

Taula rodona: "The European future thinking".

- **Moderador:**

- **Riel Miller, soci fundador de *XperidoX: Futures Consulting*, i soci de *Demos*.**

- **Participants:**

- **Johan Peter Paludan, director general del *Copenhagen Institute for Future Studies*.**
- **Charlie Edwards, director de recerca, *Demos*.**
- **Mike Jackson, soci fundador de *Shaping Tomorrow*.**
- **Fabienne Goux-Baudiment, presidenta del *World Futures Studies Federation*.**
- **Paul Isbell, Investigador principal d'Economia Internacional i Comerç, *Real Instituto Elcano*.**

Riel Miller

-My name is Riel Miller. I come from Paris. I work, thinking about the future. Thank you very much for being here. I appreciate very much the invitation. I'm very impressed by the work that COPCA has been doing and the report that has been produced and very grateful for the opportunity to moderate this panel today. I think we've already had an excellent introduction from both speakers, who have given us the understanding of why we need to be motivated, and I appreciate the motivation, people are here, but also how we have to start thinking in ways which allow us to question our assumptions, which is where Goran ended, and is not such an easy task. Part of this panel is about helping us to think about ways of questioning the assumptions. We don't have a lot of time. We have a lot of good knowledge. Let's translate that knowledge into innovation, as Goran was suggesting. I want to make it very efficient and move through very quickly. I'm not going to spend a lot of time introducing the speakers. There is in each pack an introduction that explains who they are. I'm just going to give you their name. We have questions that have been structured to orient the discussion, so that we can move through a series of issues. I think you also have some of the questions in

your pack. So hopefully we'll be able to build a sense of the implications of the changes that are taking place in the world around us today for all of us, but also particularly for Catalonia. Can I begin then by introducing Mike Jackson, who is founder of Shaping Tomorrow, and who has a very good command of the activity that's taking place. The searching that's going on in the world around us, in business and in the general public, to think about the future. Mike.

Mike Jackson

-Thank you Riel. Good morning. I'd like to start not by thinking about the future but about the past and to relate this to a personal experience. Ten years ago I was the CEO of a hundred-and-fifty billion dollar business and I found myself unable to cope with the future. I was too busy forecasting the future, too busy doing budgets, two-year forecasts, five-year strategic plans that sat on shelves and never did anything, when the world was changing. And I found it very frustrating that I couldn't see the future fast enough. I retired from that business, still frustrated, until I discovered some of my colleagues on this platform and realised they knew more about how to manage the future than I did. In the last ten years I think complexity and volatility has increased dramatically from where I was ten years ago, so my frustration would have probably been a hundredfold now were I still the CEO of that business. I was struck by what futurists think about and how trends managers manage their businesses and so subsequently we began collecting information about the future and putting it in one place on my portal called Shaping Tomorrow. At the time, Shaping Tomorrow was the only place to go to find trends in one place. Subsequently we have identified that many, many companies, particularly PR companies, advertising companies, research companies, are building their own trend databases in specific areas. This is a new phenomenon. There are many, many, many, many, many trend organisations doing the future of outsourcing, the future of advertising, etc. All of which are great places to go to find information about the future. However, Shaping Tomorrow still remains the only place where you can go to find all of these different sources.

When we first started we had two hundred sources, that was about five hundred...five years ago, not five hundred years ago, five years ago, and we now have five thousand sources and it's growing rapidly maybe at about ten every week. And they are all professional sources. So something is happening underneath the process that says companies are getting frustrated by not seeing the future and organisations are beginning to move into that space to help them find trends that they need to do their business. When we began Shaping Tomorrow five years ago, we began by collecting articles. Articles written by people like Riel and Fabienne, about the future and what was likely to happen to us, some of the information that Goran had in his presentation would have been in those articles, and we began giving that to business. And business said this is great, we have one place now where we can read these articles. We even had one CEO who read every article for about three years. On a Friday afternoon he'd read every article and he'd carry on until he'd finished and then he'd start again. Now we've got a situation where the businesses have said to us, it takes too long for us to read the articles, we want you to condense these articles into one-line pieces of information that helps us to know what sort of things we should be thinking about. Give us the questions that we need to answer. And then more recently, some of the big multinationals have come to us and said we want you to rank and rate these trends, tell us which ones are going to arrive now, tell us which ones are five, ten, fifteen years out. Tell us which ones are most likely to happen. And subsequent to that, organisations such as Philips, BASF, Siemens, etc., they're all organisations that are always thinking about the future that's the way they run their business, they have long investment cycles, they've done this for many years but now every organisation has to do it. So they're saying we want to be able to do this ourselves, rank and rate our own trends, spread it around our own business. Involve all of our people in our business in actually determining what the key questions are for our business and how we're going to address those. So, Shaping Tomorrow has become very much a process of helping organizations to understand what's coming and then to deal with it. And

if I'd had that ten years ago, if I'd had those trend agencies and ourselves ten years ago, I would have been able to answer the question that I struggled with when I left that business and was so frustrated that I couldn't see the future. So in my opinion if I was still a CEO, I would be spending most of my time in the future and giving up all of the things that I used to do in managing the present and conducting post mortems on the past. Thank you.

Riel Miller

-Thank you, Mike. Let me just carry it on, I want to try and pose a question that picks up a bit on this I mean, Goran ended with the light in the dark forest. And we have the feeling today I think that from the internet and from the resources that are available, like Shaping Tomorrow, that this issue of challenging your assumptions is something that is more plausible, more feasible, you can do it on a more regular basis, that's part of what this report is about. This report is about helping you to be able to think about your assumptions, to think about the world around you, to give you the information you need because the research has been done that you can do the innovation. I just want to ask Mike, do you get the feeling that the users of this are beginning to understand, for lack of a better word, I would say foresight, it was up on the slides also that Goran presented, that there's the beginning of an understanding that foresight is something that people can have access to regularly.

Mike Jackson

-I would say no. I would say that even, most of the good organisations we work with, with a few exceptions, are still stuck on the idea that I'll find out what the trend is and then I'll follow it, but trends bend, and the real issue is what is going to happen after this trend changes course, and it's the smart organisations who are starting to ask the questions "Well I know there's these three trends out here but what if they change course, what if they interact with each other? How will I react if that happens?" But we've still got a very large group of organisations out

there that think that now they've found the trend they should just follow it blindly. So there's more work to do with many, many businesses.

Riel Miller

-Thanks, that's excellent. I think that really helps frame the issue that's the next speaker's task, because it talks about the break, the fact that things are not sequential that we have perhaps to think about how it's not just an extrapolation, but that the actual context changes, and here again the issue, the relationship between foresight and context is critical and I want to ask Charlie to talk a little bit about, Charlie Edwards from Demos an associate from Demos in London. Sorry, you're a senior researcher?

[Unintelligible]

To talk about the post-industrial society and in part the context for all of the discussions we're having today.

Charles Edwards

-Thanks very much Riel. Well thank you very much for inviting me to speak, albeit briefly in this at this important occasion. And I wanted to begin by saying that, I mean Spain's economic performance has been fairly impressive recently. The growth has been robust. But it's the key to maintaining this economic stability, this competitiveness, which is going to require some fairly radical thinking, if we are to shift into this post-industrial era, and I want to couch my comments in the context of business, not necessarily of lifestyle which the post-industrial society also encompasses. A post-industrial society is one in which the majority of those employed are no longer involved in the production of tangible goods, but of services, where knowledge workers dominate the landscape where manual workers once used to work. Information, knowledge and creativity are the new raw materials enabled and sustained by technology. It's in this emerging economy that the next layers of value creation as Goran pointed out,

whether that be in technology, marketing, bio-medicine or manufacturing. They're becoming so complex that no single firm or department will be able to master them alone. So in a post-industrial society, therefore, the most successful companies will be those who understand the power of collaboration, that can develop and sustain their networks at the national regional and global levels. In a flatter world, business will be done through collaboration within and between companies, guided and directed by consumers who co-create those product and services. If the twentieth century was shaped by large hierarchical organizations, with professionals at the top, it was an era of mass production, of mass distribution. The buzz words of yesterday were of standardisation, centralisation, synchronisation. Well today there is a palpable shift toward new distributed organisational models that are innovative, that are adaptive, and as Goran pointed out, are low-cost. We know the world, as the COPCA report suggests, is getting flatter. It might not be flat as, say, Thomas Friedman has argued, so if this is the case then companies will have to respond in turn, by adapting the organisational structures and cultures to suit the new marketplace. And , in the post-industrial world, the growth of technology which has enabled individuals and small communities to take on major corporations, will be a key factor in change. So the second rule for small and medium enterprises is to act big. And the key to acting big is to take advantage of the new tools for collaboration to reach farther, faster, deeper and wider, and create choice for consumers on a scale hitherto unimaginable. But these consumers will no longer simply consume. Together with the business they will help develop the next wave of products and services. So tapping into these individuals and communities will be crucial for the future. Now instead of simply reiterating the importance of technology, as Goran has, as Mike has pointed out, and which has been done in the report by Manuel Castells, I want to focus on a growing community that I think are already creating this change on a massive scale that we have not quite understood. You may have heard of Linux, of rap music and of the jubilee campaign, a campaign that wiped millions off debt from developing countries. These were all driven by a community called Pro-Ams, innovative, committed and networked amateurs

working to professional standards. Now there's this emerging group that is having an influence on society and will continue to do so in the next decade. Pro-Ams will create the key breakthroughs, rather than the industry leaders. So the breakthroughs will come from the fringes, from the amateurs who have that interest in the products and services that companies are developing. And they are going to do this in three ways. And I just want to point out three factors that I think are going to be important. One is that Pro-Ams will be disruptive innovators, changing the way an industry operates by creating new ways of doing business, often by making products and services much cheaper, or creating entirely new products. And there was something on CNN this morning about how this trend is happening in South Africa. Pro-Ams will lead innovation in use, and this is something that I think is really crucial, we know the cost of research and development is huge, and that some small, medium enterprises don't have that budget. But in this society an open, mass innovation on a scale we have never seen before, will create that community of interest that can further refine and develop the product, extending the life of that product and constantly refreshing it. So Pro-Am communities will be the new research and development labs of the twenty-first century and beyond. And Pro-Ams are vital to service innovation. Now, we know that services are delivered to a script, which directs the parts played by the producer and the consumer. But service innovation comes from producers and users simultaneously adopting a new script for the future. And so harnessing Pro-Am service innovators will be vital in the post-industrial society. The more Pro-Am skills there are distributed across the economy the greater the innovation and the labour market flexibility. And just to very quickly finish up. Catalonians are well known for their progressive attitudes, their fierce independence the idealism and their commercial, and I hope I get this right, their *seny*, their nous their business competitiveness. And it is those values that will help you shape the future if you take that step forward.

Riel Miller

-Thank you very much Charlie. I think that picks up on a really critical question with relation....to me... keeps us on this theme of foresight and how to use knowledge, which is, this dividing line between the professional and the amateur, this dividing line between the person who knows and the person who is ignorant, is changing, the dividing line. Just to give a quick sense of how that dividing line is being worked through...how we're crossing that from the examples that you gave, I mean, what gets the trust and the depth of knowledge...because we looked to an expert before the one with knowledge and the people with their ignorance... because we trusted them, because they were the professor or they were the senior manager with experience. How do we now cross the dividing line between the amateur and the professional without thinking we're just guessing or

Charles Edwards

- I think it's partly to do with the emerging technology that we have, and what we can clearly see is that major companies, say take IBM for example, aren't necessarily looking to the business development units to create that change but are asking those business development units to go out, to understand actually how the consumer feels about the product, so it's about collaboration on a scale that we haven't actually seen. And it's about breaking down those barriers between the producer and the consumer. So if you like, on Goran's slide where he had those various stages of relationships, well it's almost the next stage on. It's actually an interaction between the producer and the consumer.

Riel Miller

- Thank you very much and I think that sets the stage now for moving us to the question of what happens at the European level; how is this being translated in the context of regional and the political universe within which we all function; how is the foresight and the changing dividing lines and barriers moving us in the

European context towards more foresight? And here I want to introduce Johan Peter Paludan who is a director at the Copenhagen Institute for the Future.

Johan Peter Paludan

- Thank you very much. Well, thank you for the opportunity to come to Barcelona. Goran is not the only fan of Barcelona, I'd like to say.

I've been doing future studies for thirty years, so I know how hopeless it is, so therefore my mantra is that the future does not exist, hence it can't be predicted. On the other hand you can't help trying, because we are in the unhappy situation of having to make decisions in the present and they have to work in the future so you have to have some kind of assumptions on the future. However stupid they may be, they are better than none, so I have kept working on the future for thirty years. Now, we are talking about the post-industrial society, and I started wondering, I guess, and I had to look, was there a time when we were talking about the post-agricultural society, before we settled for the industrial society. So post-industrial is a sort of term in the workings, in development, and we have been working quite a lot at this issue to try to be more specific on what kind of society we will have after the industrial society. And with specific attention to Europe, I'd like just to say what I think is important in this context in Europe; first of all, we're the rich kids. We are spoiled brats, have been for a long time. Secondly, and as a consequence of that, we are increasingly having to either turn jobs over to machines or to Chinese. We are Old Europe, I think it's important to remember that, even if the Americans say it with a negative twist. We have quite a long history and we are old in another context; we are a greying Europe, we are increasingly getting more and more middle-aged, because Europeans have forgotten how to reproduce, so we are in fact dying out, the Europeans are entering the Red List of endangered species. In view of this, we have two paradigms we have been working on. One is called Dream Society and the other is called Creative Man and I think both might be relevant in the European context. Dream Society to put it very shortly is basing its assumption on the fact that we have entered a society where there's no lack of products,

there's a lack of customers, and customers do increasingly take function for granted, products work, so what? So if you want to catch the attention of the customers, you have to put something *beyond* function, you have to appeal to their emotions in one way or another, tell a story, or whatever, because otherwise they won't be able to make up their minds, with all these various products to choose among. So much to choose, so little time. So storytelling in various ways is going to be more and more important, and if Europeans can master that art, they should be doing all right. Now Dream Society, to my mind, is okay, but it is slightly too heavy in its emphasis on passive consumption and therefore we have come up with another concept called Creative Man, focusing on the increasing revolt against passivity. I recently heard that the global market for interactive video games is now bigger than the global market for films. So passivity will never go away, but it will increasingly be supplemented by people wanting to be more active, more interactive, and therefore you have to make even more emphasis on creativity, because that's where you can find the new business models, where you integrate producer and consumer in pro-sumers, because if you don't do that, then you won't have any success. Whether these two paradigms are the end terminology of the post-industrial society I'm not quite sure, but I was reminded when thinking about the post-industrial that many years ago, the Indian leader Mahatma Ghandi was asked what he thought about European civilisation and his answer was that he thought that would be quite a good idea. And I have the same feeling about the post-industrial society, that that's where Europe has got to go. But, I think it is standing in front of the choice, does it want to become the centre of creativity, fleeing away from the repetitive routine work that belongs to the industrial society. That's one option, and that's a nice option, that's where the money is, to put it bluntly. I do think there's a danger of another scenario, a kind of passive dream society where Europe turns into a sort of museum - we've got lots of old culture, and all the people from the rest of the world can come and look at it, but that's not quite the creative side. So that's the way I think its going to be.

Riel Miller

- Thank you very much, I think that that highlights the issue of how do we get the transition being something that's explicit, and I guess one of the choices that's provoked in the context of foresight is that people can be afraid of making the changes, that they look to the past and they simply want to recreate the past and so in your sense, I mean this, in choosing the scenarios, you see the kind of work that's being done here, this kind of report, and I want to try and emphasis, you know, why I think that being here and the work that's being done is important, what kind of role does foresight, and the imagining that you do with your work help to create that kind of society and to make a choice that you think would be a better one?

Johan Peter Paludan

- Well, I think talking about foresight is important not only by giving inspiration to specific companies or governments, but also by stressing all the time that the future is here and that the future is going to be something different. The only really predictable thing is change. And lots of people hate change. Sometimes I feel that the best picture of how people feel through change is a feeling you can get when you're sitting on the train standing at the station and when the neighbouring train starts to move, you feel as if you go backwards. That's a feeling lots of people have and therefore the more you talk about the future, the more you get people accustomed to that change will come and it's not that bad at all and sometimes you ought to remember that this future, which looks so threatening, will eventually be the good old days. It's just a matter of living it through. So I think it also has a more broad, pedagogical function.

Riel Miller

- Thank you, that's very much something that I experience in my line of work, there's an immense amount of activity taking place around Europe, but also globally, to begin to work on the tools and help people see that the train is moving, that's what Mike was talking about, it's what Charlie does, and at the

global level, one of the people who's deeply involved in what's happening at the global level, is Fabienne Goux-Baudiment, who is president of the World Future Studies Federation and a Projective in Paris. Can you talk to us a little bit about how this understanding of a two-fold process, one is that the world is changing, the other is that we're beginning to develop techniques and tools that allow us to understand those changes better, and here, just to pick up a little bit, there are moments when we feel pessimistic or when we feel that it's too much, or that Europe will be left behind, or that de-industrialisation because of China will end our future, and in that context, looking globally, how does foresight help us think about the pessimism-optimism question and think about change?

Fabienne Goux-Baudiment

- Thank you. Well, I would say that mainly, the future issues are that the world is trying to understand the current changes and to think about what they could produce in the future. And considering this, the main objective is really to try and understand another critical approach of what the future could be. This understanding is based on two main steps, I would say. The first step is what is at stake? This is really the question. And today, what they are saying is that well, what is at stake is that the industrial era brought us war, mainly, terrorism, pollution, climate change, and very, very difficult social conditions. From this point of view, the future appears like a dead end, if we are just to go along this road. But in the other way, we have a lot of possibilities of change; we have a lot of potentialities. Among them we have to look at how we can improve mainly cities, because we know that the possibilities for cities will really be a note of the future, citizenship, I mean who are the people living now in the cities, voting, trying to express themselves; who are they? They are very different from what they were some decades ago. So we are trying to understand them. And mainly we are already beyond the production system; we are trying to understand how can the next society survive, but not only survive, but improve itself, improve people, relationships between people, and what we are really trying to understand, and this is the second step, what's next. And here, pessimistic and optimistic people

are very different and are bringing different visions of the world. For I would say a major part of the world, in Australia, Asia, well, America, North America and Europe, you have very pessimistic visions about the future. This is, ok, this is a dead end. We are against a wall. So what do we do? And the idea is that we have very few interesting ways of escaping. One way would be the famous new agrarian civilisation, well, we are not allowed to [unintelligible]. Another way would be some, you know, Utopian communities coming back to kind of neo-Socialism, Utopian Socialism I would say, like Fourier or Proudhon. And beyond that, well, you know? Very wishing lists, I would say, we must be in peace, happy, doing good things and so on, ok, like the Superman of Goran. Well, that's a point. More interesting views, I would not say that we'll be living more, but, well, they are more interesting, more creative, are from the optimistic people. Optimistic people think that well, this is a crisis, and in every crisis you have opportunities of change. So we are preparing the next step. And the next step could be transhumanism, for some people, well, I would say it's something we have really to think about, but some are really believing in this. For those who don't know, transhumanism is about the combination between humans and machines. For others it would be rather some cultural renaissance; renaissance here would be something like finding a new spirituality, a new way of living in communities, being less individualistic, less egoistic, trying to cope all together in peace and so on. Mainly there are the two main currents of thinking, the next step. The problem is that futurists are very aware that these are very, very poor visions of the future, and we have definitely to work on, that's why we have so many groups right now from the world, Wisdom Alliance, or some groups within the federation, or other kinds of think tanks that are really working on what could be the next step, but definitely, it's a complicated matter.

Riel Miller

- Thank you Fabienne. And I think that that picks up the fact that's been stressed throughout and that's in the report as well, which is there's this huge diversity, there's an immense diversity in the world, we have access to huge amounts of

information from many different sources, and hence many different visions, many different forms of pessimism, many different forms of optimism; there's the war of culture, there's the sort of climate change, then there's also the ones who see industrialisation, many people getting out of poverty... Can you give me a sense, though, of...because in the international community of people who think about the future, are we in a position today to give people more tools to take advantage of those diversity of ideas?

Fabienne Goux-Baudiment

- Well, it depends who to ask the question. I mean, as a futurist, mainly, this is my job for less than you, but some 21 years, and, well, I'm afraid that after that, well, I still have hope, but I do not believe in tools. What I believe in is intellectual tools. I mean, it is not by a matrix, or by causal layers and [unintelligible] or whatever else, okay, we have a lot of those things, but mainly we have to have a better education. Definitely. Our education is totally outdated. And I think that futurists more than everyone should have a better education. And openness, I mean you have to practice languages and you have, not to practice languages, but to change your concepts in your mind, we are building our concept from different concepts in different cultures. And for this we have to think differently about the world. And I would say to finish that we have to be very, very modest, I mean that if you believe the future will be this, first you are wrong, it will *never* be this and then you are just unable to do what is your real job as a futurist, I mean to provide alternatives. So I think it's really a question of thinking. We can have training, and good training, about the future and about how to think as a futurist. But I think you have no tools, no recipe.

Riel Miller

- No recipes. Very good. Thank you Fabienne. I think that it's clear that there are no recipes. On the other hand, what we've heard so far, I think, points out to the fact that it is crucial to be able to question your assumptions, in order to be able

to think about the stories you're telling and to be able to then tell a story that has a different way of living, a different way of being, is the way in which we come to the decisions we make. And so now at the end I want to ask Paul Isabel to talk a little bit from the Real Instituto Elcano in Madrid to talk about the implications of these changing assumptions, the shifting that we've heard about in terms of the way people think and the way they tell the story about their world around them for Catalonia. Paul.

Paul Isbell

- Thank you Riel and thank you everyone for being here today and a special thanks to COPCA for having invited me. First I think I need to confess that I'm the only one here, I think, who's not formally involved in quote unquote future studies. I'm an economist, working at an international affairs and strategic studies think tank. Now, in the one hand, as an economist, I can also say I'm a globalist in my perspective, as economists should be, and I tend to look at the globe as a system. So when I look at how Catalunya, or Spain, or Europe is going to adapt, try to maintain dynamism and prosperity in the future, I'm looking at it from the perspective of a dynamic and changing global economic system. And for an economist, the global economic system is really driven forward by two things: one is the deepening and more integrating market or the deepening of the division of labour, and technological change, and two things generally cause change by holding back the movement forward of the global economic system: those are reactions to both of those processes - to the deepening of the market and the deepening of the division of labour and to technological change and its implications. On the other hand at the strategic studies think tank we're always trying to discern a strategic horizon, and from the point of view of an economist, using an economist's tools. Now, having said that, it's clear to most of us here that although Spain and Catalunya in the recent past, over the last generation, have transformed their surroundings, to one of dynamism and prosperity and a potentially bright future, one that looks similar to at least one side of the report which is being presented today, a world where world GDP will have nearly

doubled within ten to fifteen years and it's not going to be all distributed equally, a world in which there are some very interesting opportunities for those that divine them from the perspective of the developed world and the perspective of Catalunya, and take advantage of them. Let me just say this at this stage. What I'm going to try to do, given that we have, that I have, given that we all have such little time, I'm going to try to innovate myself: rather than by trying to give you my arguments, and then not have time to give you my conclusions, I'm going to give you the conclusions first. I'm going to try to lay out what I would think would be four objectives for both the public attitude from Catalunya and from Spain and objectives for public policy, to create an environment in which we have a chance at being innovative, in the future, dynamic, to respond to many of the changes that are hinted at in the report that's being presented today.

First, openness. I mean openness in all of its facets. From the economic point of view, this means free trade, openness to trade. It means openness and a lack of resistance to the movement of capital, whether it's capital leaving Catalunya, this famous delocation of capital, or capital coming in, and it also means free, open attitudes to the free movement of people. This also means to the inflow of immigration. I'll get...hopefully within the time we're here today get back to that.

Secondly, education. And here, if I had to add something that would be obvious, given the flow of our conversation today, obviously education to train people for the post-industrial society, to add and augment human capital so that people are capable of embracing new technology, if not innovating it themselves. Obviously the technical side to education is very important. But I also think, given what's going to be my third conclusion, that a renewed emphasis on liberal arts education, on broader humanities education, is also going to be essential in the future, if our publics are going to be able to understand what's happening to the world system, to understand the dynamics which have come from the past, the dynamics which drive the global economic system, so that we are able to embrace the changes implied in the deepening division of labour, and in technological progress, as opposed to more simplistic solutions that are aimed at reacting to them. And for maybe eliminating some of the confusion that we have

today over whether or not Spain and Europe should be promoting freer and more open trade, whether or not Spain and Europe should be embracing the kind of scary developments that are implied by capital leaving Europe and going to places like China.

The third conclusion, then, would be the inevitability for the future, if it's going to be the future described in the report that's the more stable prosperous one, and a global and sustainable future, would be the inevitability of some kind of global governance. An improvement of global governance. An improvement of the global governance of the world economy and that does imply some surrendering or sharing of sovereignty from the nation-state level to transnational levels in the future and I think that that's where humanities education in the future is going to become very important. We can't afford just to have a world of successfully moving individuals in the business world reacting to future change, if the global system itself is not sustainable into the future. And just to give you the last conclusion, this would be, one of the interesting things about the report when it divined this possibly prosperous future, there were two limitations...potential limitations that I gleaned out of the report; one would be some sort of global reaction or local reaction against openness and a free open economy, the other was resource limitations, energy limitations. So if there is a fourth message for the future as far as looking forward in innovative ways in business from Catalunya, from Spain that might be interesting energy and environmental technology products and services.

Riel Miller

-Well I think there again, you know, we're on this interesting, but I think difficult and often frightening question of a transition...a shift from one period to another period...and how do we find the signposts, how do we find, if not the tools at least the elements with respect to this humanities, this more open...and I guess the question that occurs to me is that, if...to be open and to discover the things that are after the industrial, that are after the delocalisation, and I'm not...the old economy goes away, the new economy has to come into place, it means that

there needs to be this capacity to move across. And I just want to pick at one element here, it's that, in the transition from an agricultural society to an industrial society we gave up learning by doing, to go to school and become book learners. In terms of Spain's challenge and the challenge of a country like Spain in Europe with the deep history, learning by doing as a way to equip people to build a new future. Do you see that as being an important element in that process, in terms of your conclusions and your solutions?

Paul Isbell

- Well, I certainly... I would think that given that the transition for the developed world is to move into a post-industrial society in which we're not really taking advantage of labour and capital. These are now being dominated by the large emerging markets. And where our comparative advantage across Europe is going to be, is in human capital and knowledge. Given that that's the panorama for the broad systemic shift, if it's not learning by doing it's certainly learning by taking individual, existential kind of risks. In other words, the social system in place in Spain in particular but still across much of Europe doesn't really encourage people to look ahead, to take risks which in the end tend to be quite small and without great consequences but I'm talking about things as basic and as pragmatic as accepting change in the labour market legislation in which the risk posed to the worker losing their job in the future is obviously higher than under-protected systems.

Riel Miller

- Thank you very much. And thank you for listening. We had a very compressed schedule and I think you can see that there's tremendous richness in the discussion and what people have to bring to bear. I think it's a richness that's reflected in the report that's being presented today, and that is part of the ongoing effort to think about the future here in Catalonia and in Europe in general. I think that the question of how we can take advantage of the richness of resources and the diversity of views is in part frightening and in part reassuring.

And I think that I hope that this experience is part of building your capacity to tell different stories and to find the stories around us so that that divide between consumer and producer, the divide between the professional and the amateur, the access to the information of a creative society in a global context, where we have policies that enable us to do all that, is something that you feel better at doing everyday and inventing everyday experiments, which are the experiments that we don't need to keep forever, they don't need to last into the centuries, but experiments which teach us by doing and by learning how to create the future now. Thank you very much.

And the very good news is that there's a coffee break now!