because it was Rhode Island Red. You see in Rhode Island they have these chickens called Rhode Island reds and it got stuck in the middle because it was a Road Island Red. Now if any of you with Hegelian orientation don't find these jokes funny it is because you have figured out the logic in all and it is clearly lacking. So now then let me move on to the substantial part of all this entertainment, and get serious and somber.

Here we are 50 years on from the Treaty of Rome, with the wine lakes and the butter mountains and the Common agricultural policy, the Euro, and all the wonderful things that are Europe. And the question now is, "How do we re-invent Europe?" How should it change from 50 years ago. Well, let me tell you a tale. A couple of weeks ago I was in London at the LSE bookshop and I went all through their bookshelves, both their new and second hand selections. And they have this whole section on European integration. And some of these are meant to be forward looking, and they are looking forward to how Europe may be in the next 20-30 years given what's happened with the Euro and all the rest of it. They are dealing with all sorts of topics to do with enriching the legal structure, changing labour relations and laws, and wage setting and so on. Nothing that I could see in about 10-15 of these books had any mention of some obvious things that are going on around Europe.

But today we have for example, global environmentalism and global heating. James Lovelock tells us we are going to be fried in a 100 years, we have potential desertification in Africa. We have India and China

rapidly growing, China at 11% a year, India at 9% a year. We have technological change being spurred by global competition, swirling all around us. So how can these pieces just talk about changing a few wage legislation pieces here and there to re-invent Europe? It's like talking about Hamlet without the Prince. Put another way, we have spent 50 years having Europe integrate into itself. The next 50 years seemingly will have to deal centrally with how Europe integrates into the world, and how the world accommodates a re-invented Europe. The interrelation between Europe and the world, will in my opinion, be the central issue in all discussion in European integration in the next 50 years, not Europe's re-invention of itself.

Now if that isn't far reaching enough for you in a dinner speech, let me also put this into a bit more context. Let's take a couple of issues. Let's begin with the global environmental situation and the global component. Take global warning, what James Lovelock calls global heating. Well the first thing to note is that there is a huge disagreement between the earth scientists and the econometricians which we have amongst us as our economist friends. The earth scientists portray a picture of terrifying gloom that the earth is surrounded by the Gaia layer, with an environmental catastrophe on our hands, partly our own doing but also partly caused by the warming of the sun.

The Lovelock scenario involves Gaia, the organism of the earth, surrounded by a hitherto self-regulating environmental layer which is in rapid decay and unable to regenerate itself as it has done for 3 billion years. The Lovelock scenario is that, within a 100 years, civilization as we know it will barely survive, with a few people left at the Antarctic poles. A temperature rise of 5°C will occur within 100 years, a major sea level rise, desertification, social disruption and human kind will barely survive. He predicts a hundred thousand years will be needed for the regeneration of our civilization.

Lovelock has been working in this area for 40 years, he is a very serious scientist, he is a fellow for the Royal Society, and he has received many international awards. His books are written with care and with compassion and with thought and these are not radical views among earth scientists. They are views that, in my opinion, should be taken seriously.

What does all this imply for Europe and its re-invention over the next 50 years? Well, to me, it first implies that even if Lovelock only has a 2% probability of being right, this issue will dominate global economic and political debate in the next 20-30 years. We simply have to constructively think through what we do.

And the amazing thing to me is where we are in our thinking because to me, it is extraordinarily rudimentary. We have proposals on the table form the EU to go to deeper and deeper cuts on emissions, 20%, maybe by 2020, maybe to 30% if other countries match. There are to be serious discussions in the G8 on 50% reductions in carbon emissions by 2050 (Lovelock has called for an immediate cessation of all use of fossil fuels). Proposals from Chancellor Merkel are for sufficient reductions in carbon emissions to be imposed to maintain a target of temperature change of no more than perhaps 2°C.

The earth scientists have found that even within their own community there are criticisms. Most of these scenarios are generated by simulation models and as someone who has worked on calibrated general equilibrium models, I know how sensitive all of these model analysis are to parametric specifications, underlying structural form and key simple assumptions. Even in global circulation models, the ways in which cloud formation is treated as endogenous in their structures can make major differences to the scenarios. But we come back to the same point. What do we do in light of all of this?

Do we simply commit to deeper and deeper cuts? My answer is no. We need to do more, much much more. And Europe both should be and will be centrally involved in this.

What we need in my view, first, is recognition is that we need to today to commit ourselves to contingent actions depending upon circumstance, rather than commitments to definitely act independently of what happens. The difficulties in carrying out those negotiations are so large and their complexity is such that today we need to agree to mutually act in various ways if things should happen in the hope that they do not. For instance, we could have commitments now on deeper carbon emission cuts depending on actual temperature change. Admittedly, its 50 years for some of these emissions to rise into the upper atmosphere, but we can make joint commitments today as to what our actions are, and it's our actions which will be important, if needed and we simply have to be prepared to act jointly and swiftly together if needed. If we have desertification in Africa, we will potentially need to move millions of people across borders. Where countries are poor and small and geographical borders run parallel to each other in small narrow countries this will not be easy. The potential scope of change may well involve social engineering on a scale we have never even contemplated. None of these countries, poor as they are, will agree to admit the refugees unless there are major commitments from the OECD and other nations made in advance. Current aid flows from the OECD, which in the case of the US, are running at maybe 0.2% of GDP, maybe in the case of the Scandinavians at 1% of GDP. Much of the aid is tied. Who knows what the aid flows are that we would need to deal with catastrophic events accompanying global warming; perhaps 10-15% of GDP. Major discussions and negotiations should start now on dealing with these contingencies and Europe can be in a position to lead these discussions. The whole global structure of finance, redistribution, trade, aid, and much more will become embroiled in it.

The reinventing of Europe in these areas seemingly must involve international leadership in global environmental policy which is already reshaping the global economic order, but much more will follow; contingent redistribution and burden and risk sharing around the globe.

Let me mention another dimension of the same issue; the threat of significant sea level rise. Bangladesh could be awash and flooded even with a 5 foot sea level rise. Bangladesh as a country as we know it could disappear with extreme sea level rise. Insurance markets, as currently organized, cannot cope with such a contingency. In some countries there are restrictions that the value of insurance policies issued in terms of liabilities cannot exceed the assets of the companies. We are talking about major global catastrophic country to country risk and its insurance. Financial innovation will be needed and maybe market mechanisms can cope. Maybe this will involve the issuance of global flooding bonds. Bonds where the payment is contingent on very precise measurements of sea level rise in certain locations and certain dates. Maybe we have global heating bonds. Global financial markets will likely evolve and change in ways which involve sensible diversification of risk.

And so the dominance of global environmental issues and planning for potential catastrophes' of global events could dominate the landscape even of a re-invented Europe over the next 30 years. The earth scientists propose technological fixes. Deep earth satellites between the earth and sun, with movable reflective panels, which Lovelock describes as sunglasses for the earth; effectively a technological fix for global warming. Silicone which would be injected into airplane fuel and when discharged when planes fly around the earth, would change the earth's reflectivity.

The costing of initiating these has not been done. How burden sharing would operate, independently of whether or not the fixes would work remains unanswered. All of this represents a major challenge for re-inventing Europe. These then are one set of global issues in re-inventing Europe. Let me now turn to another set of issues which arise with the growth of India and China and a world increasingly divided not

between developed and developing countries, but between growers and adjusters. This is as witnessed by what has happened with trade restrictions against China in textiles and apparel in recent years. The growth process in India and China is clearly dynamic, even though there are major issues of measurement in trying to figure out exactly what their growth rate is. I was recently in China and was talking to people in Beijing and they indicate to me that there had been a 30% increase in contributions to public pension plans in the last year to 18 months. And I said well if they had gone up by 30%, I am also told that imports and exports have gone up by 30%, that all enrollments in graduate and undergraduate programs have gone up by 30%. I asked, how can all of the sub-aggregate industries be going at a rate of 30% when aggregate growth is only at 11%?

The person I was speaking with was a very prominent economist in China and he said they had made their own measurements and they thought the growth rate in China last year was really 36%. I said you are joking and he said we joke not. But later that same day, there was another economist who tried to convince me the growth rate last year was closer to 0%. We do not know what the growth rate is, but it is clear that from visits to China there is dramatic change which is taking place. In education, in pensions, in trade, urbanization - everywhere there is huge change. The dimensions of these changes are, in my opinion, major and the process is still in its infancy. Foreign Invested Enterprises (a legal form which embodies foreign direct investment venturing in China), accounts for perhaps 60% of China's imports and exports, close to 25% of the overall GDP but only 3% of employment. The transfer of labour from traditional rural areas and relatively inefficient state owned enterprises, whose productivity (and profitability incidentally) is improving rapidly in the case of telecom, banking and oil and gas, could continue for decades. These FIEs then can thus continue to receive huge amounts of further labour transfers and the trade penetration of China can continue if the absorptive capacity of the OECD continues.

Another statistic, cumulative foreign direct investment into China since 1985 maybe runs at 600 billion dollars. If you evaluate the capital stock of the OECD and make a rough calculation that the OECD GDP is perhaps 25 trillion dollars, using a capital output ratio of 3 to 1, then you would have a capital stock of the OECD of maybe 75 trillion dollars. Not all of that is on wheels, but if only 600 billion have moved thus far to China we are again in the early stages of movements there.

Now many people have argued that the growth of India and China is not sustainable. There are environmental issues, there are issues of non-performing loans, there are issues of growing inequality, and many of these issues have been discussed by Western scholars. My own opinion is that the growth will continue because it has deep roots in the social structure in China and we could discuss these potential interrupters of growth more. The potential for global change from India and China is especially dramatic in the area of autos. Chrysler is now in a joint venture with Chery, which produces a small car in China called the QQ, which is produced for \$4000. Some claim it will eventually be comparable to the Hyundai Accent. Once it passes safety standards it could have a huge impact on the North American market and European markets in Autos. There is a discussion of a relocation design capability of North Americans autos, particularly Ford, moving from the United States to China. All these and other changes are dramatic and, in many ways, accelerating.

Even more dramatic is the case of India. By 2030, India may have 1.6 billion people, double that of China. Wage rates in India are one half or less than those in China. Tara Motors now have a subcompact car which may be comparable to the Chinese QQ, which sells for \$2000.

The penetration that has taken place into the OECD economies in terms of trade from China has largely taken place in labour intensive manufactures, such as textiles and apparel. These have partly displaced

imports coming in from the US, from Brazil, Mexico, Turkey, and elsewhere. With quality upgrading in trade and a movement of future export trade by China into autos and electronics, the adjustment consequences may thus fall increasingly on products more centrally produced in the OECD. In addition, the growth rate of trade of 30% will apply to an ever-larger base. Currently, China has 8% of world trade. In 2 ½ years it will be 16%; in 5 years it will be over 30% of world trade with these current growth rates. The internal adjustment consequences may be troubling for policy makers in some of these countries. In Canada where I am from, the auto and financial industries are the largest and major industries in Ontario, the largest province. Already, house prices in the west - in Calgary and Edmonton - have increased by 50% in a year due to the global oil and gas situation. Major adjustment consequences, leveled directly at Ontario which account for 90% of Canada's exports of manufactures, and 35% of Canada- US trade in auto supplies may be major.

And how this is dealt with by policy makers will become central. One issue is whether it is simply a matter of relying on the magic of the marketplace. Whether the political pressures for intervention will become overwhelming as the global economy divides more and more into adjustors and growers will be an issue, as we've seen in textiles and apparel with the spread of initial US and EU measures against China to countries such as Peru, Brazil, Mexico, and Turkey.

My friends, the challenge I emphasize in my speech tonight is that in re-inventing Europe over the next few decades we need to recognize that the global context within which future European integration will take place is potentially key, as will be the increasingly important role to be played by discussions of Europe's interaction with this rapidly changing world.

All I have done is pose some issues. There are no magic solutions. I believe the way forward is to brutally recognize the realities of accelerating and escalating global change, and the potentially massive shifts which are to take place in our global structure. What we are to do about them will be the challenge of our lifetime, and what Europe does (if anything), the challenge for Europe.

This is the serious bit of this speech and if you are still awake, I will conclude with the uplifting part. And the uplifting part is a song and the song goes like this:

Happy birthday to you, Happy birthday EU O Europe, O Europe, May God's blessings fall on you.