



Chair:

- Jean-Pierre ALIX

Science-Society Advisor to the Presidency of the CNRS

Speakers:

- Jean-Michel BESNIER

Professor of Philosophy, Paris-Sorbonne University

- Jean JOUZEL

President of M.U.R.S.

M.U.R.S. Proposals for the Future

JEAN-MICHEL BESNIER

First of all, I would like to make clear that what I am going to say I owe to my membership of M.U.R.S. and to the division of labour on the organizing committee for this conference. As I am speaking before Jean Jouzel, the president of M.U.R.S., I will not be drawing any conclusions, naturally. I will perhaps just reveal a few secrets about the thoughts which inspired us when we chose the central theme for this conference.

Is the world becoming flat?

As you know and as Jean-Gabriel Ganascia told you yesterday morning, the organizers of this conference offered questions for general discussion inspired by the analyses of Thomas Friedman, a great leader writer for the *New York Times*. The question was as follows: Is it true that the world is becoming flat? in other words, is it true that we have entered an era of widespread interchangeability, global competition, and frenetic standardization? Is it true that everything has become accessible to everybody and that the best will take the upper hand, irrespective of their position in the world?

To be fair, these are not new questions. What has changed, however is that when we asked these sorts of question previously they always had a purely negative slant. They were asked, for example, in relation to Tocqueville's survey when he returned to America in 1835, and predicted the extension of equal status which would be potentially disastrous for freedom in democratic societies. These questions cropped up again at the end of the Second World War and I remember the enthusiasm with which we read Marcuse's *One-Dimensional Man*, or the descriptions of wrongdoings of cultural industries produced by the Frankfurt School of philosophy. On each occasion the aim of course was to denounce the levelling process which would abolish differences and establish alienation by stealth.

However, when M.U.R.S. asks the question about the possible flattening of the earth, it is also questioning the responsibility of players in this world, with new intensity. But we can no longer believe that we are living either in 1835 or in 1968. The world which Tocqueville dreaded and which we denounced as youngsters has changed. It claims to be representative of aims which are sometimes selfless, such as knowledge sharing or freedom to move freely across the entire globe. Our association with promoting

knowledge, which the technologies creating a flatter world support, make it difficult for us to be nostalgic or even perhaps to crave revolution. On the contrary, I think that this world refers us back to ourselves and even to our undying ideals. We need to be clear: we must recognize that we wanted flatness and did everything we could to achieve it and that we knew when we were defending the ideals of knowledge dating back to the Enlightenment that we desired this flatness. Universalism and the struggle for equal rights, the demand for knowledge for all invited us to envisage a world without divides, i.e. without relief and hence flat. Today, we have identified what has enabled us potentially to homogenize the planet and to fulfil the aims which the Enlightenment set itself. What has enabled us to do this is fundamentally a technical process, that is to say an extraordinary process called digitalization. Thanks to this process through which everything becomes interchangeable, interoperable and commensurable we have achieved what Galileo announced when he said that nature could be expressed in mathematical terms and what Descartes and Leibniz were aspiring to when they dreamt of a universal mathematics which would be able to express the whole of reality in formal terms. Today, digitalization is responsible for bringing the metaphysical plans of modernity to fruition and with them the disillusionment of the world mentioned earlier by Dominique Pestre, which it was said would enable us to break away from obscurantist and irrational representations of the world.

The responsibility to be free and creative

Therefore, this flatness is something which we desired as a factor for universal emancipation. Now that we have it, we are asking ourselves how on earth we reached this point. We are also wondering how to accept the consequences which it is having on our behaviour and on our relationships with each other. In short, we are wondering if we can be answerable for its consequences and shoulder the responsibility for a knowledge society which is generating unlimited commensurability. This two-day conference and the nine thematic workshops which it has enabled us to hold have not tackled the issue head-on, with the possible exception of the workshop on ICTs. Nevertheless, what these workshops have had in common is to invite participants to examine the degree of involvement which we can have in health, climate, agriculture, research and information. What we have tried to highlight is the role which has been allocated to us, European men and women. It is the only initiative left to us and we wanted to emphasize it. To use the language of philosophy, we have mobilized our values and our "ought to be", as Hume would say, not content just to record facts and merely to sanction what "is". Responsibility starts with the decision to be a creator of what we describe as our world. By taking part in this conference, all of us are immediately placing ourselves in a position of responsibility from the outset. Now the question undoubtedly remains of whether

we are willing to take part in this flatness described by Friedman as if it were predestined. This is potentially a thrilling destiny since it challenges us - or would challenge us - to surpass ourselves and tear ourselves away from a different destiny in the form of withdrawal within our own frontiers and specialisms. This is in fact the fundamental question. Should we believe that we are condemned to move from one destiny to another? Or are we at best like the hero of a classical tragedy, condemned to believe that we could want to accept destiny which is not in the hands of the gods but the fruit of our own freedom?

Responsibility calls for a secular solution

In any case, responsibility constitutes a challenge which is all the more urgent and problematical because we claim to be the playthings of powers beyond our control. Globalization (a synonym for flatness), is perhaps a tempting alibi for those who are disturbed by or frightened of their freedom. As we know, Tocqueville has written very clearly on this subject once again. This is doubtless why some easy religions without any obligations, or a taste for all-encompassing forms of spirituality are making a comeback. All these religions and forms of spirituality exempt us from responsibility and allow us to transfer responsibility to someone else. They assure us that we are no-

thing at all and as such what we do has no more impact than the activity of an ant or the activation of a neuron, and thus others are responsible, not us. In this respect, responsibility undoubtedly calls for a secular solution. If we are answerable for what happens to us, without dissimulation, then we are eliminating transcendence which could dictate what we should think, do or say. For example, we should not be intimidated by those who would like to present cyberspace as a form of horizontal transcendence to show us that widespread interconnectivity dilutes responsibility in an emerging collective intelligence.

At the end of these two days, we could perhaps dare to think that flatness is a mere fantasy. The best way to do this would be to state that if the knowledge society is a real, then it is perhaps not what people say it is. This was the idea which we had when bringing you together at an event under the auspices of the European Union. Based on your experience and in the context of your work, you would each be able to describe how Europe still has some contours and cannot be reduced to the idea of a desert in which one is undoubtedly allowed to move freely, albeit in a very tedious way. We now need to take stock. We have to contrast the vision of a world subject to deadly entropy and growing lack of differentiation with reasons for hope in the form of dialogue between partners with their own identities which is not just a digital identity and responsibility which is not purely legal. Obviously, not all reasons

for hope are equally valid. If we do not accept them as invitations to action they can even appear to be without hope. I shall finish with three examples.

Three examples

When the general director of UNESCO, Koïchiro Matsuura made a speech on the knowledge economy on the eve of the Tunis summit on 16th and 18th November 2005, he highlighted the obstacles which still existed to achieving it. In doing so, he denounced, or rather announced a factual reality to counter the illusions of those who might have believed that the world was flat. Let me recall his main arguments. He said that there were still five obstacles to the emergence of knowledge sharing in such a way that human activity and the development of society would be totally transformed. I shall simply list these obstacles without commenting on them, other than perhaps suggesting that we still have to take up these challenges and that we can still organize ourselves in order to do so: the digital divide, the cognitive divide, the concentration of knowledge leading to a south-north brain drain, the cost of information, and social divisions, one of which is inequality between men and women which constitutes a major obstacle. We could say that this list is just as valid as the flatness mentioned by Friedman, forcing us to conclude that there are still many ditches and contours in our world.

At the risk of appearing paradoxical, I would say that the danger which remains in these forms and the obstacles would justify the decision to encourage dialogue between nations. In this respect, it would be a positive thing. Flatness is not a threat to us yet. Ir-responsibility is not yet on the agenda.

As we know, in a general sense, the point of futurology lies in conveying what interests us today. What future developments do we foresee now which could express the way we view the present? Whilst preparing this presentation I recently re-read a number of forecasts that were formulated in the 1990s by scientists brought together by Thierry Gaudin who was appointed by the Minister of Research at the time, Hubert Curien, to think about what the world would be like in 2100. These forecasts were published at the end of the last century and they bear so little resemblance to Friedman's flat landscape that it feels like almost a century ago. I remember one of these predictions on our topic which seems so very far away from our current concerns. On reading this exercise in futurology, one discovers that the 21st century would be totally dedicated to our enrichment via knowledge and that it would unify behaviours and systems of belief on a worldwide scale. So far, so good. Except that Thierry Gaudin and his colleagues then differentiate between three different approaches to knowledge which, according to them, would connect to form a system.

158

M.U.R.S.
Proposals
for the
Future

I will mention these three approaches, but will not make any comment on them. The first approach to knowledge as described by the Westerners, i.e. us, views science as an undertaking that operates on the basis of trial and error, aiming for pragmatic efficiency. When we think about knowledge, we always think about science in this sense. The second approach to knowledge is that of Africans and Brazilians, who attribute to some experiences such as trances the merit of awakening empathic experiences and mystical ability to enter into the heart of things. This is also a means of acquiring knowledge, a way of forming a relationship between a subject - the subject of knowledge - and the object to be known. Finally, the third approach to knowledge is that of the Chinese and the Japanese who attribute value to the language of symbols and signs through which they sympathize on an aesthetic level with the world.

It was tempting to dream, like the futurologists I mentioned, that these three attitudes to nature and to knowledge, science, love and art would intermingle and form a tri-functional whole mobilizing the spirit, science, soul, love, the body, and aestheticism - a dream therefore of a global cognitive system which would make the world desirable, fruitful, and harmonious. We can say without bitterness that when we speak of the knowledge society, we are not talking about a conciliatory system inspired to a greater or lesser degree by New Age ideas. We take as a prerequisite the fact that the

Western approach to knowledge is the one that prevails. But the fact that we were able to create these scenarios barely 20 years ago speaks volumes about the disillusionment which we have to tackle and about the exhaustion of the imagination to which we are henceforth vulnerable.

Another example that could provide cause for hope in the future of this dialogue that we would like to initiate is the extent to which we can observe that people's attachment to traditions and cultures has been reawakened dialectically so to speak through the implementation of globalization driven by ICTs. Admittedly, this may be a defence mechanism which will disappear, but this is not certain. In any case, it is up to us in Europe to reinforce this attachment to the traditions which forged our common sense of identity on a European scale and to steer it away from forms of fundamentalism or communitarianism which globalization supported by the Internet has promoted by way of a reaction. It is a platitude to say that the knowledge society must place its trust in education. It is perhaps less of a platitude to say that education must set out to highlight the role played in building identities by local cultures which are under threat from the tendency towards uniformity of lifestyle and thinking. It is perhaps less of a platitude to say that we must be ambitious in our outlook and think about rebuilding the Tower of Babel so that we can give free expression to the spirit of each of our languages. The knowledge society should not be monolin-

gual or it will be doomed to the entropy of a pidgin language and to the contraction of minds which this would entail. Over the last two days I have not heard anyone speaking Italian, Spanish or Portuguese. We have obviously missed the spirit and worldview which is a part of these languages. How much longer will we tolerate this sort of amputation?

how many of us sit in front of our technology like greedy children.

The knowledge society only came into being a short time ago. We are trying to make it a reality, and that is all to the good. However, instead of wanting it to be a hegemony which is virtually totalitarian when all is said and done, why not try to picture it in 10, 15 or 20 years time when it will have settled and become commonplace. If we are able to do this while testifying to a belief in the future, then we must envisage disconnection as a possibility and conclude that we now need to invent conditions for communal living which do not involve are so-called instruments of communication and all the technology which promises transparency without being aware that a degree of ambiguity is inherent in all genuine human interaction. This is perhaps the most urgent aim and motivation behind dialogue and hybrid forums to be initiated on a European scale. What could we be together in a world which the vagaries of history would have led to redraw its frontiers and contours? Thank you.

160

M.U.R.S.
Proposals
for the
Future

A renewal of dialogue

Despite appearances, the final cause for hope lies in the renewal of dialogue between emancipated partners - in the development of free and responsible awareness on the part of those who are currently tempted to get together to switch off, i.e. to break the connection, on the pretext of putting us in touch with the world and making us lose touch with immediate realities. There are those who might say that the temptation to switch off, which is often associated with the watchword decline, demonstrates great honesty and even a degree of irresponsibility. How can hostility to cyberspace limit the damage it causes? The immediate response is that cyberspace only exists because we want its resources and because we use it to communicate, interact and educate. If we stop doing this, it deletes itself and no longer exists. I am not issuing a call for subversion. If I were, rest assured I would naturally be doing it in my own name without committing M.U.R.S. But it is an invitation to consider

JEAN JOUZEL

Creating large-scale dialogues

Obviously after these very informative discussions organized by Jean-Pierre Alix and the panellists, and these two very stimulating presentations by Dominique Pestre and Jean-Michel Besnier, my final words will be much more modest and down to earth. I work in the field of hard sciences, and I think that all of us here are convinced of the need to bring science and society closer together, hence the title of this two-day event – Science in Society: Dialogues and Scientific Responsibility. This all sounds very good. However, there is still a lot to do. I am convinced of the need for this interaction. Of course, science should not be the slave of society, we have to find the right balance. I think that we, the scientific community, have to be at the heart of society and we have to be very receptive. This is the first challenge because in the scientific community it is often the same people carrying out research and trying to communicate it and operating on two fronts is a daily challenge which can sometimes lead to problems. It is up to scientists to address this.

I would like to return now to the question that was asked during this conference. How can we move from what at the end of the day is a scientific situation of a “minor dialogue” between science and society, as Jean-Pierre Alix described it, which is usually one-

way, to a “major dialogue” which we have been told must be two-way. I think it must be multidirectional, because dialogue with decision-makers, companies, and society is not the same. It can be made uniform, but there is still much to be done and several forms of dialogue to be established.

What have we learned about genuine dialogue? That we need a sufficient number of partners, a variety of different profiles and great openness on both sides. This is all difficult to organize. I felt that some of you were slightly pessimistic. I would like to inject a note of optimism. I experienced the “Grenelle de l’environnement” conference on the environment from the inside and it was quite thought-provoking from a dialogue point of view. The “Grenelle de l’environnement” is a typically French event, bringing together scientists and also local bodies representing the state, companies, unions, the workplace and NGOs around the same table to discuss shared concerns about the environment. What is also positive about it is genuine awareness on the part of institutions at a European and national level of the need for genuine dialogue between science and society.

I understood that creating large-scale dialogue is hard work. I learned that you have to think about it before, during and after the event. I think that there is very wide range of subjects, and there are many areas in which I am more involved such as climate change, but there are a number of topics

which we have not had time to address over the course of the day. However, for our part, we the scientific world, since unfortunately we are better represented here than society, have to be truly committed. We have to make the transition from science to science and conscience. Both dimensions must be present.

Our wish, on behalf of M.U.R.S., but also on behalf of those who organized this confe-

rence, is to bring a European dimension to this topic, to open up new avenues. I think that we will continue along these lines. This conference was organized under the auspices of the French Presidency of the Council of the European Union and we hope that the future presidencies will also organize similar conferences dedicated to science and society, perhaps more open to society than this one. We will make sure that this gets under way.

162

M.U.R.S.
Proposals
for the
Future

