



THE FUTURES OF CULTURE

Volume I : Meeting of the Working Group on the Futures of Culture

(Paris, 9 - 10 January 1990)

(Project co-ordinated by E. Masini)

Future-oriented Studies Programme

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FOREWORD

Within the framework of its third Medium-Term Plan (1990- 1995), UNESCO is implementing a transverse programme entitled "Future-oriented studies". One of its main objectives is to encourage the progress of future-oriented research, so as to enable UNESCO to gear its action to the issues and challenges of the future. Another important objective of this programme is to identify, at the regional and interregional levels, emergent trends and foreseeable changes in UNESCO'S fields of competence, so as to adapt its action more closely to regional situations. This will contribute to the programme planning of the future activities of the Organization. The focus under the third Medium-Term Plan is on two themes: future-oriented reflection on science, technology and society; interactions between cultural development, cultural identities and pluralistic (or multicultural) societies.

In this context, on 9-10 January 1990 at its Headquarters in Paris and in co-operation with the World Futures Studies Federation, UNESCO organized a meeting of a consultative working group of experts composed of independent persons who had been required to present their views and suggestions on the topic of "The Futures of Culture", with a view to starting a series of activities in this field at a global and regional level.

The present document contains the proceedings of this working group, as well as the position papers prepared for the meeting, and is the first publication of the results of the project on the "Futures of Culture", co-ordinated by Mrs. Eleonora Masini. It will be followed by the publication of the regional research carried out on the same topic concerning Latin America, Africa, Europe and Asia.

1.

PROCEEDINGS OF THE WORKING GROUP ON THE FUTURES OF CULTURE

Paris, 9-10 January 1990

MRS. MASINI: Culture in the future is the crux of the future. It is a very difficult topic, but a topic for UNESCO, and only for UNESCO. No other inter-governmental organization is in a position to tackle this topic. This is why we have a few people around the table here who have been doing work in the field. At the World Futures Studies Federation we started about ten years ago to look at the cultural aspects of the future. We did it in Costa Rica, in Hawaii (1986) and most of all in Beijing (1988) and it is from that kind of experience that we realized how it is not easy and how it has developed in different ways. So I think the starting point has to be, first of all, that it is a task for UNESCO. Secondly, we are standing in the present and looking at the future. This limits our work. We will not focus so much on the conceptual aspects of the issue, but on what is happening and may happen. We will listen to our colleagues telling us about the conceptual part which has been developed and which UNESCO has been discussing with many other people. But we are now faced with problems which are those of a multi-cultural society, so we cannot spend too much time on concepts. We have to look at what kind of issues societies are going to face, because of the multi-cultural situation, and talk about dominant cultures, exploited cultures and so on. These would be the three immediate criteria: UNESCO, the future, non-conceptual practical discussions.

MR. GOULET: I should like to present some seminal thoughts on *“culture and development”* for the future. Let me situate these reflections in the setting of my area of study. I am a student of value conflicts in the processes of development in different cultural and geographical settings. Obviously in recent years, this area of study has had to expand in order to examine not merely the development processes, but also the transformation of economic and political systems within entire national societies. Allow me to present very rapidly, in a kind of telegraphic fashion, the way in which I would view the problems of culture and development in the future.

By way of introduction, one may pose a few questions. Will economic and technological progress destroy the cultural diversities which have been a precious heritage since the origins of human history? The meaning systems of all societies, by this I mean their philosophies, their religions, their “ensemble” of symbols and myths, have brought to hundreds of millions of members of all societies till the present, a sense of identity and an ultimate explanation of the significance of life and death, and conferred upon them a place and a rôle in the cosmic order of things. Will these meaning systems now be reduced to insignificance by the steam-roller effects of mass culture, characterized by electronic media, consumer gadgets, occupational and geographical mobility and globally disseminated role models? This is one order of questions. In other words, will cultural diversity which one can initially assume to have a positive value for its members because it brings them their identity and their meaning and their place in the totality of the universe, be diluted or eliminated for the human species as a whole in the same way as have the diverse fauna and flora which add to the richness of nature? Diversity of religion, language, and modes of living, brings a positive wealth to the human community. But there is also another side to the coin. Will the explosive release of ancient cultural, ethnic, racial and linguistic emotions attendant upon the political liberations

now proceeding apace throughout much of the world, destroy all possibilities both of genuine development founded on universal solidarity and community building across differences? Will we witness, in other words, a return of intolerant local chauvinisms, breeding new wars over boundaries and intercultural discriminations? These are the kinds of questions which thrust themselves upon those who ponder the futures of culture and development. What indeed are the future prospects of culture and development? How do these two relate one to another? What are the cultural dimensions of development and the developmental implications of cultural affirmation? These questions define the vast agenda which serves as the topic of our planning deliberations as we begin to think of a programme of research and dialogue on the futures of culture.

Let me offer one possible outline or scheme for dealing with these multiple questions by presenting a series of brief, almost telegraphic, propositions centering around four axes or central themes. (1) The state of development today; (2) the state of culture today; (3) ethical visions of the future; and (4) some policy directions or pathways.

The state of development today:

First proposition: We are reverting to a reductionist economic growth paradigm. This constitutes a regression, since after the 1960s, development specialists moved beyond pure economics or finance in efforts to integrate the political, social and cultural dimensions of development.

Second proposition: The boundaries dividing politics and economics are rapidly disappearing. Increasingly, politics deals with economic policies, witness Thatcher's programmes, Poland's march towards markets, China's tentative probe with capitalistic incentives. Similarly, economics increasingly deals with politics, winning support for an austerity programme, let us say, or new taxes, tariff and trade debates, etc.

Third proposition: The world debt crisis has transformed the debate about development strategy into mere crisis management. Structural adjustment is simply a euphemism for avoiding shipwreck in a sea of debt, inflation, and recession; it is the term which has now replaced development.

Fourth proposition: The collapse of Marxist regimes gives all Utopian visions a bad name. Therefore, any advocacy of multi-dimensional integral human development, which respects its spiritual, cultural, and ecological dimensions, is easily dismissed as Utopian and impractical.

A fifth and final proposition on the first theme: Notwithstanding the hegemony of the old economic growth model, in policy circles a new development paradigm is in gestation. New approaches to development are being tested in the living practice of communities in need and movements of struggle. The priority values of this new development model are the primacy of human needs and rights over wealth production, participation over expertise or at least in

partnership with expertise, ecological sanity, the building of the community, and the search for an equitable distribution of the benefits arising from both economic and technological advances.

The second central theme or axis with its consequent propositions - The State of Culture Today:

Proposition one: All cultures and cultural values are being powerfully assaulted by great forces of standardization. These forces acting together and cumulatively homogenize, dilute or relegate diverse cultures to purely ornamental, vestigial or marginal positions in society.

Proposition two: The first standardizing force is technology, especially media type technologies. Television, film, radio, electronic musical devices, computers and telephones operate as potent vectors of the values of individualism, hedonistic self-gratification, consumerism, and shallow thinking. Just think of the need to reduce any issue to a thirty-second television byte, or a two-line editorial statement!

Proposition three: The second standardizing force is the modern state. The modern state is a political institution which is intrinsically bureaucratic, centralizing, legalistic and ever inclined to assert greater control over ideas, resources, and the rules of the game in all spheres of human activities, in other words, culture. What is culture? Ideas, resources, and rules of the game!

Proposition four: The third standardizing force is the rapid spread of managerial organization as the best way of making decisions and coordinating actions in all institutions. Increasingly government leaders must be managers. So must university presidents, foundation officials, airline directors, heads of hospitals and scientific associations, and even abbots of monasteries.

Proposition five: The result of these standardizing influences is massive cultural destruction, dilution and assimilation.

Sixth and final proposition: The very pervasiveness of these damaging forces, however, gives rise to growing manifestations of cultural affirmation and cultural resistance.

Third axis - Ethical visions of the future of culture:

Let's start with a pessimistic scenario for the future. I don't assume that all existing cultural values are authentic or are worthy of preservation. This can be debated, but there is no merit in adopting a museum outlook and preserving all cultural manifestations or institutions as somehow or other equally worthy. The pessimistic scenario asserts that cultures and authentic cultural values will throughout the world be increasingly bastardized or reduced to marginal or ornamental roles in most national societies and regional and local communities. In the United States, for example, traditional Indian pow-wows, which were community meetings, operated democratically for purposes of electing leaders, making political and economic decisions, performing religious dancing, and recreation and society building, have

become mere recreational appendages for the entertainment of visitors to amusement parks or folklore festivals. Is this the future awaiting all cultures?

Second proposition: Optimistic scenario. Humanity advances in global solidarity, increasingly practices ecological and economic collaboration as responsible stewards of the cosmos. Numerous, vital and authentic cultures in critical dialogue with the present scientific and technological rationality, nevertheless flourish, each one proud of its identity and its past, while actively rejoicing in the differences exhibited by other cultures. Human beings everywhere develop a new mentality, begin to nurture a sense of themselves possessing several partial and overlapping identities, while relativizing each of these identities in recognition that their primary allegiance is to the human species. Cultural communities plunge creatively into their roots and find therein new ways of being modern, and of contributing out of their cultural patrimony precious values to the universal human culture presently in gestation.

Third and final proposition under this third theme of “ethical visions of the future”: Cultural policy actions should aim at making possible and desirable approximations to the optimistic scenario more likely to result than the pessimistic scenario. That is to say that educational efforts and policy measures in all kinds of spheres - linguistic strategy, the teaching of history, comparative literary appreciation, the promotion of the arts, rules governing courts and the educational system must be identified and adopted with a view to strengthening the forces of cultural affirmation while countering, or at least relativizing and subordinating, the standardizing forces described above.

The final axis or theme is Policy pathways or policy directions.

Proposition one: Cultural contacts and exchanges ought to proceed according to a fusion model of interaction. What does this mean? Fusion models of interaction are opposed to two contrasting extremes. The violent conquest or assimilation of one culture, on the one hand, and the passive surrender of weaker cultures to stronger ones and the acceptance of marginal rôles. Fusion in cross-cultural encounters, for instance the meeting of traditional wisdoms with scientific rationality, presupposes mutual acculturation. The key to success is clearly the elimination of all triumphalism and the acceptance of reciprocity. This approach has vast implications on at least two levels: the epistemological stance adopted in transcultural dialogue and practice, and second, rules governing practical decision-making. In short, partners to cultural exchanges must come together as equals having a common purpose. So that means that one cannot accept efficiency or social control as the dominant or the priority values of either politics or governments.

Proposition two: Accordingly pluralistic development strategies are called for, both domestically within nations and in international arenas, so the one-dimensional World Bank advocacy, for instance, of export-led growth for all countries is very damaging, it is bad economically, it is terrible culturally, it makes no sense politically. Economic growth is a legitimate development objective, notwithstanding the vast amount of writings that have

come out in recent years condemning development absolutely and totally. It is a legitimate objective, but so are distributional equity, so are the guaranteed institutionalization of human rights, the pursuit of ecological wisdom, and the active fostering of authentic cultural diversities and not just in ornamental domains of arts or artifacts or music, but in legal institutions, in economic systems, in political practices and structures. This is why in all societies planned policies, programmes and projects must negotiate some optimal mix of these diverse and sometimes conflicting development objectives, no single one of which can be absolutized or permitted to exercise reductionist authority over the others.

The final proposition: A new model of decision-making is required, one which integrates by joint negotiation three distinct rationalities: the technical, the political, and the ethical. I have a paper which appeared recently in *World Development* on three rationalities that illustrates and explicitates this ("Three Rationalities in Development Decision-Making", *World Development*, Vol. 14, No. 2, pp. 301-317, 1986). Each of these three rationalities obeys its own proper logic, sets its own goals and adopts a preferred procedure in reaching decisions. Great problems arise because each of the three tends to reduce the other two to its own preferred vision of ends and procedures. This it does in vertical fashion. Such vertical triumphalism ought to give way to circular co-negotiation in new patterns of decision-making. My conclusion is very simple: notwithstanding the powerful reductionist forces and the contradictions inherent in the social forces at work in today's world, I think a humane future for culture and development is both possible and desirable. It is possible only on certain conditions, however, namely, that the present powerful trends be vigorously combatted and reversed and that appropriate creative and corrective policies be successfully adopted.

MR. SASSON: I think we should now have some kind of a debate. Would you like to approach the debate by talking about the development part, the cultural part, then the proposals for the optimistic or pessimistic future of culture, and then finally the proposals? Or would you just like to leave it open? The debate is open.

MR. SALIH: I think Dr Goulet has faced us with many riddles to which I personally do not have the solutions. For example, who is going to formulate this new model of decision-making? The contradiction I am talking about in UNESCO dealing with cultural matters is that I feel it assumes a rational world, it assumes a world where nations, tribes, communities, deal on a basis of equal give and take. We know that is not true. In fact most of the advice Dr Goulet has given should be directed at the strong cultural decision-makers or culture-makers of this world. I cannot imagine a community in Africa or the Arab world or Asia being asked to deal on the basis of reciprocity, not to think of triumphalism, or whatever it is. But this would be very good advice for the United States, for Britain, for people who for various reasons we know have got the ability to produce and to disseminate culture and in some cases to impose their culture on others whether they like it or not. I think it is a very interesting riddle but it is a riddle. I don't know how UNESCO is ultimately going to balance the problem that here is an organization which was created in a flush of optimism assuming

that the world is going to be peaceful, rational, no wars, no demands, no efforts of domination, acting in a way - as we say in Arabic - like death in the wedding, and I hope that during our deliberations, we may find a way.

MR. REIFF: I found Denis Goulet's introduction quite stimulating. I have three questions, really, to put to him and also in relation to what Dr. Masini said, reflecting on it from an organizational point of view and seeing what we can do in the future. Dr. Masini said that culture is by definition UNESCO's cup-of-tea. This is true, we have some kind of monopoly in this area, but in development we do not have a monopoly. So, the question is, with our partners in development, and these partners are by definition some of the major donors like UNDP, the World Bank, the regional banks, etc., how do you see that with having a monopoly on culture but being a partner in development and very forceful at our partners intervening in these areas, how can we as an organization try to mix these two issues and have an impact at national levels? And related to this question is that in your proposition, you have not talked about institutions. We in UNESCO are an institution, we are an organization, and we deal in Member States with institutions: is there not something about institutional economics which could help us, deepen your proposals into more concrete action-oriented propositions? And my third remark is that in your introduction you have not touched at all on issues of quantification. Does that mean that in the area of mixing culture and development and economics, this is not an area which you think we should get into because I can tell you that whenever we meet with our partners in development, in the cultural dimensions of development, they very much request us to come up with some models to try to quantify the relationship between culture and development?

MRS. MASINI: Mr Salih's questions are I think extremely important, because they really touch on what we do about it. And I think that we are at the point in history where we have to do something about it, and the negotiation idea that Mr Goulet gave us before - whether with legal institutions, ethical systems, political structures - is one answer. It is all a question of negotiations now, and nothing more, as you write in your analysis, but we have to go beyond that on every side, because if we don't we are in a dangerous situation.

MR. SALIH: I certainly do believe that we have to go beyond the present situation which everybody accepts is not satisfactory and I may add, as a so-called creative person myself, I assume that the world can be better. But I think we should not gloss over the fact that the situation which exists now is really not conducive to all the very good ideas which Dr Goulet has given. I think his pessimistic scenario, which he presented at the beginning, is probably nearer the mark, the optimistic scenario is what we hope for.

MR. SASSON: We would like in this exercise, first of all and above all, to be neutral observers of a situation or of situations. I prefer the plural, because probably what is true in

one region is perhaps not absolutely true in another one. For example, if you take the pessimistic approach, it might be true that in Asia, the traditional and the local culture perhaps better resists the assault of a so-called dominant culture than in Latin America, in Africa or in the Arab States. But we would like in this exercise first of all to see and to make a diagnosis based on the most reasonable data available on approaches. Because in the exposé of Mr Goulet, I saw very clearly first of all statements of what he feels is the situation, a diagnosis. We might agree or we might disagree with him. The second thing I saw is the prognosis. From that diagnosis, he projects himself into the future and says "I see this trend, or I see that trend". I am almost ready to share more the pessimistic approach than the optimistic approach, but I would like to have data on it, to substantiate it, to support it, if he can give us data, if he can give us examples or if he can show in the coming exercises through examples how the world is going. Has he examples or hints or evidence that what he feels should be the way to modify the trend, or to get closer to what Mr Salih said exists - a more reasonable world? Are there areas, are there countries, are there places, where - as you said - there is this kind of negotiation, there is this kind of discussion of blend, in order not to be completely smashed by a dominant culture or at least to negotiate with it and to find a compromise? Or is it just purely a wish by a man or a woman of goodwill who would like to see the world differently from what it is? That is why we in UNESCO, first within this programme, we would like to be good, I am not saying or dare to say scientists, just observers. What is the situation? How is the situation going? We as an organization with an ethical mission, of course, we would like, if we think it is wrong, to try to change it or to modify it -not ourselves but the Member States will do it. So, you see, I agree with Dr Salih, it is that we should make a distinction between the diagnosis, the prognosis, and eventually make some proposals for changing a trend if we feel, as experts, or as people coming from different cultural horizons, that it is should not be as it is.

MR. G. SOGOLO: I do partially accept this pessimistic viewpoint. But I think that if you speak from the point of view of a regional experience, I see it rather differently if you have to explain the causes of the kind of predicament that most cultures go through. I do not believe that we can really talk about culture in the very monolithic sense, as if it is the development of culture, the world of our descent. I say this because I think that apart from the material aspect of culture, we are talking about economic domination, we are talking about the political domination of cultures and so forth. If you take quite a lot of African countries, and I take Nigeria as an example, where over 85% of the people are illiterate, and they are opposed to any modern culture, with no idea of development the world over, you are talking about the collapse of a society. At the same time there is a conflict: this is a culture that is dominated by a way of coming to terms with experience, to the real person, explaining to him about the exploitation of the world and so forth: how do you explain his fortune or his misfortune, which are not directly the same as what happens in another world? His conflict is not to remain isolated from the modern world. So what is happening? The product of culture, particularly Western culture, is already affecting him and this proves to be very attractive to him in terms of day-to-day living. He would rather want to embrace it. But, of course, he cannot do away with the predominant world in which he has grown up and,

because of the slow pace of getting exposure to development, he will still have to live within those ways of thinking for many years to come. So he has a difficulty. He would like to live the way the modern world is living but as yet he cannot afford it, or he needs many years of gradual exposure so that his kind of conflict is different from what you find when you talk about culture among the cultures that have been able to penetrate amongst themselves. I am talking about societies that you would say are almost closed societies and a few of them are able to feel that if they are educated, they have come to know about modern societies.

MR. GOULET: I know that I cannot adequately answer all the questions that have been raised, but let me try to pull together a few points of synthesis.

Yes, I would agree that by any kind of reasonable or evidence-based prediction of the probable outcome of the future, something closer to the pessimistic scenario is far more likely than the optimistic scenario. Secondly, the optimistic scenario is painted in ideal terms, that is why I said I don't think the ideal can be achieved; it can be held as a vision to establish policies that achieve successive approximations to the ideal. Just as we have codes of conduct and charters of rights, no country fully implements the charter of human rights, but there is some educational value to governments and some value in legitimizing certain human ideals to serve as a reference and a gauge. I don't think that the Hungarian ethnic minorities living in Romania are simply going to forget that they are Hungarians and embrace their Romanian brothers. Or that Poles will suddenly start applauding the unification of Germany and let Germany return to its 1937 borders. Or that the Jews in the Soviet Union are going to welcome the new Pamyat movement that wants to resurrect the 19th century pogroms. In other words, any rational look at the probable outcome of future trends leads to pessimism, but all human activity has to be based, I think, on some kind of transrational basis for creating hope. In 1981 nobody in Poland thought, when Martial Law came, that Solidarity could survive. Survival was an act of will: Poles refused to die, and they stuck it out. Any rational assessment of the way the military fortunes of the United States were going in Vietnam, a few years before the end, would have said that the US would win the war. So we have ample evidence in our century that the world does not operate rationally, least of all for futurists. Nobody checks up on the dire conclusions that futurists make about things that are going to come about. I think that we either accept that the world is deterministic, in which case there is nothing you can do about it, so we live our little hedonistic lives around our own personal satisfactions. Or we may refuse determinism. Camus, the thirtieth anniversary of whose death is being celebrated these days, once said that what distinguishes human beings from all other beings in nature is that this is the only one that is capable of not accepting nature. For 140 years Marxists said that the laws of history lead ineluctably to a certain outcome. We are starting to see that it was not so ineluctable. So I think that the burden of argument lies on the pessimists to show that their future prospect is more likely than the other. I don't think that we need to be either optimists or pessimists: either we are responsible creators of our universe, our social and cultural universe, or we are not. And it is necessary that there be institutions as well as individuals whose mission of vocation is to be "neutral observers", but it is no less necessary that there be people, who are no less interested in the facts and the

data, but who are passionate advocates. I think there is room to promote both an assessment of what the data tell us about prospects and visions of creative action to establish new possibilities. I define politics as “the art of the possible” not in the sense of manipulating within given static boundaries of possibility, but rather of creating new possibilities by implosion from within and explosion from without. There exist all kinds of examples at the micro-level of small groups, whether it is Savodaya in Sri Lanka, or the Kuala Jubu communities who say no to the main-stream decisions of their governments. They do not say no in a passive defensive mode, to seek refuge in some cultural sanctuary or haven of refuge against these standardizing, modernizing forces, but are creating a new model of development. The real difficulty is that these actions can be multiplied and repeated and still have no bearing on macro strategies. This is why I think it is important to destroy the monopoly of legitimacy enjoyed by a one-dimensional development model or advocacy; there is room for conceptual work of a critical and constructive nature to establish the legitimacy of another model. You raise, Mr Reiff, the question of quantification. Absolutely essential! Everybody in development circles, at the World Bank or the IMF, in USAID or the Voluntary Agencies has said for years: “Of course, we know that development is not just about economics, there are some social things, some political things, and cultural things, but we do not know how to measure these”. Well, the Overseas Development Council, a non-governmental private think-tank in Washington, simply said: “Let’s create a new social index: it is very imperfect, the Physical Quality of Life Index” (PQLI). They did not simply create an index conceptually, they marketed it. At present the Centre Lebrat in Paris is launching a project to create a new index of development which would go beyond social dimensions and try to capture some of the other spheres of authentic development. We all recognize that development must contain elements of economic growth, of social well-being, of political and human rights, and freedom, and some researchers, like Raymond Gastil, have published a freedom index for a year. So there is work now going on to establish some kind of comprehensive index of development. One should not get bogged down with millions of statistics as did Jay Forrester when he created a computer model for world dynamics around one hundred thousand variables. Normative thinking about development must not be relegated to econometricians or statistical experts. One has to find something, however imperfect, that makes the statement eloquently about development and translates it into practice the way that the P.Q.L.I. did.

I recognize that many of these telegraphic statements pose riddles to which there is no magic answer. Thirty years ago Senghor said: “We Africans do not wish to be mere consumers of civilization”. He meant two things by that: if the only way to become “developed or modern” is to commit cultural suicide, many of us do not want to do that. In other words, if Africans can be “developed and modern and enter the twentieth century”, only by becoming pale carbon copies of Europeans or Americans, they do not want that! Senghor argues that Africans think that it is from a deep plunge into their own cultural roots, their past, with all of its contradictions and its abdications, that they can draw the vision and the strength for an alternative way of being modern, a different way of creating institutions that can assimilate technology selectively. He also believes that, thanks to their view of nature and the relationship between human beings and nature, Africans possess something positive to offer

to the world community that may be too one-dimensionally given over to a promethean and manipulative view of the forces of nature in the ecological domain, in the domain of the relationship between the older and younger generations. Africans have, in their own culture institutionally, behaviourally, ritually and symbolically, some positive values which are necessary correctives to the dominant prevailing values that get institutionalized in "development". You are absolutely right to say that we are swimming against the stream. Thus I think that small forces, if they don't give up, need some allies. UNESCO has access, has legitimacy, has "entrée". It does not have the resources or the power of the World Bank or the IMF. But there is within the IMF now a recognition that this structural adjustment programme is monolithic; some in the higher circles of the IMF, are searching for ways to bring a human face to structural adjustment. That is a palliative, I recognize. But it is a fact that the World Bank has been forced to change the use of hundreds of millions of its dollars in Brazil because of the pressure of local communities. I gave a couple of examples in the paper I just gave you, of weak and vulnerable communities refusing to accept the terms on which aid is offered. I think that one of the tasks of UNESCO is not just to be a neutral observer but to provide resources and encouragement to those advocacy researchers who are in the business of practising and experimenting new modes and some conceptual work on exactly how you can bring the qualitatively good alternative development efforts of small vulnerable groups into the micro arena. I recently wrote a book that deals with negotiating incentive systems from within a set of values where you want to maintain your cultural identities, with illustrations from a few places in Brazil and Asia. It is not as though micro examples don't exist: they are numerous. I remember a few years ago in India when Morarji Desai was briefly Prime Minister, from 1977 to 1981, he told me in an interview: "We have tried for three years to bring to India a Gandhian strategy of development, favouring village development and small industries and orienting our incentives and our support in tax breaks to small operations, development in place". He added "I think it may be impossible for India to pursue a Gandhian strategy of development unless the whole world were Gandhian, or at least unless the region were Gandhian". Desai frankly recognized the enormous weight that large forces exercise on any nation. This is why fifth-column action is needed to undermine the monopoly of legitimacy on certain ideas, particularly certain strategy ideas within the bowels of the IMF and the World Bank. If certain people are doing that, it is very important for them to have some kind of good house-keeping seal of approval, from a more straight-laced legitimate kind of organization like UNESCO. UNESCO can confer that legitimacy under its banner of pluralism, its mandate to examine the range of possibilities, including possibilities of helping to create new indices, to promote some advocacy and research by individuals or institutions. At the same time UNESCO promotes dialogue. Every social science has its body of more normative people and its so-called "numbers crunchers". Yes, we need quantification, but we don't need quantification if it is going to basically reinforce the licence given to reductionists to proceed with their reductionism. And the qualitative people, the people who call themselves inter-disciplinary, need to be brought to discipline and to rigour by the quantifiers so that they don't just spell visions off from the tops of their heads.

MR. SALIH: I have a question which I think underlies the whole thing. What is UNESCO to do? We know that UNESCO is made up of Member States and by definition that means it is

an approximation, that is, it takes the consensus view, so-called, of the Member States. Now that is all very well in everything except in matters of Culture. Because in matters of Culture, as we know, you have to stick your neck out, you have to have a standpoint. And from Dr Goulet's exposition, two points arise: (1) that culture can be used for destabilizing the existing order on the assumption that it is not satisfactory and we want to evolve, create a better order and I think on the whole that's what happened in, let us say, Eastern Europe and that is commendable. But, in the Third World on the whole, in Africa certainly, in the Arab world certainly, cultural forces are supported by states and governments as a means of what Dr Goulet called standardization of forces - he used that in the negative sense. But these people assume that their priority is to create cohesive units and they hope that culture can help them to do that. Now what does UNESCO do in a situation like this when it talks about culture? Does it support, for example, culture-makers who are by definition destabilizers, those who are actually disseminating ideas which in some cases are considered seditious and maybe not even supported by their own government? I think it is a dilemma, which is worth thinking about.

MR. GOULET: Yes sure, cultural advocacy can be profoundly destabilizing in two ways. There is the problem of elitism in culture, for one of the modern values most powerfully vectored by the myth of development is equality, male/female equality, older people/younger people equality, functional equality, a powerful assertion against all forms of elitism. We simply observe that most cultures dating before the present time are not egalitarian. They sharply conceal the differentiation of rôles and even symbolic and philosophical justifications for all kinds of inequalities. So, I think that if UNESCO were to take too absolutely the view that it is a consensus organization whose members are Member States, it will condemn itself to insignificance simply the way a corporation does when it says "Well, let's not rock the boat, let's have committee decisions". Of course that guarantees the lowest common denominator, that guarantees that one is basically a follower and usually not a very creative or energetic follower, since by the time you follow and catch up, somebody has jumped ahead so you are not even successfully following. I don't know exactly what freedom to operate creatively, and even controversially, UNESCO has without committing institutional suicide, which no institution likes to do. We don't have in history many examples of "Philippe-Egalité". One of the lessons of history is that institutions and individuals don't surrender their privileges, which they really think are their rights after they have had them for long enough, unless they feel that they have to. The representatives of many cultural aspirations know that they face drastic dilution or marginalization unless they can come to terms with the standardizing forces of the managerial system of organizing everything and the state system. The conceptual reductionism that comes with the technology of the media has suddenly made quantity seem more important than qualitative judgement. That is why within the social sciences a small minority of people, 40 years ago, criticized the myth that there was such a thing as value-free social science. There is no such thing, and I think that the idea that if one is dealing with cultural, spiritual, psychological, subjective, or qualitative things, this is somehow really scientific and rigorous only if one can quantify it, is also a myth. The most important things in life are not quantifiable.

MR. SASSON: Just one question. To what extent is there a non- Gandhian development style in India, because you said that India could have Gandhian development only if everybody in the region or the whole world was Gandhian? So I might assume that what India is doing now is a non-Gandhian type of development, fair enough. To what extent is this non-Gandhian type of development harmful to India's cultural development or is there a compromise between cultural approach and cultural setting, and is that development? I am convinced that the non-Gandhian style has brought some prosperity to India. As you said, economic development is legitimate, fine. Did India lose something in its culture, in its tradition, in its set of values, in its systems of ideas, of representation, by doing so?

MR. GOULET: I think Gandhi was naive on this point: he simply did not look at the question of large scale and the mass. He simply wanted to wish big cities and big industries away. One cannot do that and that is part of the reality too, and it is not all bad, even though some bad things have come with the package like Bhopal, etc.

MR. NANDI: Gandhi specifically recommended a number of modern artifices for India: the three well known ones for which he created legitimacy were the lathe, the sewing machine and the bicycle. It is not that he rejected the large, but he saw it within the framework of the small. India also has a tradition of urban living stretching back 4000 years, so he did not want to write it off, or reject it, but he recognized that a majority of the 800 million Indians stayed in the villages for better or for worse. And some charisma must be imputed to that way of life, to make change, any particular kind of change, including locating some diluted version of the urban industrial vision within the Indian context.

MR. GOULET: The problem is the same faced by E.F. Schumacher, author of *Small Is Beautiful*. Maybe small is beautiful, but some big is necessary and some big simply is there and cannot be eliminated. Therefore a one-dimensional advocacy of the small, the counter or the alternative, will reinforce the notion that the best one can do is carve out little slivers of space for alternative solutions. Advocates of the small, or of cultural defence must come forcibly to grips with the kinds of dilemmas that the macro advocates of the big face. Now, the second stage of Schumacher's logic of "small is beautiful" is the success of George McRobie who wrote a book *Small is possible*. It does not suffice merely to show that a different way of doing things is desirable, is nice, is good; it must be proved to be possible, and here is where examples are important. But a third step may be necessary: I told McRobie that he ought to write a book *Small is powerful*. Why? Because country after country adopts technology that is culturally, economically, socially and geographically inappropriate because technology is viewed as the chief means to power. Unless decision-makers, strategists and planners can be persuasively shown that the small or the multi-dimensional or culturally enhancing protective things can also produce economic power and political power, they will ignore these values. However, they will say "Yes, it is beautiful, it might even be

possible, but the nature of the game here is big and powerful. And, if we must, let's accept cultural standardization".

MR. SOGOLO: May I just ask a question on equality? I do not know whether you are assuming that equality is "passé", because in some cultures, again now talking about most African cultures, where the authority and the trustee of the traditional chief are accepted - that he holds the land, he holds property in trust for the rest of the many members of that community, and they willingly accept that authority because it is not like the modern capitalist system where the man who holds the property denies the other, but the Chief is willingly prepared to share out whatever he has and members of the community, those who are supposed to be dispossessed, accept that whatever he is holding, he is holding in trust for them. I would say the same thing about the whole crusade of feminism. A lot of African women do not seem to accept the fight for equality between men and women, because they see their own rôle culturally as being denied, namely, that the moment you say that they are equal to men in certain respects you are denying them what naturally belongs to them, you are redefining their rôle as women within their own culture. The question is that I do not know whether it would be a good thing if you were now to try to force the illusion of equality.

MR. GOULET: You raise a valid point, and I don't think equality, particularly in its present highly Western modes of expression, can automatically be assumed to be a universal or an absolute value. You are absolutely right to say that what is more important than equality is that individual persons and communities receive esteem and be treated by others as beings of worth for their own sake, independently of their utility or function to the other. In different cultural and social settings there will be different rules of the game, different institutional arrangements and they won't be static or unchanging as to exactly how you blend the need for integration in a community with authority, some of which is indispensable with guarantees for human freedom, and there will be aspirations for equality that may take different forms. No, I do not start out with an initial assumption that the present institutional or psychological models of equality which had their origins in certain Western societies are necessarily, immediately, or automatically either universal or absolute. I further admit that even if you were to say that equality had potential or a universal application, in its particular institutional and behavioural manifestation it admits of a high degree of relativity where there will be different mixes, different patterns of authority and arbitration and negotiation as to exactly how conflicts between the stewardship of the common good or the active fostering or promotion of it can be reconciled with community-shattering assertions of individuality. I think that here a UNESCO kind of detached observer inventory of the high points of cultural conflicts would be useful. If UNESCO could shed quantitative and interpretative light on the different forms in which major cultural conflicts manifest themselves, whether ethnic conflict or conflicts of value, opposing tradition and modernity, it would help. Many people in Asia and Africa think that the language of human rights and the need to incorporate it in a legal system are very ethnocentric.

MR. NANDI: My task has been made a little easier by Denis Goulet's presentation and instead of mechanically presenting the note which I have written, which is available for you to read (cf. position paper in Annexe), I would also like to take into account some of the points already made. And I shall try to the best of my ability to simplify some of the points raised by Denis in the morning.

At one level, we know what is what. We know for example that all the problems of humanity were solved once and for all in 18th century Europe, when the Enlightenment consolidated itself. All questions to all human problems were answered at that point and all that has been left for humanity to do since then has been to work out the implications of the experience of 18th century Europe in different ways in different countries, handled or managed better under the guidance of institutions like UNESCO perhaps in some other societies, and so on and so forth, and all we have to do around the world is to climb an inclined plane of history, climb slightly out of breath and panting, and our success will be judged by the extent to which we can climb faster than somebody else is also trying to climb. Previously, we were asked why we were not like the United States. First, in India we used to be asked why we were not like England, then when England fell on bad times we were asked why we were not like the Americans, and then we were asked why we were not like the Shah of Iran - that is a Third World example. Now we are asked why we are not like Japan. So we always have to be like somebody else to justify ourselves. That is one part of the story which we all know well. Once you know this, you also know the other part of the story as well, that the future of culture, if you are talking of it in the singular, is very bright, and the future of cultures, if you are talking about it in the plural with an "s", is rather bleak.

M. DE JOUVENEL: Je voudrais limiter mes propos à quelques remarques - je prendrai tout d'abord un exemple celui de l'automobile, dont le prix dépend de moins en moins du coût de la tôle et du plastique et des coûts salariaux des personnes qui travaillent directement la tôle et le plastique. Le coût d'une automobile dépend de plus en plus d'activité immatérielle: recherche et développement, ingénierie, design, publicité, communication, marketing, et ceci est encore plus vrai dans les industries de hautes technologies. Vous savez qu'on dit habituellement que dans le prix du composant micro-électronique de base, la puce, il y a à peu près 95% d'investissement immatériel. Cela signifie que nous sommes en train d'assister à une mutation tout à fait fondamentale, au travers de laquelle la richesse qui reposait sur le sol et le sous-sol, sur des matières physiques, repose de plus en plus aujourd'hui sur de l'immatériel, qui est de l'intelligence humaine, du savoir faire, mais aussi des attitudes, des comportements, une capacité d'adaptation et de créativité. C'est là un élément tout à fait fondamental, qui signifie que l'irruption du culturel dans l'économie devient une condition *sine qua non* de la réussite économique. On peut s'en réjouir, on peut également s'en inquiéter pour les pays en développement en voyant, par exemple, que les matières de base voient leur prix stagner, voire décliner, puisque la croissance économique dépend de moins en moins des "inputs" de matériaux mais on peut également se réjouir de cette évolution pour les pays en développement, en se rappelant que le tiers monde qui représente en termes démographiques les trois quarts du monde, constitue un fantastique potentiel humain, à

condition de consentir un effort considérable sur deux plans, qui, à mon avis, vont de pair: l'éducation, la démocratie et les droits de l'homme.

Deuxième remarque, cette évolution est éminemment liée à l'essor des nouvelles technologies. Les nouvelles technologies, ce sont notamment les matériaux nouveaux, l'informatique et la bio-technologie.

Le tiers monde aujourd'hui représente à peu près 5% de la dépense informatique mondiale, ce qui montre que les nouvelles technologies sont très inégalement réparties à travers le monde. Néanmoins, la mutation informatique, à laquelle vraisemblablement n'échappera aucun pays, est une révolution qui va elle aussi faire de plus en plus appel à la culture, au moins pour trois raisons. La première est que l'investissement hardware (en matériel), est aujourd'hui moins important que l'investissement en software (en logiciel). L'enjeu le plus fondamental, dans le domaine de la mutation informatique, c'est aujourd'hui la maîtrise des logiciels, c'est à dire, une fois encore de la création culturelle, intellectuelle, scientifique. Deuxième élément, différents pays, ou même pour prendre un exemple encore plus frappant, différentes entreprises disposant de la même technologie ont des performances économiques radicalement différentes. Ce qui fait en effet la différence entre deux entreprises, ce qui fait la différence entre deux pays, n'est pas tant la technologie elle-même que la maîtrise adéquate de ces technologies, passant par une appropriation sociale de ces nouveaux outils, et c'est donc une fois encore les capacités d'apprentissage, d'adaptation, et de création des individus. Je pourrais vous donner de nombreux exemples d'analyses comparées de firmes, où l'on constate de plus en plus que ce qui fait la différence au niveau des performances économiques c'est avant tout la variable sociale et culturelle. Troisième élément: la technologie informatique conduit à l'heure actuelle à une substitution de travail humain par du capital, par conséquent ces innovations sont globalement destructrices d'emplois, d'où un fantastique besoin de créativité au niveau des modèles alternatifs de développement.

Un mot ensuite sur la bio-technologie. L'essor de la bio-technologie nous interpelle au niveau philosophique, éthique, social, et culturel. Des questions nouvelles vont se poser quant aux relations entre l'homme et la nature, mais c'est encore plus vrai de l'essor de la génétique et des questions qu'elles vont poser quant à notre conception même de l'homme et des relations entre individus. Je prends un exemple, "un micro-exemple" à l'intérieur même d'un espace culturel aussi homogène que l'espace européen. Observons la fantastique différence qu'il peut y avoir entre l'Italie et l'Allemagne, l'Angleterre et la France, sur des questions aussi élémentaires que les problèmes de transfert de sang ou d'organes; ces transferts sont gratuits en France, payants en Allemagne. Plus nos moyens techniques vont progresser, permettant des manipulations génétiques sophistiquées, plus le risque va être grand de voir des individus - pour satisfaire leurs besoins les plus élémentaires - aller vendre leur sang, aller vendre leurs organes, voilà une question parmi bien d'autres que soulèvent l'essor des nouvelles technologies.

Dernière remarque concernant plus spécifiquement le problème des valeurs. Délibérément j'adopterai une attitude optimiste. Contrairement à ce qui a pu être dit sur la tendance à

l'uniformisation et à la massification en matière de comportements sociaux et de valeurs, j'ai le sentiment que nous assistons à l'heure actuelle, à travers le monde entier, à une recherche frénétique et à certains égards inquiétante, de nouvelles identités. Autrement dit, il y a une espèce de crise touchant aux grands référents collectifs, aux grands espaces communautaires, et une sorte de désillusion vis-à-vis des choses qui entre nous faisaient qu'il existait une certaine solidarité hier et, contrepartie de cette désillusion, on assiste à une recherche extraordinairement profonde d'identité. Avec à l'arrière plan un enjeu majeur, me semble-t-il, qui est de savoir si après avoir désacralisé tous ces grands référents collectifs que nous avons hier, nous allons être capable d'assumer cette liberté, ou bien si pris de panique devant cette absence de référents collectifs nous allons, à tout prix, aller rechercher d'autres grandes idéologies qui vont nous fédérer, d'où le risque, aussi important au nord comme au sud, de la montée de l'intégrisme sous toutes ses formes. Va-t-on être capable d'assumer cette liberté? A supposer que oui, comment va-t-on concilier ces besoins d'identité au plan individuel ou communautaire avec l'exigence croissante d'une plus grande solidarité à l'échelle planétaire? J'ai le sentiment en effet qu'on est dans une période où il y a des tendances très fortes à la montée d'interdépendances à l'échelle planétaire. C'est évident dans les domaines de l'écologie, de la finance, de l'économie, (ne serait-ce que parce que l'économie repose sur des éléments de plus en plus immatériels, donc de plus en plus volatiles, qui ignorent les frontières); donc en même temps nous assistons à une montée des différences, à une diversification des systèmes de pensée en raison de la diversité des identités culturelles. Quelle va être la procédure de régulation, quelles vont être les institutions, les lieux de débats, les lieux de négociations nécessaires d'arbitrage, je n'en sais rien; j'ai des inquiétudes concernant les organisations inter- gouvernementales car la légitimité de celles-ci repose sur la légitimité des Etats qui est elle-même en train de fondre du fait même de la montée des interdépendances.

Sur les valeurs, je voudrais simplement rappeler que l'UNESCO ne démarre pas à partir de rien, ne serait-ce qu'en raison d'une enquête à laquelle j'ai eu le privilège d'être associé il y a deux ou trois ans, enquête de type Delphi réalisée avec l'UNESCO par Futuribles International à l'échelle du monde entier et qui avait pour but de mettre en évidence le pronostic d'experts en sciences sociales sur l'évolution des valeurs à l'horizon 2000 dans l'ensemble de la planète ("Le monde à l'horizon 2000", UNESCO, BEP/GPI/1, août 1987). Je voudrais citer un deuxième document clé pour les réflexions engagées ici, celui réalisé sous la direction de Eleonora Masini, "Visions of Desirable Societies", (Pergamon Press, 1983). Un des problèmes majeurs du monde actuel tient à l'absence totale de vision qu'il nous offre. Pendant longtemps on a assimilé le développement à la modernité, donc à l'adoption du modèle occidental de développement; fort heureusement les japonais nous ont montré qu'on pouvait se moderniser sans pour autant s'occidentaliser complètement. Mais au delà de ce modèle, difficilement transposable, je trouve qu'il y a un vide intellectuel, voire politique. D'où une responsabilité majeure pour l'UNESCO, appelée à être un fertilisateur, un catalyseur de réflexions, de visions alternatives de sociétés.

MR. CONCHEIRO: In essence, I think that economy should be considered globally as part of culture and so I might even ask if we are not speaking of something which is redundant when

we separate economy and culture. I think that some of the examples that M. de Jouvenel gave us actually put the thing in that perspective. Whether or not material things are considered part of the culture makes no difference to the strength of the links between economy and culture, at least as concepts. Maybe one should even distinguish between a culture and a cultural system inasmuch as in one, one has what can be called the material culture or things, the society, or the people and the culture, which are essentially the traditions, the given identity, the ways of being, of doing things, values, etc., and further the activities necessary for the survival of that society which would, together with the material culture or the things, be more properly called the economy. That they are clearly linked is obvious. I think that much economic activity, economic growth, depends on innovations derived from both technical and scientific knowledge and the wealth of nations rests not on their resources, but on their minds. So, if one starts with that concept and one accepts that between 40% to 80% of post-war economic growth has been attributed to science and technological innovations, it is easy to understand that for the economy, science and technology are basic and fundamental. I remember reading a paper by Brunowsky in a beautiful book which is called "The Sense of the Future", where he discusses the need for certain values to prevail in a society if science and technology are to be practised with any possibility of success in that society. And some of these values that he mentions are truth, honesty, independence, originality, decency, freedom, respect, honour, dignity, and tolerance. As with any of these, it might be that the development that you have in science and technology is fractured due to a particular individual, but it is not a collective property of society. Now some of these values might or might not be adopted by society, and I think that much of what we were told, that given the same tools or technological tools one can have differences in the development of the economy, might be related to the way societies adopt or practise some of these concepts. I know that in some developing countries, one might say we want science and technology as part of our values and our economic development. However, in a certain political system, it might not be that independence or truth or honesty are given a positive value. So if they are not, no matter how much money or resources we put into the development of science and technology, we might get very poor results. A recent comparative study of work-related attitudes and values of managers in a large number of countries, has added to what was mentioned by M. de Jouvenel and makes interesting suggestions on the effects of values and economic organizations - it is a study by Hugh Davy called "Cultures' Consequences". I think that during the 1960's the concept of cooperative strategies was that in business, theory was substituted by a concept such as management by objective and during the 1980's the latter concepts were gradually replaced by the concept of cultures. So it is a clear recognition that economic success may need more than just efficiency and good management practices and technology. And even according to some, during the 1990's and beyond, corporate cultures will give way to a search for what they call "a sense of reality". When speaking of future economic changes it is also frequent to point at certain characteristics which are considered to be, and I might add not always with good reason, a global world sense, and among these are obviously the globalization or internationalization of the economy, the so-called tertiarization of economies that was mentioned before that restores and services the knowledge of societies, the linking of markets, first the markets of raw materials and goods and very recently goods and capital, the

increasing importance of the specific basis as a central trade and economic development, and maybe the new-found multiple attitude of the world. I would also link to that trends towards a new kind of corporativism. So, dominant economic powers have historically affected and changed the values and culture of those within their sphere of influence. During this century we have seen features of the American way of life that have been adopted on a world scale regardless of having a local culture surviving in parallel with them. However, if in the future, as seems likely, the American economic hegemony is questioned, one might ask if its cultural influence will diminish or will Japanese or German values, just to quote an example, gain international presence?

In some countries and maybe even on a global scale, I think that financial matters seem to have gained prevalence over production matters, i.e., we now speak more about financial matters than the real economy. Financial flow seems to be dominating economies, particularly those with high inflation rates, with differential interest rates, volatile money markets, non-uniform rates of return for investments, etc. So, in some countries, this has altered the power structure and within companies, the value of financial managers has been substituted for that of production managers, which means that medium to long-term productive investments are becoming less popular. Speculation seems to be gaining the upper hand, aggravating trends which contribute to increase volatility, and for some countries economic changes have meant a switch from expectations for growth to hopes of survival.

Further, vulnerability to external economic forces, such as was mentioned before (the external debt, for example), has meant a loss of independence and even self esteem. Productivity, value-added and technological innovations, have suffered from the blows dealt by external and internal shocks. The reduction of productive investments and consequently the insufficient creation of jobs in the formal economy together with other factors such as bureaucratic obstacles, the search for independence, tax evasion, very low minimum wages, you name it, have created a very rapid expansion of informal or underground economies, which in some cases may today represent as much as half of the formal economy. In the future, at least in most developing countries, it seems unlikely that a trend reversal will occur. The phenomena of underground economies are not exclusive to the developing countries. They also occur in some industrialized countries. And this may in turn, among many other things, bring about perhaps less governable societies because an increasing amount of activities occur outside controlled channels. Perhaps this will mean more political instability. This, together with many other economic and cultural changes, also points to future changes in the way jobs, formal employment and working places will be perceived. I think that 40 hours a week full employment may be a thing of the past, and I am sure that increases in productivity will be needed and are most likely to occur. Free or leisure time will almost certainly increase for most people. However, it may or may not be used to improve the quality of life. I think more opportunities for do-it-yourself activities or self-reliance will be available. Informal continuing education kits and programmes could be expanded. It is a matter of access or having the money to buy them. This might also polarize societies. Extended holiday periods may also modify travel and tourism and we will have to adapt to this new environment.

Changes in communication and transportation systems and technologies will also certainly modify both economics and culture. Although certainty about commercial success is far from clear, I think that development efforts will probably lead to much faster jumbo cargo planes and much faster passenger planes which will increase and intensify the internationalization process that I mentioned before. Advances towards integrated service digital networks will hardly be stopped in a growing pattern of integration between communications and computers. Home video entertainment centres are also likely to expand in numbers and options, not only because people would like to use them, but because they are commercial products that will be sold by those industrialized countries that have a lead in these technologies. So the potential social and cultural changes induced by all these developments will most likely be far-reaching.

Through different periods of history some countries have chosen inward-looking approaches to development, for example China or Japan in the 16th and 17th centuries, and again at different points of history, and although it is not easy to explain why this has been so, it seems that cultural character has been a great influence. Today, as mentioned earlier, integration and internationalization seem to be the predominant trends. However, in parallel I see a resurgence of local values and communities and I think this has been pointed out repeatedly in literature. The State, so to speak, is becoming too small as an economic unit, but too large to represent local cities and interests which allow for local cultures. If internationalization proceeds, those economies which have been relatively isolated from international flows will have to make great adjustments to reposition themselves in the world economy. I am thinking not of countries which are generally associated with isolation, such as my own, Mexico, which although it has been linked to world trade flows, has done so in a very small way. If the link increases, it will have to make very great adjustments. Consumption patterns, subsidies policies and commercial practices will have to change. Clientelist practice will have to be transformed into competitive policies and in a more tightly intertwined world economy, nationalism will have to be reinterpreted. So, if local national interests are sufficiently affected, I would not say that it is impossible that they would return to protectionism, a reduction of trade flows and a break in the internationalisation process. What would happen, for example, to this whole process, if a recession hits the American economy? I think that all our perceptions about the way futures are going would change.

Further, I would add a different point of view, that cyclic behaviour patterns have been proposed by many of us not only in economics but also in social and cultural responses in general. Were the rural 1920's or the free 1960's and 1970's and all they imply culturally linked with peaks of economic expansion? Social tension expressing itself sometimes as internal conflicts and sometimes as external confrontation has also been associated with peaks and troughs of economic waves. Even the political orientation of societies, as has been suggested, is correlated to prevailing economic conditions. How far and how seriously one can take such theories is still debatable, particularly as regards future developments. However, it is a fact that biologically and socially, generations succeed one another every twenty to thirty years, and certainly they influence both cultural and economic behaviour. The modernization of economic structures is a common objective of many countries today.

But might I ask, is it possible to successfully modernize the economy but not at the same time other sectors of a country, for example, the political system? Can you have, when you engage in this internationalization game, different rules for different countries, can you forget about the use of asbestos in toys when you step onto the international floor? You can do it if you are an economy which is isolated, and you are producing for your own market, but if you enter into an open economy then you will have to take into account the cultures and restrictions that are placed by them in other countries.

We all search for a meaning in our activities, i.e., who are we, our values, our needs and our legends. The study of corporate cultures has explicitly recognized that this is a fact and has begun to explore the way culture relates to economic activities. How different can a corporate culture be from the culture of the host country? How far in its environment can or should a corporation try to extend its values to its surrounding communities, whether it be its suppliers or the workers' families and communities? Progress does not necessarily have to mean only economic progress, i.e., material progress. If it has been so interpreted, it may be because it is the predominant culture that has suggested it. So cultural changes, past and present, seem to propose that happiness and welfare are more than material satisfiers, although this is not to suggest that material satisfiers are not important. How do you measure happiness in any society? How can you say that we have made progress and that we are happier today than we were yesterday? And this brings to me a comment that was made by Denis Goulet. We are speaking about preserving cultures, or protecting cultures, and I am not sure that that is appropriate at all in the sense that cultures are things that work, and if they work they work because the environment makes them work. So say that there are traditions that are adopted because they work. If the environment is changing should we be preserving values and modes of behaviour that might not work in the new world?

Global and systemic views point to consequences of economic progress that were previously largely ignored, for example, environmental issues. The combination of these factors is pressing for the development of a new kind of economic theory based on a different set of indicators and part of the same or similar trend is the pain caused by our wasteful societies. Recycling is gaining credibility as an activity which makes sense, but can this be accommodated within the values of Western cultures, or the part of Western cultures that we have all adopted, or will cultural changes be needed for these trends to become strongly entrenched in the future?

Cultural and economic changes do not necessarily proceed at the same pace. Some even perceive culture as a means whereby the social system protects itself against abrupt or rapid changes. Can one propose that a change of values be adopted into culture or is that something that does not make sense by definition? Is culture something that preserves traditional ways, or can we have a tradition of adopting or managing change?

Finally, three more points that I would like to bring to your attention. One is the process of urbanization and the economies of cities that strive towards uniformity, and there I would give the example that rural time is different from urban time. When you are someone who has

arrived from a rural community and you have to adapt to the time of the city, that is to industrial or post-industrial time, you might have cultural shocks for the people who are managing the enterprises. Secondly, the rôle of women: their increased participation everywhere in the economy might change the view that we have about the economy and the way culture is transmitted from generation to generation. Women have traditionally been those that pass on cultural values. If they now spend less time with their children because they have to work, this might alter the whole process of culture transmission. And one final point: the problem of the distribution of wealth, both at the world level and at national or local levels. You cannot have uniform cultures and uniformly adopted values if you have a very uneven distribution of wealth. Survivor values are different from growth or progress values and we have found in some developing countries, with a lot of pain, that switching from an economy that is growing, whether or not it is distributing products evenly, to a serial growth economy for a decade has meant a lot of adaptations, even culturally.

MRS. MASINI: Mr. de Jouvenel said that what we are witnessing is the eruption of culture in every field. You spoke about the same in economics, and is this in a way a sort of an inversion of the trends at the beginning of the 1970's? I would like you to explain a little more about this point which I think is very interesting.

M. DE JOUVENEL: Le point essentiel que je voulais souligner, c'est que les sources principales de richesse hier étaient dans les sols, - l'agriculture -, ou les sous-sols - les mines-, alors qu'aujourd'hui les sources principales de plus values sont dans l'immatériel, dans la part de plus en plus importante des inputs intellectuels dans chaque produit et dans chaque service. Même sur des produits alimentaires et certains produits agricoles, l'essentiel de la plus value, c'est désormais de l'immatériel; sous ce label on met des choses très différentes, par exemple de la recherche et développement, des semences, des aliments, des savoir faire du marketing, de la publicité, de la distribution, etc. Il y a donc sous ce label d'immatériel des activités intellectuelles très diverses, les unes qui impliquent des qualifications très poussées, les autres qui reposent plus simplement sur des savoir faire. L'importance des savoir faire est illustrée dans le domaine industriel. Beaucoup d'études comparatives montrent que des entreprises, des ateliers, des pays, à niveau égal de technologie, ont des performances économiques très inégales ce qui reflète l'impact des facteurs socio-culturels. Je prends un exemple: je suis impliqué depuis deux ans dans la restructuration de la Régie Renault, firme automobile française qui était dans une situation tout à fait dramatique. J'ai abordé cette mission avec la culture d'un français moyen, qui se dit que si la Régie Renault marche mal c'est sans doute parce qu'elle n'a pas assez investi dans les nouvelles technologies. Et puis je suis allé visiter l'usine, et j'ai vu des ateliers ultra-modernes. Au Japon et aux Etats- Unis, il n'y avait rien de plus. Avec la même technologie la productivité des ateliers japonais était deux fois supérieure à la productivité des ateliers français. Pourquoi? Essentiellement en raison de la différence d'attitudes face au travail ainsi que dans la maîtrise sociale de ces nouvelles technologies, une différence qui dépendait du facteur humain, de la mobilisation de la ressource humaine quelque soit sa qualification. Cet exemple temoigne-t-il de ce que

l'on a appelé "l'irruption de la culture"? Personnellement j'ai tendance à faire mienne la définition de la conférence de Mexico sur la culture (1982): la culture va bien au delà des beaux arts, elle englobe des manières d'être, des attitudes, des aspirations, des volontés.

MR. SASSON: La culture c'est aussi un champ de connaissance qui évolue, qui se questionne, qui change, et qui s'intègre pour donner cet immatériel dont vous avez parlé et qui fait la valeur ajoutée plus élevée d'un produit par rapport à un autre. La connaissance scientifique s'est effectivement mariée à la culture, puisqu'il s'agit de connaissances qu'on modifie, qu'on fait avancer, qu'on questionne, qui posent des problèmes d'attitude, en particulier sur le plan éthique.

M. DE JOUVENEL: La culture englobe aussi pour une très large part la capacité d'adaptation et d'innovation des individus. On insiste beaucoup sur le rôle de l'innovation mais trop souvent on réduit l'innovation à la seule innovation technologique. Or, on a démontré qu'aujourd'hui environ 75% de l'effort d'innovation résident dans l'innovation socio-organisationnelle, les 25% restant résidant dans l'innovation purement scientifique, physique et technique. Innover sur un plan strictement technologique ne sert strictement à rien, s'il n'y a pas simultanément une innovation au niveau des pratiques sociales, au niveau de l'organisation sociale elle-même et au niveau du savoir faire.

MR. SOGOLO: I really think that the question of the development of culture has quite a lot to do with pace, pace in the sense of the intellectual aspect of culture, namely, when the material development is there you also need the corresponding intellectual attitude to carry on with a given modernization. I don't know whether it is true, as most Third World countries believe, that they can go the way of Japan. I am very pessimistic about this because there have been very glaring examples in recent times, e.g. in the last decade when most Third World countries grafted on modern products of technology without the basic infrastructure. If you make a model of a car, and you don't have the steel, and you don't have the petro-chemical, the base for the take-off of that particular brand of technology is not ready. In this way you find in most Third World countries projects in high technology which are now being abandoned because there was no solid basis for them. So I really think that it would be a little bit unhelpful to try to encourage most Third World countries in their current situation to go the way of Japan. I really think that the best alternative is at a lower level of technology, what they can afford, not what they would desire. They desire the most modern of everything like the rest of the world, but can they afford it, can they sustain it? I think that basically what seems to be happening now is that most Third World countries want to run through the stages of development within too short a period. The developed world took quite a long time to evolve and I think that the basic message should be that most Third World countries, because of their present predicament, should proceed gradually so that the material aspect of their culture can evolve gradually, rather than have an eruption by transferring and grafting modern technology in a situation where, for example, the Third World country wants to set up a

nuclear reactor while the basic electricity supply required for it does not exist. I think it would be unfair to encourage such a country to cope with that level of technology.

MR. SALIH: This very interesting position of Mr. de Jouvenel makes me, as somebody who comes from the so-called Third World, very sad. But I refuse to be depressed or pessimistic. You have got this concentration of knowledge, intelligence on one side, and we in the Sudan for example have been consoling ourselves that we have 200,000,000 acres of fertile land which we could develop and that would bring us structures, and Mr. Jouvenel, if I understood him correctly, is telling us that that is not really wealth. Wealth is in the human brain. In other words, people living on their wits, and people who are sitting on resources which ultimately, it seems, they cannot benefit from. This, of course, will go on and on until you have a situation where a part of humanity is so desperate they cannot do anything about this situation and I think Mr. Concheiro spoke about ungovernability. How do you rectify a situation like that, because we are being told by everybody now that we are living in an increasingly small world, and we are all neighbours and what happens in one place affects the other? Who is going to stir the consciences of the rich and powerful so that they stop becoming richer and more powerful? Who is going to make the caravan, so to speak, stop until the weak catch up with it? There is an Arabic saying that the weak person is the prince of the caravan and that the pace should be set to the weak, and not to the strong. We have got here a momentum which is well-nigh satanic, if I may say so, of an accumulation of power in certain areas in the world which has even almost stopped having any objective. It has become almost esoteric, that knowledge produces more and more knowledge. You know people have found the keys to the riddle and they are just going on and on and, of course, this brings into question the whole notion of progress. Whose progress, and how, and why? Somebody mentioned that Senghor said he would reject progress, but unfortunately neither Senghor nor anybody else has any choice in the matter, because you have got this satanic momentum which will go on and on. I believe that is where culture, probably in the limited sense of the word, comes in. That is where probably literature, art, and music will humanize this devilish situation. It will probably stir the consciences of those who have and will not give, so that ultimately you can talk about one globe and you can talk about the survival of the human race, and not just a survival which in fact ultimately will not be survival at all. If the situation goes on, as has been indicated, you will have turmoil, you will have revolutions, you will have a globe which in fact is not "tranquille" at all.

M. DE JOUVENEL: Je crois que vous avez posé une question fondamentale, que moi j'interprète de la manière suivante: les pays en développement peuvent-ils sauter une étape? Je crois qu'il y a là un vrai débat: faut-il passer par toutes les phases de développement telles que les ont décrites les économistes classiques ou bien est-il possible désormais pour un certain nombre de pays en développement de sauter une étape? Vous semblez dire que ça n'est guère possible et qu'il convient d'abord d'essayer de répondre aux besoins de base par des procédés traditionnels. J'ai envie de dire qu'il faut faire les deux à la fois; il faut à la fois répondre aux besoins de base par des procédés traditionnels et, en même temps, je crois qu'il

faut essayer de sauter une étape. Je prends un exemple très concret qui concerne l'informatique dans les pays en développement. En réalité il y a eu beaucoup d'informatique dans les pays en développement depuis maintenant une vingtaine d'années. L'expérience montre néanmoins que tous ces équipements sont généralement sous utilisés ou utilisés à des choses superflues plutôt que d'être appliqués à des fonctions essentielles. Pourquoi? Essentiellement pour deux raisons; l'informatisation des pays en développement se fait sous l'impulsion de l'offre - c'est d'ailleurs tout à fait frappant de voir que l'informatique dans les pays en développement a suivi exactement les mêmes canaux de ravitaillement que l'ancien pouvoir colonial-, au mépris complet des besoins spécifiques de ces pays; par ailleurs l'instrument informatique installé dans l'administration centrale adopte des nomenclatures statistiques directement copiées des économies de nord, ce qui signifie par exemple que vous avez une seule ligne pour l'artisanat et une nomenclature tertiaire très détaillée. Il y a manifestement un effort à faire pour adapter les nomenclatures statistiques aux spécificités nationales. Enfin, dans un grand nombre de cas, ces instruments informatiques sont en panne ou sous-utilisés parce que, dit-on, il n'y a pas de savoir faire local. J'ai participé à une étude sur l'informatique dans les pays en développement qui concluait qu'il y avait quantité d'informaticiens dans les pays du tiers monde, mais que malheureusement les plus performants étaient immédiatement propulsés à des postes de direction et ne faisaient ainsi plus jamais de l'informatique. Il y a donc là un problème qui concerne à la fois la stratégie de diffusion de ces nouveaux outils et, en même temps, les mesures d'accompagnement pour que l'on tire profit efficacement de ces outils en fonction de la spécificité des besoins et du contexte sociologique dans lequel ils sont introduits. Je crois personnellement que dans l'ensemble des cas, les pays en développement ont tout intérêt à essayer de sauter certaines étapes dans les processus de développement, à condition malgré tout que les processus enclenchés soient des processus qui tiennent compte des spécificités de chaque pays, y compris des spécificités culturelles. J'observe que le prix des matières de base sur une longue période tend à stagner si ce n'est à décliner. J'observe, également sur une longue période, que les sources principales de la richesse résident plus dans l'immatériel, donc dans la matière grise, que dans le sol et le sous-sol, ce qui ne veut pas dire qu'il est indifférent d'avoir de bonnes dotations naturelles en termes agricoles et miniers; lorsque je parle de l'immatériel, je précise que ce n'est pas seulement d'avoir des informaticiens de la cinquième génération, c'est aussi pour une très large part de l'intelligence et du savoir faire artisanal et traditionnel correctement valorisés. Ce qui me donne espoir, c'est d'abord le fait que les pays qui sont soit disant les plus développés sont eux-mêmes confrontés à des problèmes endogènes considérables et que par conséquent un bon nombre de pays soit disant riches sont finalement beaucoup moins riches qu'il n'y paraît. N'oublions pas que l'économie japonaise est de plus en plus concurrencée sur le plan industriel par ceux qui étaient ses sous-traitants hier et que par conséquent elle va devoir se restructurer vers un secteur tertiaire qui est loin d'être ultra efficace: n'oublions pas que les économies dites développées de l'Europe de l'Ouest sont confrontées à des problèmes structurels majeurs tels que ceux du vieillissement démographique, du chômage ou de la pollution. Par conséquent je pense que l'existence d'un quart monde dans les pays développés peut conduire dans ces derniers à une remise en cause fondamentale qui pourrait déboucher sur un autre dialogue avec les pays en développement. A cet égard, je prévois une prise de conscience graduelle par les

populations, du Nord comme du Sud, des enjeux majeurs auxquels nous sommes confrontés et à une mobilisation du potentiel humain sur ces objectifs. C'est cette mobilisation des populations qui, seule, fera éventuellement évoluer les hommes politiques.

MR. GOULET: J'aimerais ajouter un mot à la remarque faite par M. de Jouvenel au sujet de concept de "sauter une étape". Il me semble qu'il existe deux conceptions radicalement différentes qui correspondent à cette même expression. D'une part, sauter une étape peut être conçu comme un procédé mimétique qu'adopteraient diverses sociétés dites moins développées, sous-développées ou en développement, afin d'en arriver au même stade que les sociétés dites développées ou technologiquement avancées. Je préconiserai, pour ma part, une toute autre conception: sauter une étape équivaldrait à redéfinir les objectifs et même les institutions et les modèles structurels de ce qu'est la vie moderne, la vie technologiquement efficace, la vie économiquement et matériellement adéquate, en refusant de traiter la culture et les valeurs culturelles de façon instrumentale comme le font presque tous les spécialistes du développement. Je m'explique: on envisage trop souvent les cultures et les valeurs comme des instruments, c'est à dire, comme une aide - ou un obstacle - pouvant être mis au service de l'obtention de certains objectifs tels que la croissance économique, la modernisation technologique et institutionnelle, etc. Mais si nous renversons les termes de l'équation, il devient possible de regarder la culture dans ce qu'elle a d'authentique pour définir le sens de la vie. Est-il possible de se situer devant la culture et ses valeurs culturelles de manière non-instrumentale? Il ne s'agit pas simplement de remplacer un impérialisme psychologique par un autre, ou de mépriser le développement dans ce qu'il a de valable, c'est à dire l'affranchissement de l'humanité du travail servile gr,ce à la technologie. Sauter des étapes dans le développement consisterait alors à imposer une redéfinition des objectifs visant à la définition d'une société de justice et de solidarité ou à la réévaluation de nos attitudes face aux forces de la nature et en atténuant le caractère trop prométhéen. Il ne faut donc pas sauter les étapes simplement de manière instrumentale et mimétique.

MR. SASSON: Est-ce que vous envisagez plutôt un saut de type mimétique ou un saut de type, j'allais dire qualitatif, de redéfinition du développement?

MR. GOULET: Je me souviens d'avoir été frappé, il y a quelques années aux Etats-Unis lorsque je conduisais les interviews auprès des hommes d'affaires, de certaines déclarations qu'ils faisaient. James Gavin, qui fut Ambassadeur américain à Paris, disait: "Je ne veux pas être Secrétaire d'Etat pour McGovern, parce que j'ai beaucoup plus de pouvoir et d'accès aux chefs d'Etat, de possibilités d'influencer, d'infléchir les événements en Afrique et en Europe, étant chef d'entreprise" (le Bureau de consultant Arthur D. Little dans son cas). De même David Rockefeller avoua un jour qu'il avait refusé d'être nommé ambassadeur en Union Soviétique parce qu'il serait placé sous le regard des moyens d'information. "Lorsque je veux parler avec Khrouchtchev ou Brejnev, je peux le faire discrètement, nous pouvons nous entendre et il peut m'ouvrir toutes les portes. Je peux lui faire savoir ce qui se passe dans nos

enceintes.” Bien sûr il existe des structures formelles de pouvoir, bien sûr il y a les institutions, mais lorsque par exemple, il y avait un directeur fort et puissant de la Banque mondiale, McNamara, c’est lui qui détenait le pouvoir. Lorsque le directeur de la Banque mondiale était plus faible, comme Clausen, ce sont d’autres, certains de ses conseillers, qui ont eu le pouvoir. C’est la même chose avec les chefs d’Etat. Il y a des définitions contrastées du vrai pouvoir: la capacité d’obliger les autres à faire sa volonté ou l’effective capacité de créer quelque chose. Ceci peut impliquer un pouvoir de persuasion et non de coercition. Donc, pour répondre plus précisément à votre question, il est certain que nous constatons plutôt le mimétisme de la part des gouvernements. En même temps nous voyons un contrepouvoir s’affirmer de plus en plus dans le refus d’un tel mimétisme. Cette jonction dans le micro du qualitativement supérieur de point de vue culturel ou humain avec les critères qui président encore aux prises de décision dans le macro, voilà justement le point absolument crucial.

PROF. NANDI: I will tell you an apocalyptic story that might make some sense.

Francis Bacon, the father of modern science and the first to give this mandate to modern science and technology as a source of power and something which would subjugate both nature and human nature, after he was convicted of bribery and when he was leading a retired life with his scientific experiments in his old age, one winter evening he went out of his house to conduct an experiment on how a live chicken would behave if you were to force feed it with snow. How would it respond to this experience of being frozen to death? So, Sir Francis was experimenting, force feeding the chicken, and in the process the chicken, of course, dutifully expired, but he himself caught pneumonia and died soon afterwards. So, nature does rebel, or else a poetic justice is involved there. And I would like to hope that culture also rebels. In my note, therefore, I have spelt out the three or four dominant definitions of culture. Culture as what we have been told, culture as an indicator of high social status, culture as culture - you know like you buy tickets for a hundred francs and go to see it in a theatre, culture as something consumable - like hanging a painting by Salvador Dali on your wall, culture as a way of life even - with an anthropologist’s study. In Mexico City, for example, there is an anthropological museum which represents Mexican culture better than Mexico does itself, so if culture dies out in Mexico at least the anthropological museum will be left for us to visit and study culture. The point I was trying to make is this, that there is another meaning to culture which seems to be emerging at the peripheries of the world of knowledge in which we move and which dominates the global consciousness, another concept of culture which has not been articulated in professional circles, in our circles, and we do not know how to handle it. It is the concept of culture as resistance. Culture is that which resists, and I would hazard the guess that this concept of culture as resistance is inextricably linked to resisting those projects or those forces of violence - somebody mentioned the rôle of UNESCO in the world as a peace keeping force - to which the dominant global consciousness has become, over the years or over the centuries, particularly blind. I will spell this out. Give human beings any ideology, any faith, any emancipated principle, and over generations human ingenuity is such that it can convert the emancipated principle into new forms of violence or exploitation or domination. We are living in a world

which has a fairly good idea of how traditional theories - faith, religious creeds - could be used for exploitation and violence, but we have a poor understanding of how modern institutions and forces unleash its enlightenment. It is in this world that cultures have a specific rôle to play as the baseline of social criticism, not only what we may see as an irrational resistance to the forces of progress and scientific rationality, but as forces which intrinsically allow you an alternative baseline of social criticism. The standard argument is that you are trying to go back into the past, that culture has not remained what is and so on and so forth, but I do not understand the logic of this because every textbook - on sociology or the history or philosophy of science - tells me that when modern science began it went back to the Hellenic sciences for justification of its principles. Nobody accuses modern scientists of going back to the past for justifying their vocation, or justifying their philosophy of science. But if you say, in the post-modern world, that you might have to go back to the past in an innovative fashion, in a new way, into cultures, and maybe try different kinds of traditional schemes all over the world to rediscover a new baseline of social criticism, which will probably give a better understanding of the new forces of domination and violence released on the world since, you are immediately accused of going back to the past. Now, if we allow ourselves this definition of culture, which is neither the anthropologists' nor that of the experts of culture, this is the way culture is being used by a wide variety of groups from the Amazon basin to the Himalayas, then of course various kinds of possibilities open up. I mean even what Denis has called intolerable local chauvinisms begin to acquire a new kind of meaning, because you might be in effect dealing with a form of social consciousness and an institutional structure, which by default has become a means of pluralization acquiring a new vision of the existing dominant global structure and consciousness within which we are caught. I will give an example. In India, there is a lot of debate about how superstitious certain traditional forms of medicine are. This debate is very virulent, often almost verging on violence. Sogolo has referred in a different way in his note to the same kind of debate evidently going on in Africa. Some days ago in a public meeting this matter came up and people were going on and on about how we must also provide a critique of traditions. I gave the example of homeopathy and cancer. According to the American Medical Association, over the last fifty years, the life expectancy of cancer patients has increased by one per cent. In fifty years, life expectancy has increased by one per cent. According to the American Medical Association, again, each cancer patient in the United States today costs US\$ 3/4 million in treatment, and certain forms of cancer, like skin cancer for example, is 90% curable. Now, if you put these three figures together, you come to two or three conclusions: one, that perhaps when you are not dealing with cancers like skin cancer, your life expectancy has not increased at all, and perhaps treatment might even diminish your life expectancy, despite the fact that you are spending US\$ 3/4 million and you are unlikely to pay this if you have skin cancer, you are more likely to spend it on the kind of cancers which require extensive surgical intervention. Now, if you juxtapose to this the fact that many Indians try homeopathy when they have cancer, and if you presume that homeopathy cures nobody, because sugar globules ultimately do no good, it is only superstitious, then I would very humbly suggest to you that there is a possible position to take that given that the sugar globules do not have a calorific value of say more than thirty calories per dose, then you are not spending more than perhaps something like two American cents per dose. Perhaps in a

very fundamental way superstition is expanding your range of choices and giving you a more scientific rationale with access to another way of looking at the issue of cancer. This is by default, this may not be what the homeopaths claim, I am not concerned with that. Now, this is by way of an example, and I would suggest that we are living in a world where these are not hypothetically fulfilled. I can give you examples from sector after sector of life, where almost by default traditions or cultures or the ways people live have become a possible, I would say possible - underline the word possible, I am not making majestic claims for cultures - baselines for social criticisms and social intervention.

One final point, I have talked about culture as a substantive process until now. It is, however, possible to look at the concept of culture as a resistance, as a language. Whether we like it or not, in the majority of the world, a numerical majority lives in cultures and with cultures. We might be very sorry about that fact, we might be miserable about the fact that most of these cultures are imperfect, as all human constructions are, we might even like to engineer these cultures and make them better, but the fact of the matter is that, for better or for worse, this is the kind of people we are living with and they constitute the majority. Now, if you have to work with human beings, if you have to work with a majority, not directly with them as experts who are telling them what to do in the future, how to improve their lives, how to correct themselves, how to be better human beings, and so on and so forth, if you would see the world as a participatory, democratic, shared, reconstructive process, then cultures, whether we like it or not, become our language of communication with a large majority of that world. If we forget that language of communication, then of course we face the kind of pathological expressions of culture which are undoubtedly going to be there if we throttle a majority of the world and try to teach it a language which can only be understood when it communicates with you or is used to articulate grievances or anguish. If you accept culture as a language of communication, then for better or for worse, you might also have to face the possibilities that many people in the world do not talk the language of evolutionism, of stages, where somebody's present becomes somebody's future, or somebody's past becomes somebody's present. I do not say to Denis Goulet if I meet him "You are a very nice person, I like you, you are exactly as I was yesterday, and if you behave well and if you follow the principles of scientific rationality, tomorrow you will be like me, you might even be better than me, and in the meanwhile appoint me as your expert and consultant because you are only my past, you are living in my past, and I know the past better than you do, because I have lived through that past and transcended it. So I know you better than you do yourself". I can also say to him "I am a consultant for your future, because your future is not going to be any different from my present, and you are going to enter this future in the near future, whereas I am living your future now". So, I have a twin rôle to play, as a consultant for his present as well as his future. If you wish to get out of this trap, then one way of handling the situation may be to learn Denis Goulet's language, however irrational and however odd it might look, and try to find out why he does not want to be like me. I would like him to be like me, but he may not like it that much, he might not consider it a great improvement.

Many years ago, a friend of mine, a very dedicated social worker, was working amongst villagers in northern India to introduce new leather technology, amongst a group of cobblers.

That particular group of cobblers in India were Untouchables, so the project had a very humane goal. It aimed not only at improving the economic condition of the cobblers, but also at breaking down the social stigma against them and helping them to escape from the hierarchical order in which they were trapped. It was going very well. However, one old cobbler just would not change. They tried to persuade him for months, this friend of mine who was a management expert - as one would expect, management experts are always very optimistic. So he was the one who would go every few months to the village and try to persuade the old cobbler to change. One day he decided to clinch this and he said to him "Look, my dear friend, I have been trying to persuade you for six months to take to this new machinery which in fact you don't even have to pay for, I am providing it for you, I have got the money and you are not in any way obligated to me. Why? What is your problem?" His answers were totally unquantifiable. This is how the conversation went. The old man said, "Well, my dear friend...". Before that I must tell you that my friend also went and told him "Let us clinch this issue today. You tell me why you do not want to change. Even your brother has accepted this technology, and improved his condition enormously. You can see the kind of excellent clothes he and his children are wearing". So the old cobbler replied: "Yes, you are right. These machines are very good. They do improve the conditions of people, and my brother also has improved the quality of his life. But there is one thing, you know, now he is dependent on these good clothes. He continues to wear them and actually he does not need that many good clothes, but I find that he cannot get out of this good clothes business. He is to go on earning more money to provide good clothes, not only for himself but for his entire family, and his children are wearing even better clothes. And he has to earn money to provide them. In our weather, this hot weather, you do not need that many good clothes". So my friend was a little crestfallen with this argument and said "If you want to be independent, I understand that, but at least think that it is progress, everybody is changing, ultimately you have to enter the new world. You enter it, it is a different stage of history. Why don't you accept it as that?" The cobbler said: "My dear friend, that also I accept. But I want to decide at what stage of history I want to live". And then my friend gave it up as a bad job. Maybe that story has something to tell us.

MR. PIENE: I think first I will also tell some stories. Some of you may know these stories already - and then I will talk about my work.

I grew up during the years of Hitler, and we all know but we may not be so aware of it, that he was the first radio dictator. - And I think it was in 1950 - Duke Ellington embarked on his first great tour to Europe, and he came off the boat somewhere on the Normandy coast, and some fabricated statement read "Mr Ellington, what do you think would be the best thing for world peace?" And somewhat predictably he supposedly replied "JAZZ". My good friend, Chip Monk, was a radio and communications technician. He built all the stages and the amplification system for the Woodstock festival, and a couple of years after the Woodstock festival, he went on tour with Myriam Makeba. And in his spare time, between setting up the stages and the amplification systems, he taught the local population how to wire amplification systems and microphones. - You may remember another anecdote, that is when Marilyn

Monroe was asked what in a certain situation she was wearing. She answered "All I had on was the radio". - And finally, this is the fifth one in this little string of anecdotes, last Friday my wife and I went to the funeral of Lawrence Alloway, a critic and art writer and former Curator of the Guggenheim Museum. And one of the eulogies went on about his merits to the fine arts, and then said he hated all music, except for rock music.

Now I find all that interesting in view of how it seems to indicate that there are certain ways and means of transportation - I think it is generally called communication - that indeed reach many, it seems, easily. Upon that I will talk a little bit about one portion of my work that has been dedicated to an institution called the Center for Advanced Visual Studies at the Massachusetts Institute of Technology (MIT), in Cambridge, Massachusetts. I am not so much talking about my own work as an artist but am mostly talking about the goals, the work, and - the values, maybe - of this particular institution. It is one of, I think, what now must be about forty research institutes at MIT, and it was founded, it was *formed* in 1967, and officially dedicated in 1968. It has the stated objectives of interaction among artists, scientists, and engineers and, if we want to talk about fields, among arts, science and engineering, in a relatively small institution. However, we have to understand that this small institution is situated at MIT which I think is justly referred to as a big institution dedicated to teaching and the advancement, that is research, in science and technology. Our Centre for Advanced Visual Studies is mostly an institute for artists. There are resident artists, and there are resident graduate students. Since 1975 we have been running a graduate programme that leads to a degree called Master of Science in Visual Studies which is essentially an arts degree and there are Fellows, i.e., resident fellows, and these fellows as well as the graduate students come from almost every conceivable country in the world. Our institute is so international, and at times, has been so dedicatedly international that there has been serious criticism by MIT that the institute is too international. That is, our residents practice their work partly in the nature of research, of advancement or progressing in their chosen, often self-chosen roles, towards practising their art or arts. If we agree that one of the purposes of art is human expression or the contracting and the compacting of human experience into communicable human expression, then indeed I think the main goal of the people of our institute is the furthering of human expression. However, the specific goal is the furthering of human expression with the help of new technologies. Other goals are the carrying of this human expression, that is of the artist's statement, into the environment, i.e., to expand the language of the artist beyond the traditional world of the artist, or the traditional worlds of the artist, into the common environment, into everybody's environment. Part of this environment is also something that is essential, of important value to the people at the Centre, i.e., nature. So, if we are talking about art also as a mediating factor, then the mediating as we see it is not only between art, science and technology, but also between art, science, technology, and nature. Nature is something we often see as a matter of the earth. But I think we have all become accustomed to seeing nature beyond the needs and the state of the earth in the atmosphere and in space. So we are very much seeing the task of mediating as one between art, science, technology, ecology, and nature in the largest of senses. A further goal of our Centre, of which I have been the Director since 1974 - I was also the first Fellow there, first Fellow from outside Boston, 1968 till 1971 - a further goal of the Centre is to see art within a social context, i.e.,

not only see art within the context of art but to see art within the largest social context that we are capable of addressing. Then there are specific interests. One specific interest - I don't have to name them all - is, for instance, celebrations, celebrations as a uniting factor, as a form of ritual, or new rituals, that indeed use means not available when artists and when all people used old rituals for the sake of communication, for the sake of expression. I could state other interests, I could state other categories of value but this may serve as a brief hint at what is happening there in terms of its mental orientation, its intellectual orientation, and its value system.

A first medium addressed by the artists at the Center was suggested by developments in science and technology. This first medium was video - this was, say - beginning in the late 1960's -and video is to be understood as something that enables television to be television and that on the other hand enables artists to express themselves through video and enables them to address themselves to a much larger audience than through their traditional education.

Another medium is the laser, and the artist's use of the laser is indeed an interesting phenomenon because in terms of the dosage, in terms of the quantification of the medium, it seems to be somewhat in between medicine and defence. That is, the way we try to use the laser is that we attempt to quantify the laser as a tool, an expressive tool, a projection machine, an artistic sculptural tool that implements the articulation of space and of the night sky, that enables us to deal with a larger scale than traditional means offer. We use lasers in the medical context and smaller than the awesome and much feared military applications of lasers (too powerful and too expensive). Another medium that has, of course, been very much a matter of interest in our Center is the computer, the computer not only as a species which "ordinates", the computer not only as something that makes mathematicians happy or that makes airlines more efficient, or that makes vast portions of the economy more successful, but the computer as something that makes possible the creation of transportable imagery from scratch.

In our Center we now talk about the *art of telecommunication*. We do not just make phone calls, we make picture phone calls, we communicate via satellite, we communicate images, we communicate place, we communicate dialogue, we communicate artistic expressive dialogue. Parallel to the practice of the arts in the media is the art of education. Many developments that happen in the arts happen in a parallel fashion in the practice of educational communication which is equally dear to us.

Now, there are certain consequences. One is a small consequence - if we look at the global image: the practise of art education, of course, will not only change, it has changed already. The practise of art education which may be a small thing vis-à-vis the great political theatre, is on the other hand at the heart of culture. Because the practise of art education was established around the second half of the 18th century, the way it is being handled now, in the "Western" world at least, has survived to this day very much in the same way. However, there are many new institutes in the world, particularly in France, Germany and the United States, but also in many other parts of the world, which are dedicated to new forms of art education. They deal with such new phenomena as the art of television. Everybody spends a

lot of time complaining about how bad television is, and everybody usually blames it on the United States because much bad television comes from the United States. I should also say that the people who "buy" that are not really well informed. There is also a lot of good television in the United States, but that is not the part that is being bought so much the world over. In a certain way the encouragement to produce more bad television really comes from other countries. It does not necessarily only come from the United States. We attempt to make very good television and we try to share our experience and our progress with others as well. There are beautiful institutes in the United States, at least two or three, that are attempting to change that. I am also saying that with these new developments, particularly the way they have been picked up in France, there is often a very strong emphasis on technology. Also our friends in Japan are quite busy advancing technology a great deal, and often in the uses of technology, the humanity of applications of technology get lost in the process. So people often think, when we talk about art and technology, that we are inviting the devil. The devil, of course, is seen by my intellectual friends in Germany, for instance, in technology, because - an example - the devil is in the laser, the laser is defence, defence is what's wrecking the world, therefore we should have no lasers, we should have oil paint and canvas and we should have chisels and models. The problem is that, of course, there is progress in traditional arts, too. The traditional arts are very important and we love them very much, but they do not necessarily address the very important ethical task of changing world culture. I have pointed out that in our Centre many nations in the world were represented among the 175 Fellows we have had over the past 20 years, and there were many nations present amongst the 75 or 85 graduate students that we have had over the past 15 years. We realize that the transgression of traditional educational methods, or the transgression of traditional practice in communications through art, or communication in culture towards a wider culture are all very necessary.

The problem of how cultures can become new culture is certainly not solved with the advent of new technologies, but I think the chance of dialogue, the chance of how they can talk to each other is indeed immensely increased by the sensible use on a human scale of these technologies, and one kind of people that I think are very very predestined to use these media, to use these new means are the world's creative people anywhere. I had one of those famous conversations again the other day with a French woman in Boston, who obviously was not a philosopher, but ended up by saying that there are good people wherever you go, just like there are bad people wherever you go, and I would extend that to creative people. Wherever we go, we meet them, wherever we go they find us, and that I think is one of the major bases for any kind of culture, let's not even call it world culture, just human culture as we can see it.

I would like to add one small paragraph, which is that, by observing so many new art and technology institutes and institutions in many parts of the world I have realized time and again that many of these institutions are based on money. They are based on support by industry. They are based on support by the economy at hand. They are very much supported by sponsorship that seems to be logical and is important. But what it leads to is a certain uniformity in the practice of new media in art and culture.

The sky artist Tom Van Sant, who lives in California, developed methods with which he could address fly-over satellites that would capture his images of mirror reflections. Thereby he arrived at earth pictures that were artistically interesting and also interesting in terms of land surveillance. It turned out that his work became of interest to space engineers, because they picked up his technique for course correction of satellites. There is interaction, indeed. Now talking about other media, it is, of course, not just thought research that is interesting to us. There is, for instance, a vast world of medical technology, anywhere in the world, which is most interesting to us, and ought to be most interesting to the artist because it is life preserving, and it is life prolonging, it's life extending and many artists have just entirely ignored it. So, I am kind of knocking the arts, or knocking, criticising the practice of the artist: How come that there is medical apparatus all over the world that is directly addressing human life and has been entirely ignored by many creative people? There is the challenge that lies beyond what we know about culture and cultures, that is the challenge that lies in space, that is the challenge that lies beyond the known world of the atmosphere. Needless to say, I see much need for the artist to address not only intellectual questions, but also to go out and explore, in the same daring fashion in which once people like Columbus or Vasco da Gama went out into the unknown and brought back beautiful images and the lure of a new life.

MRS. MASINI: I just wanted to share a few thoughts that were stimulated by the different interventions, and will focus mainly on Mr. Concheiro and Mr. Nandi, because we have discussed Mr. Goulet's presentation quite a lot. I have the impression that in a way Mr. Nandi was expressing a very similar view to Mr. Concheiro with regard to certain things, and a different view on others. I will also say, if I understood you correctly, Mr. Concheiro, that *dominant cultures go with economic power, and we wonder where are we going. Are we moving away from the economic power and dominant culture of the US to that of Japan and West Germany?* My question would be how different are they and what can we expect if we look ahead ten years? In a way, Mr. Nandi was saying, if this is the trend we are following, "cultures" can express a resistance to a domination by another culture. But at the same time, Mr. Concheiro said, if I understood him correctly, can a culture survive if the environment will not allow it to survive? How can the Gandhian example survive if the environment will not allow it? Mr. Nandi says, "It can exercise social criticism, it can survive as a social criticism". In a way this is shown by what has happened in Eastern Europe. Social criticisms have been going on in a rather fragmented way, and at a certain point something made the social criticism of the main culture come to the surface. What has also come through in our discussions is the question of time, which I feel we have not addressed enough in cultural terms. There are so many different paces of change: technology, economics and culture. Is it only a question of pace of time, of dimension or is it something different? I have done quite a lot of research with women in different cultures, and technology does seem to change some aspects of the culture, but the family structure, the extended family, does not change so easily. So, we have a difference, and maybe this is something one should try and go into a little deeper. In a way Mr. Piene was also talking about time. The visual is very much related to the time transmission of the culture. It is a

much more rapid way of transmitting our thoughts. This also has to be taken into consideration. Finally, one other aspect that I hope we will be able to discuss a little more is the rôle of women in cultural change.

MR. GOULET: I did not understand. Could you clarify what the connexion is between different views or readings of time and the way women participate in culture?

MRS. MASINI: Very often if there is a technological change, let's say for instance in the textile industry in Brazil where women are involved, it is very rapidly put into action in an enterprise, but the way of behaviour of women and their way of life does not change with the technology. They go on with the same way of life. And there are other examples too. You know Sri Lanka very well, for instance. For the women working in the free trade zones, the way of life does not change. They go back to the same extended family, and they will be doing the same things. I mean, nothing changes culturally speaking, or very little, or very slightly, and it takes much longer. This can be seen very clearly in the family or in women's issues, and I therefore hope we will be able to look a little more into the rôle of women in cultural change. The radiating rôle of women in a culture is very important as is how much they change or do not change, which is my point. The research I have been doing in eight countries shows that they do not change their life- styles much; their minds change, but their way of life does not, because the social structures do not change. There is a big gap there. I hope we will be able to discuss this question of time in different societies further.

MR. SASSON: From the prospective viewpoint, what do you think will happen? Do you expect, for example, a narrowing of that gap, or on the contrary will it remain steady, and not change too much?

MRS. MASINI: It depends on different societies. For instance, in Latin America the gap seems to be small and becoming smaller. But I don't see that happening in African countries. I have been working in Kenya and the Ivory Coast, and I have not seen the gap closing. I do not expect it to happen in the next ten years, if that answers your question.

MR. SOGOLO: I think in the case of Africa, the studies indicate a division between educated women and non-educated women. The division is very small, but among the educated you find a change which is quite evident. However, if you are talking about non-educated women it is a different matter.

MRS. MASINI: I am mainly talking about non-educated women. Educated - I don't want to define it at this point.

MR. CONCHEIRO: I just wanted to react to Mrs. Masini's comments. I think that there are differences in culture, for example, in Japan and the US. I also think I would put it on a different level in Germany, for certain historical reasons, if you want. I think that they have a different view from Japan and from the United States. So I would think that if there is a change in the predominant economic powers, there will be a change in some of the cultural values that will be adopted. Also you pointed out a difference that I am not so sure is a difference between my point of view and Mr. Nandi's point of view, in the sense that I mentioned, that if a culture is able to survive, not only can it survive but it has a resistance value. I also said that culture is essentially a set of traditions and therefore it resists change. In that sense I think there is room for both. But when I say that certain local cultures will not or cannot survive, it is only on the assumption that in some cases you cannot adopt a scheme of modernization and integration to the global economy and at the same time say you will still live in a pre-modern world in the political and social structure. Either you go for it, or you don't go for it. But it is very difficult to have both. So, I think that you have a valid point: cultures are a means for social criticism in the sense that you criticise or resist some of the changes, but if you are adopting the economic life and a certain pattern, then you are forced to modify the culture so that it works within that economic environment. I did also mention something about time, and maybe I should be more explicit. Some of the urban Mexican industries hire people who inhabit the urban areas, but who have come from rural communities. They find to their distress that these people do not adapt to the time, the working hours, established by the factory and they don't really understand what's going on. They are a bunch of lazy people that come late to work, and you cannot set up and programme production in a mass production factory if people come at the time they want to come. Flexible time schemes are fine if they are programmed, and for certain kinds of activities, but not for a production line in which you have to do certain things before other things. If you require raw materials, and someone has the key for the storehouse and he does not come to work or comes to work ten hours later, you are waiting for the raw materials and you cannot start production. What generally happens is that there is a cultural difference in the interpretation of time. When someone in a rural area says we have to pick up our harvest, he means this week, anything from today to next Friday. When someone in industry says we have to harvest today, it means right now and today. So, this definition in the perception of time is to the point. Secondly, I would take some examples from the book you edited entitled *Visions of Desirable Societies*, in which it is clearly shown that if you expect to be reincarnated, you have a different vision of the future than you have if you believe that once you are dead, you are dead. I might not worry about the environment if I don't have children and as I am not coming back. But if I am coming back, and I am coming back as a rat, then maybe I should worry about the treatment we give to rats. I think that there is a cultural difference in the perception of time, not only in practical terms but also with regard to the length of time you can look forward to.

With respect to the rôle of women, I completely agree with you that maybe technology does not change their way of life in an immediate manner. What we found in Mexico is that two factors influence behaviour and change. One is income. If you have an income, you are not so dependent on your husband, and therefore couples split up more frequently when the

female has an income. That completely alters the pattern of social behaviour. The second factor that influences the everyday way of life of women is education, as was rightly pointed out, because not only does it give them independence or more possibilities of gaining access to paid employment, but also because it introduces them to birth control programmes or nutritional programmes. That also completely transforms the point of view. I would also add that I am convinced that if the rôle of women changes, as it is changing mainly because of the bigger participation of women in the labour force, the way cultural values are transmitted in the family will have to change. I therefore foresee that the less time women spend with their children, they are relinquishing or giving away the rôle of culture transmitters, maybe to different institutional organizations, one of which might be television. Just to point out a difference in probable perceptions, which is something that we all do, and perhaps we all do wrongly, in many cases we perceive cultures as the actions of a government. I think that we should do away with that because it is very dangerous. I was really surprised to hear Mr. Piene mention that maybe bad television was the fault of the consumers of bad television, and that the consumers were thereby reinforcing the production of bad television. If we were to be blind to the fact that Mr. Piene is a thinking person and therefore might not be just repeating a paradigm that can be transmitted through government actions or thoughts or beliefs, and if I were to say that Americans think like Prof. Piene, I might be tempted to ask why is it not the same pattern when we speak about drugs? I mean, whose fault is it? Is it the fault of the producers or the consumers? If I were to take the position of the United States government, I would say well it is the fault of the producers and not the consumers. I take this only as an example, because it seems to me that when we speak about cultures we want a logical order in which everything stands one to one to each of the positions in each of the items we have. I don't think that cultures have such rationales. They contain a lot of faith or beliefs which might not be sustained by reason. I say all of this because I want to stress that although you can find some parallels or interactions between economic and cultural developments, I am not sure that you can do it on a one to one basis, and that you can be sure that economics also always corresponds to the same cultural patterns or behaviour.

I want to add two more examples to what Mr. Nandi said, just to make sure that we do not have this difference that Mrs. Masini pointed out. One is an example that has to do with what you mentioned about the way technology is used and the rôle of women. I remember participating in a project to collect information on solar radiation. We had different stations and the stations were made up of intermediate technology. We did not have a network that collected all the information directly via a communication link to a central station that processes, but rather isolated pieces of equipment that would register and store the information, and they were standard taperecorders. You push a button and all the information is captured on a tape and taken by hand to the central processor. All the stations worked perfectly except one. We were puzzled about it, and reviewed it technically and went over and over the technical solution, and nothing seemed to be wrong with it. So, I sat down with the person who had the responsibility once a week of pushing the button so that it would empty all the information. This person happened to be a woman. I asked her "Why is it that you have good information one week, and then you don't have information for two weeks, I mean, the information is completely blank. Why is it?" She said "Well sometimes I don't go

to push the button". I said "And why is that?" "Because when I wear skirts, it happens that the stairs to go to the ceiling where the equipment is, are on the outside, and if I walk up the stairs, the workers at the site gather below to look at my legs. So I don't go, and I don't push the button, so you lose all the information". Now the second example is the use or non-use of certain technologies in health. In one of the projects that we have done, much to the surprise of the Health Sector that is sponsoring part of the project, we came up with the idea that Mexico should spend as little as possible on health services. What we want is more money put into the water supply. What we want are simple things, such as water that will not cause diarrhea, which is the main cause of death in Mexico. It is good to have a sophisticated equipment, but if you are only going to treat about 0.0001% of cases that are important, and those cases almost certainly people who are already privileged, then perhaps we should say we don't want a sophisticated health service, but we do need certain things first and those things happen to be better water and more sewage treatment facilities.

MR. PIENE: I just want to say that I support everything that has been said recently by my neighbour, and I can understand it very well. I would also like to point out that wherever I go, no matter how poor the people are and no matter what the circumstances, I always find CDs and radios and televisions, they are omnipresent. They are all over the place, wherever I go. That's my experience. I may not have been in the places where there are none, but they are certainly in Alaska or wherever. And that's partly what I am referring to. Because mostly what comes out of these boxes, black or otherwise, is what we call (I think rightfully so), a lot of junk. And I don't find it necessary that what is being transmitted through these technological means has to be junk. It could be educational, it could be more educational, it could be informational, it could be cultural, whereas what we get mostly as "civilization" is this junk civilization that Lawrence Halloway liked because he thought it was pop art and because he did not understand music. That is what I am talking about. That is, I think, one of the aspects that have to be addressed when one talks about culture and the culture of the future: that much of this junk is really waste, it is just plain waste. It is a waste of money, a waste of ambition, a waste of interest, and a waste of time, and that I think is something that can really responsibly be addressed by many creative people, call them artists or whatever.

MR. DATOR: "Culture" is a purely political term. It is a reification and abstraction of the way people live. The term "culture" is a modern invention and is an instrument of oppression if it tries to force others to be like whoever it is that can determine what that culture is. I myself am unaware, once the concept of culture came to be widely used, of it having been other than as an instrument by which some individual or group is able to declare their way of life as correct, as culture and your way of life, whatever it might be, is not culture, not according to our tradition, not the way we are supposed to behave. These are arguments that I think do not occur in traditional societies independent of their contact or clash with what people might call "advanced" or "high" cultures.

Secondly, the value judgements implied in good and bad cultures, whether high cultures anthropologically speaking, or of optimistic and pessimistic scenarios, I think are less helpful also. I believe it would be a good idea for us to try to package trends and emerging events into alternative futures, into different scenarios that frankly represent what we see as some of the alternative consequences, and not ourselves try to argue, except on a highly personal basis, whether they are optimistic or pessimistic. A lot of what Denis Goulet saw as pessimistic, I see as highly optimistic, and vice-versa. I think the probability of present trends continuing is extremely unlikely, and some examples have already been mentioned. If a year ago we had described what has happened in Europe, in Eastern Europe especially, we would have been laughed out of the room. We could not have mentioned it here. It was just completely impossible. The future is always that way, it is always surprising, it is always contrary to expectations and therefore, it always has a good and a bad mirror to it. My own interest in Eastern Europe is focused on the question of what next? Now that your 40 years of dreams have been realized, now what? The most optimistic scenario is pessimistic once it becomes dominant again. That should be our responsibility, to try to identify the trends, the events, the things emerging in the future, and then to put them together in alternative scenarios. At least, that is my own perspective. So that's what I am trying to do, and I have just a few little isolated points to make, somewhat similar to those that Mr. Goulet began with. I also start out by saying, just as Mr. Concheiro did, that culture and economics are somewhat the same thing. So, my particular responsibility, "culture in communication", is pretty much the same thing. It is impossible to talk about one without the other. Cultures result from the way humans attempt to give meaning to the environment around them, and this attempt always involves individual and social expression. Here I take up the term that Mr. Piene used, communication in some mode or the other, and at the present time most discussions about the futures of culture and of communication centre on the futures of print-based or audio-visual based communication technologies and their probable individual and social consequences. This, of course, has been basically what I have been doing over the past 20 or so years and that is the particular interest I have. But there are other aspects of communication that I want to bring to the attention of the group as perhaps being equally or more important. For example, speech. The futures of the spoken languages of selected cultures might be studied, or the futures of a single world language or several world languages whether they be natural languages like English and French, or artificial languages such as Esperanto, or even the future of conferences like this or of conversation should not be taken for granted. Cultural communication is also found in architecture and urban design. We might, for example, want to study the communication implied in certain contrasting cities, for example, Brasilia and Pyongyang on the one hand, versus Las Vegas and Hong Kong on the other. Having just come from Pyongyang, I was enormously impressed by what that city communicated to me, and to contrast it with Las Vegas or Hong Kong would, I think, say something about its culture and mode of communication. A related theme might be the original future-oriented meanings of historical constructions, like the Pyramids or Stonehenge, or those Easter Island faces, versus architecture in the style of Stalin, Hitler or Mussolini, versus the architectural styles of world fairs from the Crystal Palace to the 1939 and 1940 New York World Fair which had an enormous impact upon me personally, to Disneyland, and the futures of these specifically future communicating structures. Another facet might be

food as cultural communication. I am reminded of how Simon Nicholson used food as part of a UNESCO workshop during a forms of presentation meeting in Oxford a decade ago. But the omnipresence of McDonalds and Kentucky Fried Chicken, as well as the rapid global emergence of Oshibori and Sushi bars, and the use of chopsticks, are other examples. Or the probable spread of vegetarianism, of health food and other ethic related eating is something that we might discuss. Or the history of preserving and packaging foods from salted and then eventually tinned foods, Japanese bentos, vacuum packing, freeze drying, and soon the emergence of entirely artificial foods, the value-added that Mr. de Jouvenel was giving to potatoes, for example. I hypothesize an emerging issue that it will be illegal in the future to waste precious land by growing food on it.

A completely different slant would be to look at communication in certain social groups or sub-groups that have already been mentioned: the family, the formal educational system, the political system, bureaucracies, the economic system, religious and other belief systems. There I would be interested in contrasting who said what in these cultures with how it is said, what is said versus what is actually done by whom and how, as well as the changes likely to occur - changes in the rôles of the sexes, the rôle of minorities in corporate culture, etc. and the futures of these sub-cultures, of dominant modes of communication within the larger culture versus the rise of new ones. To give just one example, the domination of economic discourse in modern society is almost certainly coming to an end, partly for the technological reasons that Mr. de Jouvenel mentioned, and also because of the environment and the rise of environmental discourse. We are also reminded that there are different body languages in different cultures, i.e. different meanings in different cultures relating to how close or how far apart people stand from each other, or the different meaning of touching, and so forth. And what about humour - satire, irony, the absurd; and sex or non-sex, for example: flirtation, harassment, rape, as communication and their alternative futures? Certainly nothing more significant has happened within American culture than the rise of concern about sexual harassment within a short period of time. How might the meanings of sex and non-sex continue to change? The future of the so-called right to communicate, versus things that are forbidden to be communicated, or other political aspects of communication and its futures in different cultures. Then there is the matter that we have talked about so much here, the matter of cultural persistence vs. cultural change. I suggest that in traditional and even most agricultural societies, a culture and its modes of communication tend not to change. At least they seem not to change. Because of the necessary over-reliance on speech, cultural change is unnoticed given that there is a technical inability to document the change which has occurred, or even to document what was said, as participants in a heated oral argument will certainly attest.

All cultures thus tended to persist relatively unchanged or to change only slowly or imperceptibly, except when precipitated by natural disasters or by the conquest of other cultures, and this latter - conquest by other cultures - became the dominant mode of significant cultural change after the emergence of civilization and writing. I believe that we need to understand the rôle of communication through writing as an instrument of oppression, of dominance, and its considerable antiquity. At present, change in cultural

communication occurs in two main ways, sometimes separately, often jointly. The first is political ideological will, and the second is new technology. The first, will, is found in the conscious creation of communities within larger cultural systems, for example, the emergence of various religious groups in the late European middle ages, similarly in Japan at roughly the same time in fact, and in the United States in the 19th century and in the 1960's. Indeed some of the settlements by some of the Europeans of North America in the eventual creation of the United States could be an example of the willful creation of new cultures. So certainly could the creation of the USSR. If we were to continue on this track, the recent emergence or re-emergence in the future of new cultures might well be the focus of our research, for example, Islam, or the so-called new religions in Japan. I am thinking of Tenrikyo, with whom some of us have been associated or, having just come back from North Korea, I was enormously impressed by Juche as a new philosophy and a new culture, or Prout in India. The evolving cultures of peace, that I find a very interesting idea: the emergence of cultures of people who refuse to use violence even to protect themselves, or of GaÖa or other Green futures, and certainly of feminism, could be the focus of our study. Another is the future of a global culture versus the re- emergence of suppressed cultures and of the cultures of indigenous people everywhere, in Hawaii, for example. This is one of the dominant new discourses.

The focus of technology as a destroyer of all old, and the creator of new, cultures is mainly focussed on the study of the impact of radio, films and TV, computers and personal computers on modernity and the creation of post-modernity. My own value preference is that I don't consider the stuff we see on television and movies as junk. I see it as culture. I see it as an expression of culture. I see it as the creation of new culture and I am not about to condemn the 4.9 billion people in the world who prefer American video-productions because some of us in this room would prefer to watch education on television. That does not make sense to me. There is something there and we need to understand what it is, and more importantly what it is doing to the minds and the behaviour of the people consuming it. That again is my own bias. There may be something in all the stuff on television, which in 100 years from now will be viewed as being part of some classical artistic time in early media technology. And then, that brings me to my own favourite culture, that is the culture of artificially intelligent entities, the cultures of robots, the cultures implied in the rapid emergence of a wholly artificial world. I was delighted to hear at the beginning someone saying that humans are always fighting against nature. Well, we won't, unfortunately, win that battle and we are now living increasingly in an entirely artificial world, and to me, the biggest new culture and the biggest culture clash is between those who would like to preserve something that is beyond preservation, and those that are now trying to create new cultures and new meanings. My own focus is on the cultures of robots and artificial intelligence.

MR. GOULET: I would like to put a question to James Dator, and then put the same question to myself and to all of us. The question is on the general assertion that all cultures are coercive. It seems that there are different positions one can take on this. Suppose you are Jean-Jacques Rousseau and you think that the source of most evil is culture and society. It is

the artificial and coercive structures of society and of culture, says Rousseau, which destroy the beautiful, natural, human animal. Consequently, if we did not have cultures, societies, laws, and institutions such as schools, everyone would be nice, benevolent, pure and noble. Well, not everyone thinks this is so; not everyone regards culture and society as necessary evils. Somebody might well take the position defended by Aristotle or Thomas Aquinas, namely that culture and society are positive goods. These philosophers saw the human being as a social animal whose personal fulfilment and realization comes best and perhaps only from the pursuit of the common good that transcends mere individual fulfilment. One may be sceptical regarding both these extreme positions and say "We don't know if culture and society are necessary evils", but perhaps they are necessary only if historical evidence shows them to be so. Culture and society may be ambivalent values, holding potential both for good and for evil. Then when one asserts that culture is coercive, this raises a problem. Is individual freedom or subjective detachment from any kind of value adherence to something beyond the individual some kind of supreme value? Is it not the case that in different cultures, authority has come from different sources? It has been claimed that authority conforms the nature or comes from revelation, from tradition, from custom, from subjective will, from inheritance or from free choice. In the 18th century the Poles elected their kings and the French kings looked down upon them as elected kings, inferior because they had been freely elected and had not gained their regal authority through inheritance or supposedly from God. So, I really would like to know why artificial intelligence would be less coercive than cultures that have come from some kind of trial and error or consensus over a long time? There is no way to avoid authority within societies. Just to finish with an example: the youth culture in more and more societies claims that it rejects all coercion, all restraints or constraints imposed by parents, schools or institutions. Yet, nothing is more conformist in its behaviour than youth culture, which coerces all its members into conformity. As for robot culture, it too is fantastically conformist and coercive.

MR. DATOR: This was my point. I obviously did not speak clearly: I said the *concept* of culture is oppressive. Of course, we all live in social situations that are coercive. I am not saying that one can live without any interpersonal influences and many of the things you have described are those influences. I am saying that the term "culture" is always used politically. It is used, as I think Mr. Sogolo illustrated, as a nation-building tactic to say 'We live in Nigeria like this because we are Nigerians; we can no longer have your tribal customs'. My own research shows that it is very likely that new technologies on the one hand and diversifying wills on the other are leading towards increased diversification, not towards homogenization. The problem of the homogenization of cultures by economic and scientific rationality was a problem fifty years ago. Not now. In the future the problem will be how to deal with increased diversity. Indeed I think this is the problem in Eastern Europe now - let's say Romania for example. How can Romania find a commonality to use to build a common culture? I don't think it can. Thus I see dealing positively with increasing diversity - considering diversity to be a good thing - to be our major challenge for the foreseeable future.

MR. SOGOLO: We want diversity, multiplicity, but there are communities which, because of their economic or military power, have accrued probably undue respect to their culture. I personally have a great deal of respect for American culture and I enjoy Faulkner, the American poets, etc., but I do not, for a moment, accept that in this powerful nation all is necessarily a culture which other people can enjoy. Of course, the question arises 'Why do people watch Dallas?', and many people say 'Dallas is rubbish', but they go on buying it and watching it on the television. I think this question was answered earlier: goods are being marketed. You produce the goods, you sell them, and I don't think taste comes into it at all. In other words, people in India, or in Sudan or Yemen, have no choice. There is a kind of mechanism which works in favour of this so-called culture. The question is not that Americans, in my view, sell bad television to other people, the question is: 'Why don't Americans watch good programmes by other people?' We come into the whole area of cultural osmosis, where things tend to flow from one place to another. I think our friends in the developed world have slowed the pace, and they must not get carried away with their own ideas, no matter how attractive these ideas are. We are here in a UNESCO meeting where I believe the assumption is that we want to arrive at some sort of *modus vivendi*, a kind of culture which is capable of being enjoyed all over the place, which is conducive to all these good notions of ease and goodness, and will work as a mediator to emphasize and affirm positive values, all these rather old-fashioned notions which are not being talked about much now but which, in my view, are still very relevant to a great part of this group.

MR. NANDI: Mr. Goulet referred to Rousseau and one may think even in our times of somebody like Sigmund Freud, who believed that culture was positive. One way of handling this and distinguishing culture from a stereotype of prejudices, might be to see culture as something which must be non-cannibalistic to other cultures. The problem with the concept of culture dominating our thinking is that we have a concept of culture which tends to cannibalize every other culture, so that, it is, in effect, subversive for other cultures as such. Every culture is seen as a potential vector within the culture itself, culture in the singular. So that if you talk of a cultural category outside, you always have a corresponding shadow category within the system, in terms of this culturism effect. The "museum" question arises in that context. One can push that argument further and say that what you think of as a coercive culture identified with America may actually be a general global process, which itself is a subversive element of American culture, as well as full investment culture. So, other cultures in that case become possible trustees of that part of American culture as well as of Western culture which has been marginalized or cannibalized by this culture of modernity. The second point is your concept of artificial culture. One is struck by the possibility that you are perhaps talking at two levels. I am deeply interested in what you call artificial cultures, but I mean it in a different sense. I think many cultures, the artificial cultures we are talking of, are artificial only to the extent that they connote two very distinctive aspects of something which is not artificial. One, that you are projecting into them (projecting, in the psychological sense) those cultural vectors which you are unable to handle within the existing categories of cultures. Let me be more specific. We have, for example, 'Star Trek III', on American television, and you do not need experts or film or television critics to tell you that they are a

new kind of western. You are looking for a new context, for a new milieu, within the same concept. So, the artificial culture we are talking of is not that artificial after all; the second meaning of what you call artificial culture could be the means of locating Utopias in forms which are so fantastically Utopian that people are less defensive about it. In this sense too, the artificial culture becomes less artificial than it seems at first glance.

MR. SOGOLO: We generally assume that culture is a matter of spirit, meaning it's mainly free of the concept of gain and economic exchange, although not entirely free of it. Of course, a certain consensus is being communicated to culture and I don't think that this should be forgotten, because obviously everybody is aware of what this consensus could be, and to arrive at some form of consensus, we understand, is a part of development. I don't think there were cultural problems in Egypt and Africa five thousand years ago. I don't think that there were serious cultural problems in Europe until the 16th, or 17th, maybe even the 18th century, because the opposition of good and evil in culture in terms of taste experience and the feeling of well-being through communicated cultures was disturbed only by the great cultural and political events of the French and American revolutions. It was after those events that culture became a critical element or an element to be seen critically in our global life. The emergence of kitsch is something that unsettled everybody in their feeling towards cultures. The emergence of the industrial production of cultural goods is what has disturbed all cultures. It has taken two hundred years for us and others to realize that there was something wrong with culture and that only conscience and consciousness can possibly redirect or revive what used to be the value and importance of culture to a humankind given to spiritual values. It may carry elements of coerciveness or the danger of coerciveness to think how a culture is consciously supported by many different kinds of nations, of peoples, how indeed such a culture can be created, supported and sustained. I don't think it is possible without a conscious and constructive effort. It takes work, and the work cannot always be devalued by feelings of guilt, by feelings of being constantly in danger of producing something wrong; it is indeed a conscious effort that is necessary and has to be very well coordinated.

MR. SASSON: We asked you to reflect, to give us your thoughts in different areas: culture and development, culture and communication, culture and economics, culture and science, etc. We asked you to imagine a prospective approach rather than to describe the present situation, although you may try to go from a diagnosis to a prognosis and also to the desirable. This might be very helpful for us, because this kind of discussion could have an impact on the construction and planning of our future programmes. You can question some of our programmes or some basic ideas on which we build our programmes, for example, the statement which I have heard so many times, that all cultures are equal and should have the same value to me or to you. There are people today that question this, especially those who say a culture which is inegalitarian, which does not give the highest value to human rights, to me is not equal to mine. We, in UNESCO, have said, as Malraux has said, 'Il n'y a pas de culture inférieure, il n'y a pas de culture mineure, donc toutes les cultures sont majeures', and

in our documents we have always underlined the pluralism of cultures and the importance of each culture. If we look now at this statement, not for today, but for what is going to happen tomorrow, maybe all cultures are going to be enriched by this notion of human rights, and democracy, etc, and what we have seen happen might mean that in 10 years, maybe cultures will be more equal than they are today. Through this series of common examples, by asking you to reflect and to help us understand what is going on in this very wide area, you will help to understand our programmes better.

MR. SOGOLO: I was assigned to sketch something on culture and science, and I have adopted a rather restricted viewpoint on the impact of science on culture, relating to the problem of science in confrontation with culture in the developing countries. In most Third World countries, the pre-scientific attitude is still predominant, so that you have a conflict with the worldview. This is what I call a dilemma in the sense of the recent recognition by educators in the developing countries, the Third World countries, that modern science and technology are producing results that are frightening to the entire world. And yet, the attractions are such that almost every nation wants to develop along that path; the conflict therefore is this: we would like to follow this path because it appears that the quality of life is thereby enhanced, yet it appears that if we do go that way, we will be faced with numerous dangers. The other problem is this, that most Third World countries are willing to go along the traditional way of science and technology, but there are handicaps in two respects. The first is that there are natural handicaps. The resources needed to produce modern science and technology are so huge and so demanding that most Third World countries cannot really afford to go the way of modern science and technology. The second problem is this: that even if they can afford it, even if they have the resources, there is an intellectual conflict between the non-scientific and supernatural outlook which is very dominant in these countries, and modern science and technology. So really, I propose that rather than follow a copy of the Western pattern of development, most Third World countries should try as much as possible to pick out those elements in their traditional world outlook which are compatible with the elementary principles of science. Development has its own physical side besides the experience. More importantly, it goes with a certain spirit, or outlook, the way you face the world, an attempt to explain the world and so forth and this attitude has vanished since the scientific revolution in the West.

What I mean by science is a way of trying to explain the world by common sense, building a theory to put some order into a world of hazards, a confused world, trying as much as possible to create an ethical framework so as to make it meaningful. Now, in some cultures, and I refer to Third World cultures particularly, the level of theorizing behind the world of experience is minimal, and I think there is a difference between Third World countries and a kind of science-oriented culture where you have an elaborate theoretical framework that provides an explanation. I have just tried to paint a picture of the outlook of the Third World. I refer to a particular quote from a colleague of mine from the university, who says that traditional Nigerian society is incapable of or is reluctant to subject such occurrences as crop failure, the ravages of disease and death, to rational thought. Clearly the cosmology of the

Nigerian is antithetical to the scientific culture of the Western world. Now, this is to say that when you explain nature in this sense, there is a conflict between the whole mood of explanation and the new world into which you are thrown, the world of science. I must say that this is not just restricted to illiterates. You would be surprised to hear that in present-day Nigeria, for instance, if a sporting activity were going on, the tendency would be to try to provide some supernatural support for the team. What I am saying is that in a culture where the supernatural dominates, it is difficult for the scientific tradition to take off.

The other point which goes with this is that most developing countries are now trying to grasp pieces of modern technology, to become societies which exist without really bothering whether there is a spirit or know-how. Over the years we have found that projects have been set up and because the basic facilities were lacking, most of them have been abandoned. There is a confrontation between traditional cultures and science in the area of medicine. The traditional African has a conception of disease which says that the cause of illness could be physical and admits that drugs have a pharmacological potency but, at the same time, he thinks that he must appeal to some higher powers in order to make the drug work in the body. He still believes that, while the physical procedure is going on, he must at the same time apply the supernatural. Both have different functions to perform. In fact, in modern medicine you have something close to that, where the patient has to be put in a psychological state to receive the prescribed medication, so that the harmony that is created between the drug and the body makes for quicker healing. I think, therefore, that the fact that the traditional African draws simultaneously on both the supernatural and the natural should not really be seen as a conflict. In some cases a patient is taken to hospital and then leaves because he does not believe that modern medicine is able to cure him. He goes back to his traditional healing system because it has practical applications. The other point I will make before concluding is this: the direction of development, which most Third World countries are pursuing, is a little ill-advised by political leaders. The emphasis is on the side of high technology, modern hospitals and machinery, heart transplants, research, etc. In a culture where over 3 million people die every year of malaria and other diseases, the funds that are used for this sophisticated equipment could be used more effectively to try to control these diseases. The problem lies with leadership in the sense that most leaders would rather go along the path which the West approves. Third World countries should try as much as possible to be as intermediate as they can. This is what is actually needed and is what they can afford.

MR. NANDI: Ten years ago it was frequently recounted in the newspapers that United States had the capacity to kill every living being on earth 21 times over. Soviet Russia also has the capacity to kill every living being on earth. I am not superstitious, like the Nigerian peasant, but I would nevertheless have thought that one up-to-date, efficient method of killing everybody, including yourselves, was enough. You don't need the capacity to kill everybody 21 times. I ask you, what Nigerian peasant, in his superstitiousness, can match this other superstition and irrationality? I suggest to you that of the 120 million people that have been killed in this century, a majority were killed in the name of science: 30 to 40 million under Stalin, 40 million in the name of scientific biology and evolutionism. We are living in a

different kind of world, but with the same irrationality as that of the Nigerian peasant. One final question: Mr. Sogolo has said that as far as the explanation, prediction and control of nature are concerned, the superiority of science over authentic approaches is no longer an issue of debate. Now, he himself goes on to say, in the very next sentence, that we must also unfortunately accept that the dangers produced by modern science and technology and which the Western world is facing are problems of global environmental pollution, waste management, the greenhouse effect and the threat of the proliferation of nuclear weapons, etc. I would like you to relate these two sentences more directly: if the explanation, prediction and control of nature obtained through science is superior to all other methods, why then this crisis of Western civilization of which we, in the non-Western world, will unfortunately have to bear the burden in the next century?

MR. SOGOLO: I think that as time goes on, science will provide a solution to some of these problems. I have an optimistic outlook about science which says that science solves its own problems. I relate to those who are afflicted by problems that can be solved in a way that can be afforded.

MR. NANDI: I don't want to continue in this vein and I don't want to monopolize the floor. But, if it is the case that 3 million Nigerians die of malaria every year and if Nigeria has always been as superstitious and irrational as it is today, then there would not a single Nigerian left, not even you. That means that we would only see Nigerians in museums.

MR. GOULET: I would like to raise a question which was suggested by Mr. Sogolo's advocacy of the intermediate development model. It is the same problem as trying to get political leaders or national societies to adopt not only intermediate technology, but also alternative development models that are comprehensively social and cultural, and not just economic or technological. It seems that there are two questions here and they are interrelated: one may argue that the mainstream economic model is bad when it is exported to foreign cultures because it does not find therein a convenient soil in which to flourish, because the mentality of the people is different. It is important that we demolish the notion that the best or the only kind of rationality is the scientific one or the technological one. This is why there is an epistemological task at hand: it is necessary to show that rationality exists in many modes. One must also recall that there is much mythology and superstition in the conduct of science. There is much faith and much will involved in the social and in the natural sciences. So, there exists an epistemological task to break the monopoly on rationality and logic enjoyed by the scientific cast of mind. Secondly: suppose all the leaders of the African, Arab, and Asian nations agreed that it would be best for their people, their countries, and their cultures, to adopt an intermediate model of technology. They could not do it, because such powerful forces are at work in their own societies to make them reject a 'second-class medicine' or a 'second-class technology'. This is because the modern model has appropriated to itself power and prestige, and every society aspires not to be in the

second rank of power and prestige. This leads me to the following conclusion: if an intermediate or appropriate multidimensional human model of development is good for Africa, for Latin America, and for Asia, is it not also a good model for West Germany and for the USA? In other words, is the mainstream model bad only when it is exported to other cultural soils because it finds there an uncongenial belief system or psychological mindset? Or is the model flawed in its very roots? Does the model reduce the nature of human beings solely to its economic functions? Does it assign more prestige to science than to wisdom? 'The White Man', writes Laurens Van Der Post, 'came into Africa (and Asia and America for that matter) like a one-eyed giant, bringing with him the characteristic split and blindness which were at once his strength, his torment, and his ruin... The one-eyed giant had science without wisdom, and he broke in upon ancient civilizations which (like the medieval West) had wisdom without science: wisdom which transcends and unites, wisdom which dwells in body and soul together and which, more by means of myth, of rite, of contemplation, than by scientific experiment, opens the door to a life in which the individual is not lost in the cosmos and in society but found in them. Wisdom which made all life sacred and meaningful - even that which later ages came to call secular and profane' (Thomas Merton, *Gandhi on Non-Violence*, New York: New Directions, 1965, p.1. Merton's reference is to Van Der Post, *The Dark Eye in Africa*, New York, William Morrow, 1955, pp. 118-124). The basic cultural dialogue is among the different wisdoms and the sciences. It should be a dialogue conducted at the deepest intellectual and spiritual levels, at the political level, and the expressional level. But it is also a dialogue carried out at the level of the experimental practice of traditional communities which wish to embrace science and technology but in a way that will not require the sacrifice of their wisdom. This is why I think there is profound truth in what you say, that an African peasant does not see a contradiction in using both elements. Ancient wisdoms were formed by processes of slow change.

MR. DATOR: I want to add to what has been said. Mr. Sogolo made an implied but not explicit comparison, therefore my first comment may be wrong. Perhaps you did not mean the comparison that I am about to make. I have the impression that you believe there is somewhere a non-superstitious culture, that there is somewhere actually a rational culture, and I am absolutely unaware of the existence of that culture anywhere on the face of the earth. The same culture that produced the ability to destroy the world 21 times, produces individuals who also consult astrologers. It is clear that Ronald and Nancy Reagan brought in astrologers before they took any major decisions and it is also the case that the most frequently read section in American newspapers is the horoscope. I could go on and on. I got the impression that you were assuming that the West, at least the North American portion of it, was a rational culture and my experience is that this is absolutely not the case. The biggest political debate in the United States is about prayer in schools, and whether you should or should not, must or must not, can or cannot have a civilization unless you pray every day before decisions and so forth. That's one point. The second point is what I have heard about medicine, homeopathic medicine versus medicine based on so-called "rational science". In the United States there is growing dissatisfaction with high-tech medicine and a growing belief in the efficacy of homeopathic and other forms of medicine. There have been attempts

to revive cures used by native Americans and so forth. Many people in North American society feel that technology or so-called modern science is as inappropriate in North America as it is anywhere else in the world. The third point would be that I do not foresee a very bright future for rationalistic, positivistic science at all. It has been dominant during the recent historical period and is extremely important at present, but the dominant trends in future scientific thought lie in areas of uncertainty. The dominating technologies of the future in biology and in molecular engineering require a concept and principles that are now viewed as more or less magical. Finally, I think I differ from Mr. Goulet in his concluding comments. I share his passionate concern about the destruction of societies that in fact are going to die out. There is something about these traditional Nigerian societies that sustain themselves and you have to look on modernity as a disease that destroys societies. But I don't know of any perfect culture that I would want to bring back any more than I would entirely defend the present one or any that I can imagine in the future.

MR. GOULET: I agree with Mr. Dator: I think that many traditional wisdoms are doomed to extinction, and they should disappear if they reveal themselves incapable of providing a viable meaning system, a set of norms for dealing with the environment. We must not romanticize modern scientific and technological rationality, which may be on its last legs.

MR. SALIH: Actually, Mr. Dator has said what I wanted to say about the rationality of the West. Of course, we sometimes imagine that all the people in the USA or Britain or France are scientific modern people, highly developed, free of any of these backward tricks which we have. I find it rather reassuring, as a matter of fact, that people in the West are just as baffled by science as we are. Knowledge of science is concentrated, as we know, in certain elites. But why should an American or a European think that because we tend to look up to Heaven for solutions to problems which are beyond our control, we should be called backward? The American is just as backward, as a matter of fact. He is happy to live in a society which provides things he has not himself participated in achieving, but they are there, and probably our misfortune is that we have not got these select centres which can give us this marvellous benefit of science we have not participated in achieving, like everybody else. I think the problem is one of lack of familiarization and I see a rôle there for culture. Literature, for example, has done a great deal to familiarize people in so-called developed countries with the modes of behaviour and the spiritual dilemmas of human beings in other places in the world, to the extent that Europeans or Americans may feel that they are actually the same. I honestly don't find any difference between men described by Charles Dickens, for example in 19th century London, and people living in Cairo today or, for that matter, peasants in Faulkner's works and peasants in the Sudan. Familiarization, which is a rôle of culture, probably in its classical sense of art, of literature, of music, is probably going to, or should, build a bridge between these diverse world communities at various stages of material development, to feel a sense of genuine recognition, and not a sense of fear or contempt or rejection. I honestly think that there is a great deal to be done here, as it could also help to modify the pace of the model of development we have discussed. Today Mr. Sogolo spoke

about the impossibility of applying a Western European model of development, and I agree totally. You have got to modify the pace and probably the irony will be that those who are emulating the model we are following, will suddenly turn against it, which is what is happening in Britain now, where you have indications of people actually getting fed up with the whole thing. The human being is becoming unable to carry the burden of this so-called technological advance, these huge cities, this noise, this mad rush. You now see people going into cottage industries, you see civil servants suddenly resigning and going off to paint and make pottery. I find that very hopeful and I sincerely hope that the people we are following madly without being able to do anything about it, will suddenly turn around and, maybe, come to our way of thinking.

MRS. MASINI: Quite a few of us in this discussion were talking about the resistance of culture or an inability to absorb the new case, and we often quoted the example of health and medicine. This is very interesting: it comes down to the basics of survival. Cultural conflict happens when there is a question of survival.

MR. SOGOLO: Let me just take up Mr. Goulet's point about why intermediate technology should not be desired by cultures like America or Germany. I think that this is something desirable for them, but their problem is not the same as the problems being faced by Third World countries. What I said is that at least the American and German cultures are able to afford certain basic requirements, at least at the lowest level. I did not mean that there is a culture which is non supernatural. I quite agree that almost every culture has its own element of the supernatural. I am talking about people whose day-to-day living is dominated by this. The question of the superiority of one culture over another does not really come into it. I was referring to logical science. I am talking about the practical utility of science. This is where I really have the superiority of science in mind.

MRS. MASINI: The topic that I chose is 'Cultural development, cultural identity in a multicultural society'. As someone who tries to think about the future I believe that the complexity of the multicultural society we are going to face in the coming years is really at the basis of all the problems we will have to deal with in the future. This is my way of seeing the future. Undoubtedly, all the discussions we have had over this day and a half are related to different cultural ways of conceptualizing development. So development, however we want to think of it, has a cultural basis of some sort, and even the debate we are having now arises from different cultural bases of development. The basic crisis of present and future society is the failure to recognize that there are different conflicting ways of conceptualizing the development base of different cultures. This is where we stand today. This brings me to say that culture is the major component of development and this is what we have not been so good at, and where we have so many times gone astray. I give the example of China, because it is a case I know and on which I have done quite a lot of empirical research. The move that China made towards a more production-oriented economy was not simply an economic or a

political choice. At a given time it was a cultural choice. In my reading of recent events, I believe that a cultural backlash came at that point. The next point I have been trying to think about is cultural identity. As a Future Studies Federation, we discussed "Cultural identity in an Interdependent World" in 1978 in Cairo. I do not think that we have made great steps forward in the last ten years in understanding cultural identity in an interdependent world. We do not seem to understand that the processes of influence between cultures support to a certain extent the limits by which a culture loses its identity. Nor do we understand what the variables are that allow it to retain its identity. This is where we need more understanding. We will certainly not diminish the pace of communication. These cultural identities will be continuously strengthened or weakened. Is there a transfer of values or simply a transfer of certain behaviour? Is there a transfer of priorities of action, and so on. I think there is a great deal to be done here in terms of understanding and research. To what extent when we look at two cultures or several cultures coming together is one dominant because it is accepted? To what extent and at what level has it been accepted? We do not seem to understand the processes of influence between cultures, nor the limits beyond which a culture loses its identity. I always give the example of what I call the superficial elements of a culture - clothing, food, etc. But when you come to the major elements of a culture, such as the way of looking at birth, love, and death, the elements which constitute real life, how far does one culture impose on another? And how far then can we talk of a loss of cultural identity? What is the extent of the loss? Finally, the third point of my paper was the multicultural society. Here we know much more: demographers are studying the movements of entire populations, economists are looking at occupational issues. If we look at the Mediterranean, for instance, we quickly see that in the next 20 years for each job that the Northern part of the Mediterranean will have to create, the Southern part of the Mediterranean will have to create 64 jobs. We know quite a lot about this. There are plenty of data and studies, but what we do not know is cultural identity in a multicultural society. I have done some research on first and second generation Italians in Canada and the United States. How far has the melting pot, which was the image we have had for so many years, really gone? How far will it go with migration to North America in the next 10 or 20 years? At the cultural level this is what we do not know. Every country is now working on the migration issue, including Australia with regard to the arrival of the Indonesians and Philipinos. But what we have is the level of the loss of identity and the emergence of new cultures. I think that the most extreme concept is that of blending. This brings about a lot of educational problems and issues, not only for people that move with their cultures, but also for people that receive these cultures. I have been proposing in my own country the need to educate the receiving country from the kindergarten onwards. Looking at Europe as a whole, there is the concept of the 'common-home' that is so much talked about now, but I do not see it emerging. Parts of Europe contain populations which have gone through at least two generations in totally different cultural ways, and when they come together to work and have families then the differences will emerge very strongly. The family is like a chemical mixture where cultural differences either do or do not blend together. So, I think we should also watch Europe as a whole on this matter of the multicultural society. Finally, two other thoughts. In the coming together of cultures, we should try looking for indicators of the loss of cultural identity or of blending. In my experience, I very often see indicators in the behaviour of women. Let me give you a few

more examples from the empirical world. When we were doing research in China on changes in the family in two regions, Sechuan and Changse, which are completely different in economic development terms, we found that under the so-called responsibility system which existed at the time (this was in 1988), rather than having increased their level of education, the younger women aged between 18 and 25 had a lower level of education. Both we and the Chinese were astonished by these results which showed that women between 18 and 25 have a lower level of education than women between 25 and 35. How had this come about? We went into it to try to understand. We discovered that it was due to the responsibility system: all the men in the family, in the household, had to be involved in agricultural production at every level, so it was more useful for the household to keep the girls at home. This is an incredible contradiction in terms of development, and it came about in the space of seven years. So, how far had the external culture, that is the profit-oriented culture, influenced the traditional culture? Conversely, take the case of Colombia. We took a sample of about 1,000 women and found that the education level had risen in the last 20 years, with a gap of 10 years between urban and rural areas. Here women's behaviour was changing in relation to knowledge, the number of children, spacing of children and so on. Here the economic injection produced completely different cultural reactions. So, I think that an analysis of women's behaviour, their level of education and other aspects, can give an indication of the level of culture blending, culture substitution or resistance to culture.

MR. GOULET: Your discussion of the loss of cultural identity leads me to a question that modern cultures have not asked themselves. A few years ago I was doing some anthropological research with a vanishing Indian tribe in the Eastern forest of Paraguay, not far from the border with Brazil. I conducted a four-day interview with a cacique, an Indian chief, who could see the last human bearers of his culture disappearing. The forest in which they were living had been destroyed to make way for a large dam. Ten years later I visited the dam and it was closed. There was no water in the reservoir. Yet the justification for destroying the forest and the culture of these Indians, for causing fantastic ecological damage, was 'development': this dam was supposed to double the electricity output of Paraguay. The Indian Chief said 'The most serious thing is not that I am dying, or that our culture is dying and our people moving out of the forest and going to the cities and losing their Indian ways. The most serious thing is that we cannot hold the sacred dance'. And I asked 'Why is the sacred dance so important'? He replied: 'It is what holds the cosmos together'. The point is that cultures, and even certain practices in cultures, are important not only because they are essential to the identity, the survival, and the sense of community of their members, but at the deepest level, these cultures share the responsibility for holding the cosmos together.

MR. DATOR: I always have problems following Mr. Goulet because holding the cosmos together is a slightly larger problem than I want to talk about, that is the relationship between personal identity and cultural identity. I do not, for a minute, want to suggest that I believe that people in this rather individualistic way can or will establish identity without reference to

other human beings and without reference to other elements of the environment in which they find themselves. But the challenge that I believe you are describing is the challenge of a growing number of people finding it necessary to establish an identity independent of their traditional culture or with what their family or other members of their traditional culture say is their authentic identity. This particular problem that growing numbers of people have can be illustrated by an example in the United States where, 20 years ago, the attempt by the Black Power movement to find a positive identity for a person of colour resulted in certain people being able to define what was appropriate 'Black behaviour'. If you happened to be, by some definition, Black, but not to share that behaviour, it presented an additional burden and an additional problem for that individual to carve an identity that made sense. I think the same applies to women. The women's movement made it possible for women to define what it means to be a woman, and if you happen to have the formal or the biological characteristics said to be those of women and you don't choose to behave that way, there is a problem. Mr. Goulet and others have been very outspoken in defence of traditional cultures, and since I am opposed to their destruction under any circumstances, but certainly in the name of development, I agree with that defence. But, since their destruction has happened and will continue to happen, the other interesting question for us in the future is the emergence of cultures that are new in relationship to the personal identity question. Mr. Goulet made reference to youth cultures and one of the things that seems to me to be of special interest to us is the growing population base in much of the Third World, and the cultures that result from children growing up in urban areas such as, for example, Mexico City, and the cultures that result. This is a continuing and growing phenomenon. People in their twenties or early teens have a very different culture from people in their pre-teens. The study of those cultures is, I think, an important one.

MR. SOGOLO: I would like to make a point about the receiving culture. If you talk about a situation which is historically a colonial situation, not so much about the factors that brought colonialism, but receptivity to colonialism, you find that one factor is closely allied to another. For instance, if you take the Nigerian case, religion, i.e. Christianity, was with Western education almost as an integral package. Western education appealed to the people because it is closely allied to commerce and industry. Commerce and industry also provided greater material comfort.

MRS. CHALLENGOR: I think one of the things which is important for us when we look at the World Decade for Cultural Development, is the salience of culture at the end of the 20th or the beginning of the 21st century, where we are experiencing increased levels of insecurity, an ecological and nuclear threat, the acceleration of technological change, globalism and a reaction to scientism. People are wondering what it all means for their own belief system. There is another thing I would like to mention as a historical factor. The 19th century was really a century of consolidation, from states to nation states to empire. If you look at the 20th century, it's really a century of fragmentation, the end of colonial rule, and the emergence of what we call transitional forces, phenomena that begin to call into question the unique

authority of the nation state as an international actor. I think, most importantly, as we move along the 20th century towards the 21st, there has been a greater movement to give more status to the individual vis-à-vis the state. As you look at the 20th century, you can see what I consider to be revolutions, a political one for self-determination, an economic one calling for a new economic order, and now this control revolution, which I think is a natural result of the decolonization process, as people who had formerly been subjugated and told that there was another culture superior to theirs now have independence and want to reassert the importance of their own culture. I think that in the North we are again seeing increased interest in cultural identity because it is indeed part of the contradictions of the North/South gap, the move from rural areas to the cities, the move from the South to the North in search of jobs, and that creates a new pluralism that people in Europe are very concerned about. I think that is indeed the problem we face for the 21st century. Another problem we face today is that we have states that have authority but not power; and so we are living in a much more complicated global system. I think one has to take this factor into account as we try to decide what to do about it. We here in Western Europe are watching what is going on in Eastern Europe, and we are beginning to see the contradictions in communist societies. But there are contradictions in capitalist societies too and I think what is common to both is that neither communism nor capitalism has been able to recognize and respect differences. As one looks at the future, in many ways the plural society is best represented in its present form in the United States. The United States is probably the most diversified, socially and culturally, of societies, though maybe not in terms of religion. It seems to me this is the future of Europe if Europe does not take these realities into account. It is quite clear that there has to be a greater respect for differences. I accept that this is a rather pessimistic scenario and I think that if things continue as they are, the new entrants into a formerly mainly homogenous society are going to find it difficult to be accepted as people who are different but not defective. In many ways what happened with the Black Power movement was something that happened in a different system with the negritude movement. Blacks were not necessarily trying to define a new form of behaviour, but rather to make positive what had been negative. In Western societies black is a colour that is identified with evil or something to be afraid of. Certain people took advantage of the Black Power movement. It was not about defining a sort of behaviour but said that black, in fact, was considered negative in Western societies. I think this is what the women's movement is about as well, but there are always people ready to take advantage of a movement and try to turn it to their own advantage. I wanted to say a word about religion: if you look at the history of religions, it's very clear that this is where society defines the 'we' and the 'they'. We talk in Christianity about 'loving your neighbour' but we also talk about the infidel. The problem is that your neighbour now is the infidel. Until something can be done, then it seems religion must be more neighbourly and not say only "we possess the truth and therefore those who do not think like us are worth less than we". It seems to me that the problem of not accepting differences is going to remain with us. The question is: what can an intergovernmental organization do about it, because we are talking about matters that relate to state policy? A state may be very concerned about reaffirming cultural identity, which is the second objective of the Decade, but I think we should be very clear about what we mean. We do not mean disintegration of nation-states, but rather a recognition by them that if these questions of identity are now cropping up, it is because the

state has failed to deal with respective differences. I think the challenge of the 21st century is how to find the 'happy medium' between freedom and justice.

MRS. MASINI: I think the point you made about what we will have to deal with in the 21st century is very important, because what we see and what has emerged from the discussion is that there will be diversities greater than the ones we have been accustomed to. There are certainly diversities which, culturally speaking, we have accepted, but others are coming. What happens, for instance, to a young Turkish woman in West Germany? How different is she from another Turkish woman who is in her own country, and from a West German woman? This question is going to arise more and more frequently because of global communication and migration issues. We find that many more diversities will come into being and will bring about what I was calling the great problem of the multicultural society, which we cannot easily accept, although we shall have to. We can project, but we do not understand the real meaning of what is going to happen at the deep-rooted cultural level and diversity is one of the elements that we have difficulty in accepting as such. When you come to birth, love and death, then the differences come out. Those are the important elements, whether you call them religious or not. This is where the essence of the differences comes out.

MR. DATOR: This is exactly the point of my opinion. I think the 21st century will be a time when we finally will be able to move from false hopes about "discovering the immutable laws of nature", or the ability of either "religion" or "science" to discover "truths" upon which to base one's life, to the recognition that uncertainty is fundamental to life; that it is impossible and unnecessary to have "blessed assurance" about anything. Thus creating one's identity within this fundamental uncertainty; seeking out contact with different people and cultures; viewing them not as a threat to you and your cultural identity, but as an enrichment, a chance to grow; and the positive enjoyment of difference - these seem to me to be the big challenges and opportunities before us. We should not continue to encourage anyone to believe that there is absolute truth, absolute identity, absolute "culture" anywhere. To me, learning to be flexible, open, able to change, eagerly embracing change, and yet also able to create and recreate - not to preserve - a viable personal identity through all the changes: that is the challenge that the 21st century brings to all of us - or at least to our children and grandchildren.

MR. REIFF: I would like to make a few remarks which could form a bridge between scholarship which is what you are bringing to us, and organizational management which is the whole idea. I think Ms. Challenor referred to it to some extent: that we are basically an intergovernmental organization and that therefore the knowledge and the scholarship we receive from NGOs, like the Federation, somehow, either directly or indirectly, have to fit into some type of decision-making processes with Member States. I think it is fair to say that the state has become too big to look into small things and too small to look into the bigger things which we have been talking about, and the same is true of UNESCO. I think we have to

realize that we have probably become too big to look into micro-matters related to cultural identity, whether scholarship is somewhere else, and we may have become too small to enter the big things. Now, where do we find the balance between these two what I would call 'constraints'? One thing we should realize is that the institutional gap between advances in knowledge and the decision-making process to do something about it, has increased. That's my personal observation, but I think before even going into organizational structures and organizational capacity to handle a matter like culture and the future, we have to realize that both internationally and at national levels, the set of rules, functions, technical assignments, in the area of culture has not lived up to the fast changes in culture both nationally and internationally. Before we even begin to see what an organization or a state or an international organization can do about it, we have to realize that the institutional set-up, both nationally and internationally, is not yet equipped to deal with the things you have been talking about and we face here. Its a professional and not only an organizational dilemma. We haven't talked much about institutions here and we haven't talked much about decisionmaking. There have been, for example, a lot of complaints that the international community has not lived up to expectations in the area of science and technology. Third World countries in particular have criticized the United Nations system with regard to technology transfer and the building of endogenous scientific capacities. Now, this is a responsibility in which UNESCO has its share, but it's not only our problem. We have not been able to come to grips institutionally with the mixes between science and social sciences and humanities and culture. We have come to grips with them maybe in terms of scholarship and intellectual discourse, but I do not know any institutions in countries, certainly not in developing countries, that have come to grips with the strength which UNESCO should represent in looking at science from a purely technological point of view. We are in competition with the private sector in technology. We are in competition with Specialized Agencies like FAO, UNIDO, in applied technology. So, what is left for UNESCO is that area which links science to ethics, to social science. Again, the institutional lag to set up and to translate this notion into decision-making processes is something, at the national and international levels, we haven't yet come to grips with. In summary, my argument would be that translating the scholarship of NGOs into decision-making or institutional management, not talking about organizational management, is the task where we would also need more help and these are some of the concerns I am sharing with you.

MRS. MASINI: We think that in looking at culture or other issues, UNESCO should try and look at alternative scenarios, which are possible and probable. Allow me to make a footnote as somebody who has been working in future studies for over 20 years. Whatever scenario you look at, whatever way you look into the future, in terms only of trends or normative ways, the fears and the desires always come out in the scenarios. The main facts on what might happen that you are analyzing have to be accepted professionally, but what you fear and hope for also comes out. However much you are focussing on possibilities, on trends, it is always there. It is difficult for it to be otherwise. This is why I think we all agree on the alternative scenarios, without any judgement, but among the alternatives are also the desirable. In concrete terms, we think that alternative scenarios have a series of points: **firstly,**

specific cases of the possibilities and probabilities of the destruction of cultures, what Mr. Goulet called '*the destruction of the significance of cultures*' (sometimes it is only a reduction of the significance, sometimes its elimination. We could look at this with specific cases, let us say in Latin America). A **second** set of possibilities would be to look at *the artificial intelligence culture*, what Mr. Dator was telling us about, and the different levels of artificiality that Mr. Nandi was talking about: Where are they? Are they in the United States? Are they in Japan? Are they in Europe? The **third** set would be a few cases of *socially-critical cultures by the cultures themselves*, in examples such as the health and medicine issue which has come up quite frequently. This might be in one or two Asian countries. A **fourth** set is what we call the cases of '*spontaneously emerging cultures*', which sometimes emerge, seem to die, then re-emerge; the Chipkoe culture was indicated as an example. A **next** set would be, and this is more policy-oriented, *the search for fragile cultures*, in Mr. Goulet's terms, that need support because they have shown a way to survival. **Another set** that we were suggesting is very future-oriented, the search for *dialogues between peripheral cultures*. Two examples came up: one was, in view of the 1992 Columbus anniversary, many minority groups getting together, dialoguing, like the Maoris in New Zealand with some of the American Indians. **Another group of possibilities** is looking for the processes by which *one culture overpowers others*. It would be very interesting to study East/West cultures in the light of recent events; which 'overpowering' has taken place or will take place? In the area of work and labour, in family structures, in family habits, which culture will overpower the other? And what are the processes? How long will it take? etc. I previously gave the example of Europe, but there could be others. Finally, what we could call the '*nation-state oriented cultures*'. This might be very interesting in Africa. We can also propose something which is of a more methodological nature at two levels: one we have partially discussed, *the search for indicators of emerging cultures and dying cultures*. What are the indicators of a new culture? Can we have a set? This could be a very interesting exercise involving social scientists, humanists. Another even more ambitious interdisciplinary proposal could be (something that does not exist) a sort of *typology of the eruptions of cultural conflicts*? Why do they become conflicts at a given point in time? What made Romania explode? At the cultural level (let us keep this at the cultural level), what cultural elements were in that event? We could look at many cultural conflicts in the past. But let us look at a typology that might, even if it is a rough one, clarify itself with time. What made the Tamil, the Sinhalese explode? Let's try and understand the processes at least. And finally, in trying to answer Mr. Sasson, who said we should find areas of common interest, there are two already on which social scientists and people working on cultural issues can work together. *The development issue* emerges and would specifically be a part in two or three of the cases I indicated: the social critique by the culture itself, the spontaneous emergence of cultures, the nation-state cultures. What does all this mean to development? Finally, another area, which was also touched upon in our last discussion and which would need to involve the natural and social scientists as well as people working on cultural issues, is: have we reached *the limits of scientific knowledge*, are we overcoming the laws of history? Are we overcoming any kind of evolution or theory? Are we moving into what Mr. Dator called 'the age of uncertainty'? We need this. Maybe it could be a very small group of natural and social scientists that could reflect on this basis. Organizationally, each of these possibilities could be developed by a small research team.

MR. CONCHEIRO: UNESCO should try to deal with possibilities and probabilities and not constitute an advocacy group for any particular vision of the future of cultures, but rather try to establish alternative scenarios. I was wondering if, given that there are 30 to 40 teams already established and doing national 21st century studies, it might be a good idea to ask them to include specifically in their studies the idea of analyzing the possible futures of culture, culture and science, or science, technology and culture. It would be necessary to include some kind of order so that the resources would later be on compared and some global images emerge from this comparison. If UNESCO were more ambitious it could undertake studies in those countries where future-oriented 21st century studies are not yet being done, so that we could have a further enrichment of the ideas being handled. Also, in this scheme, or maybe in a parallel one or a different one, one could aim at using a date that's going to be of importance for natural reasons in the year 2000, to try to have by that time a global report on cultures that could be discussed at a very high-level meeting of Member States' representatives (Ministers and even Prime Ministers or Presidents), that could inaugurate the next millenium with a global view or a global discussion of cultures. Perhaps this sounds too ambitious but I think it would gain support, because the year 2000 is going to be a really special date whether it really means something or not. People have in their minds the idea that the year 2000 is the beginning of a new millenium and we will have to look at things in a different way. Also, I believe that one of the aims of looking at cultures, at science, or technology and development, in a multinational organization, is to promote a better understanding of cultures. Generally speaking, each nation or each Member State has its own - I hate to use these words but I am going to have to use them, as I cannot find any better ones - 'feared enemies and welcome allies'. It would be a good idea if UNESCO could promote long- term studies of cultural defences and the views which cultures have of each other. Take as an example Mexico and the United States. There are a lot of misconceptions: Mexico about the United States and the United States about Mexico. Would it be helpful to establish a view of the long-term relations between Mexico and the United States? I do not say regions, because when you set this up on a regional basis, it loses strength, but it could be three countries rather than two countries, for example, Japan, the United States and Mexico. How do they view their long- term relations? Perhaps it would be a good idea to look at things in a different manner. On the comparative analysis that has been suggested, I think it will be very useful to have our own ethno- centric cultural views and it would be a good idea to promote some kind of study that would try to find out what the views of other people are about specific cultures. For example, how do we perceive Japanese culture? Cultural communication problems arise from the misconceptions that we have about other cultures. It is not so much how we see ourselves, but how we are seen by others or how we see others. And finally, I think that the world in the future, however you look at it, will be more complex, and I do not think we understand this complexity sufficiently to be comfortable with the issues we are facing.

MR. SALIH: We know that UNESCO cannot possibly shoulder the huge responsibility of propagating, preserving and engendering culture. Yesterday I alluded to what I consider to be the dilemma of UNESCO, i.e. an organization created in a flash of optimism after the war in

the hope that it could help change the world, and then, like everything else, ideas solidified, some people might say ossified, into a form of bureaucracy. It has strength because it has to accept what governments at any given point want, and what governments at any given point want is not necessarily what they should want. But I think the founders of UNESCO also envisaged a popular organization belonging to the peoples of the world. Over the years it seems to me, (and I have worked in UNESCO), that the balance has been increasingly shifted towards the official part of the whole thing. I believe that it is time for UNESCO to somehow break out of this trend somehow. It should strengthen its popular aspect, it should fire the imagination of people, it should be seen to be relevant.

MR. GOULET: I have taken seriously Mr. Sasson's invitation to present concrete and specific suggestions. These suggestions fall within the categories which Mrs. Masini has sketched out, but I wish to say a word about their inspiring principle. I now have the impression that almost all people who plead for the active promotion of cultural integrity, vitality and diversity, are viewed by the real shakers of the world as having a kind of a museum or mausoleum outlook, that cultural values are nice things but that they are not very relevant to the living, breathing forces that move people. Yesterday Mr. Nandi mentioned that we have splendid museums in Mexico, and that they treat their cultures a lot better within museum walls than they do in real life. The editor of UNESCO's magazine *Museum*, Mr Gillette, asked me to craft in one sentence what he called 'an epigrammatic' quote about cultures which he could use for *Museum*. I came up with this statement: 'The MUSEUM - modern technology's splendid paradox ! What marvels of design, of lighting, of art, science and advertising genius in DISPLAYING as objects for admiration the inert artefacts and civilizational relics of the very cultures whose living entrails - their economic, political and social organization, their symbols and meaning systems - the self-same technology has so pitilessly DESTROYED'. One way of getting UNESCO out of this business of being a 'reliquary' guardian of museums and mausoleums is to conduct some studies on cultures: on how they live, how they provide models of organizing economic life, social organization and political activity. I would favour a kind of research that links theory and practice, and by theory I do not mean intellectual philosophizing about culture, but rather what is the self-understanding of communities of culture as they cope with technology, with bureaucratization, with modern medicine, with the vast scale of modern cities. This suggests the kind of cultural research which needs to be done. The 'Centre Interculturel Montchanin' in Montreal has moved beyond public education about cultural diversity to perform legal advocacy for threatened indigenous people. Montchanin assists fragile cultural groups to recapture their juridical autonomy and gain the freedom to define their own needs and mode of development. UNESCO might contribute greatly in constructing a *theory of active alternative development survival*. For instance, some years ago in Mexico a movement like the 'Coalicion de Ejidos Colectivos del Valle del Yaqui', in North-West Mexico, created an alternative set of structures, everything from an agricultural bank to a system of technological resource creation. They asked themselves: 'How do micro-cultural communities, who have to adapt selectively to modern technology and modern bureaucracy, deal with superior powers of modern government and modern capitalism? How do they begin to influence the macro decision-making bodies? I am interested not in lovely

case-studies of *micro-survival*, even qualitatively good development *alternative survival*, but how do micro-groups change macro-strategies? I have listed ten such possible topics which I have given to Mrs Masini. Mirrit Bhoutros Ghali, the Egyptian author of *Tradition for the Future* has done a kind of phenomenological profile of conflicts between fundamentalism and modernism in Islam. Such studies could be conducted in Malaysia, Indonesia, the Maghreb, Senegal, Egypt, Iran. A few selected small-scale studies can illuminate the dynamics of cultures 'en prise avec la politique'. UNESCO can influence the World Bank and the IMF by giving them a tool for assessing cultural vitality in development. I remember the time when a dictator of Brazil, in reply to the following question put in an interview by *Le Monde*: 'What about the economic miracle?', said: 'It is very good for Brazil's statistics, it is terrible for the Brazilian people'. There are clearly different measures for assessing human and cultural progress and mere economic or technological progress. Culture is closely connected with ecological responsibility and the management of resources; UNESCO should invest money in supporting exploratory pioneer groups trying to manage tropical forests in ways which ensure the survival of threatened cultures. One of the most important dialogues to be engaged amongst cultures is that between different traditional wisdoms and the culture embodied in modern scientific, technological, and managerial action. There might be some merit in doing a phenomenological study of the value systems implicit in modern technology. When one peels away all the superficial manifestations of different cultures, what really matters is the fundamental outlook on the essential meaning of life, birth, death and love. A few months before he died, Freud was asked: 'What are the most important things you have learned from 40 years of clinical practice?' He replied: 'Loving and working' and when Albert Camus wrote *La Peste*, he said that what one needs to know about a city one discovers by learning how and why people love, work and die. Suppose I were to select three or four key categories and ask a series of questions: 'What do different cultures say about the meaning of life, of death, of love?' And what are the latent implicit values hidden behind the present-day, managerial modern philosophy of life? Therefore, to do a phenomenological study of what cultural value dimensions lie behind this pattern of life might be very interesting. One must ask: 'What is fundamental? What viewpoint on transcendence does this practical philosophy of life hold?'

MR. SOGOLO: UNESCO is now, it seems to me, a separate market place, not linked with the wider intellectual market place. People like you, academics, scholars, are aware of what UNESCO is doing, but this is not the point. The point is actually to enter into the whole volatile market place of ideas and this may be also true of films, of video programmes, etc.

MRS. MASINI: We do not understand very well the dynamics of when culture is vanishing or being overpowered or when a culture is emerging. We could try and have a set of indicators of emerging cultures and of decaying cultures, cultures which are losing their significance, to see how it really happens and have a sort of observatory. Of course, it is not easy but it could be done on the basis of events that have taken place in the East and other parts of the world. One could focus on these elements, the basic elements of life, how they change, whether they really change, at what point in time a culture takes over rather than another. This is an

area, as far as I know, that has not been developed, and this could be an area from which the observations of UNESCO could start. One area could be Europe, as it is now, East and West, which culture will overpower the other, which culture will decay and which will overpower the others in specific fields. I suggested work on family issues. This would be very much in the realm of the possible and the probable over the next ten to twenty years.

MR. NANDI: I think there have been plenty of studies, not only sponsored by UNESCO but by universities and a huge number of scholars, on cultures in various sectors. If you point a gun at me and ask me what I think is the cutting edge which could give meaning to an enterprise being mounted in 1990 and not in 1970, I would say that it is in the area of *politics of cultures*. If UNESCO could bring to our work scheme an awareness of the politics of culture, then cultures could be studied in a more meaningful fashion. For example, the study of science and culture: if you want to study the environment, and if you could devote a part of your attention to the various other forms of science and knowledge systems which are implicit in many cultural worlds where societies, without calling them 'systems of knowledge', or 'science', have used them for their own purposes, then you will have done something for the world of knowledge as well as the problems of our times. This is the endeavour to be emphasized.

MR. SASSON: We would like to understand and provide the data or the evidence for any evolution, for any trends. You said that there were trends, sometimes substantiated, sometimes a hypothesis. You said perhaps we are going in a direction towards what will be a dominant culture, etc. Mr. Dator has listed several possibilities for a scenario - what would happen to the mother tongue, what would happen to the representation of systems, of ideas, of values in that culture, etc. He did not have the time to expatiate and to bring me all the facts and evidence with examples to show whether he was right or wrong, or whether it is just a hypothesis. He said, for example, and I was struck by this, that there was also an emerging artificial culture, because he sees that in 10 or 15 years it will be a reality. If we meet again in 10 years from now, we will probably elaborate on this culture, define its system of knowledge, of representation, etc. So, we want to go further. This meeting was a brainstorming session. It was held to listen to you, to understand, to see where we are going and what the main tracks of evolution are. Now, we have to define two or three things. We cannot do more. I agree with you that one thing to do, for example, is to promote, we are not going to do it by ourselves, but to go to some teams well distributed throughout the world and support them, to deepen knowledge, to understand better what's going on in one specific area. For example, if you say that one trend you have noticed is the disappearance of the native languages - and this is part of culture, someone's native language - I would like you to show me how we can support some kind of research to understand this process and to bring out a publication, etc. This will be a contribution by UNESCO to understanding a process and a knowledge, but within a prospective approach. Or we can do something more general, more global, in one region. The world is divided into geocultural regions. You cannot say that the culture in the Arab States is the same as the culture in Asia or in the Buddhist Asian

countries, or other countries. We have this in mind, but we would like to check with you if we are on the right track. We can take a region or a subregion and organize a series of meetings there, promote some studies, finance some studies, in order to come, at the end of two or three years, to understand what is going on in this region from the viewpoint of the future of culture, or cultures if there are many. If I take, for example, the Arab States, I have the feeling that there is some kind of homogeneity - the language is the same, the value representation systems are very close to each other, the forces which act on this culture are more or less the same. They are confronted with similar difficulties. Of course there are countries which have a small population, while others are densely populated. The pressure will not be the same, but we might, in the Arab States, check our ideas and see if we have a pessimistic scenario or an optimistic scenario. We are addressing the intellectual community and asking the intellectual community in those countries from inside to tell us what they feel. And, of course, this will be disseminated. This is to explain to you that we can have two approaches; we can have a topic-wise approach: you select the theme, you select a topic, or two or three, and you would like to see, from a prospective viewpoint, what's going on. This will be done by scholars, by universities, by laboratories, by teams; we will have to locate them, to go to the right people, so that we know what is the expected result at the end of two or three years, and we are ready to help and to assist with the limited resources we have. We know that if we can clarify these topics or trends, it might certainly be useful for managing our culture programme. This is what I call the 'spin off'; the spin off will go to the Culture Department and tell them 'Look, these are the trends in this area; your future programme should be built up accordingly, and not in a static way'. The same will be true if we take the regional approach. If we go to one region and elucidate any trends, of course, our rôle in that region will look different in two years, in four years. We won't perhaps plan the same programmes in the Arab States if we know what is going on in the culture of these Arab States. It won't be exactly the same approach, i.e. this approach will certainly have an impact on our programme. I defined this on the first day of this meeting, the 'inward-looking approach'; we want UNESCO to benefit from its own work or the work it supports.

MRS. MASINI: I think it is extremely important to look at how the future may help to understand present problems. In looking at the future, we have to accept that we are looking at alternative possibilities and among these, some are more probable than others. We may indicate an area that we think is important; for instance, I would say that we are moving towards a multicultural society and we do not know how it will move, but it is a basic future trend. I would have to see many different alternatives of this multicultural society, whether in Europe, in Asia, or in Africa, or at the global level. I have to start from this perspective and, in doing this, whoever I am, whether a researcher or UNESCO or a group, there is some element of desirability in it, because it's implicit in looking to the future that it makes you look at what you fear and what you desire; this is implicit and automatic. So, you cannot elude this. What I am trying to say is, whatever the area, or the region we choose or you choose, it will always have to be seen in different alternative terms.

MR. DATOR: I was going to suggest four packages on which we might want to focus. One would be *alternative global cultures*. There has been considerable evidence in this discussion that a global culture is emerging, but there are many ways in which such a global culture could emerge. The second would be *the alternative futures of regional cultures*. As a Pacific islander, I am interested in that topic, but it is always ignored because we are so small. In all of these areas, if we were to accept them as general categories, we could then focus on specific topics, specific regions, specific alternatives. The third is a way of phrasing some of the concerns that I have heard Mr. Goulet and others describe, that is to say, how threatened cultures survive as *alternative models of modernity*, stressing them as *cultural resistance* and as *alternative models*. The same sort of argument that we hear about ecological diversity seems equally important in the area of cultural diversity as well. Fourthly could be my own particular concern, the *emerging new cultures* of which you might say there are two forms, human and post-human, cultures emerging out of the consequences of the continued demographic explosion in the Third World, youth cultures and attempts by youth groups to, in a sense, re-vitalize old cultures, and then the artificial culture prospective. That is just one way to package and simplify the diversity that I have heard here.

MR. GOULET: You mentioned the ease with which one can overlook the lessons learned within a single institution like UNESCO. Discourses about culture are still framed largely in terms of the childhood years of UNESCO, the years of Julian Huxley and Jacques Maritain. Somehow, we must discuss cultures in terms of the real-life history of cultural conflicts, particularly when these last a long time and reveal themselves to be intractable as, for example, the Irish struggle. I recently returned from Belfast, where one walks 300 yards from one universe of perceptions to a radically different one. Catholics and Protestants understand each other perfectly well. Their problem is not that they do not have knowledge of the other. If you go to the Lebanon or Palestine, Jews and Arabs know each other very well. It is a childish view which holds that mere education about other cultures will make people more tolerant. I think this is completely wrong and contradicted by the evidence. The most serious conflicts are found amongst adepts of culture who have deep knowledge of others. Perhaps some of UNESCO's research should go into studying the difficult cultural conflicts over religion, ethnicity or politics. What are the obstacles, not to cultural understanding, but mutual negotiations? My second point is inspired by the writings of Daniel Bell on the post-industrial society. I am thinking of his book on the cultural contradictions of capitalism. He wrote that the United States is going in a direction of separating economics from politics and culture with each following a different set of rules. In politics, the rules are negotiation, compromise, and consensus. In economics what rules is the quest for greater efficiency achieved via market competition. As for culture, it is becoming increasingly privatized: culture means that every person indulges in different preferences and foods: there are no such things as cultural cement, cultural bonds. In other words, modern culture is no culture at all. It means do whatever you want. There are no norms. In most cultures called modern, this fragmentation exists. The name 'culture' still exists, but it has been stripped of content. This vacuum cannot last for ever. As Pascal said: 'If you deprive people of their real gods, they will invent false gods to worship'. Because of the concentration of the technological means of

communication and of demographic densities, even small localities are becoming very susceptible to the worst kinds of totalitarianism and manipulation. In other words, I urge UNESCO not to do any antiseptic, clean, kindergarten kind of cultural studies. The futures of culture lie in confronting conflicts and contradictions. The key is how we can move beyond a simplistic formula for handling such conflicts.

MR. DATOR: I agree entirely with the last concern that Mr. Goulet mentioned, but that's the optimistic scenario needed to deal positively with helping people preserve their own identity and their own cultures, given the fragmentation. Mr. Goulet has greater faith in the possibility of preserving traditional cultures than I do. I am more interested in trying to help people create new cultures. But our fears are exactly the same.

MR. REIFF: I just wanted to react to Mr. Dator's 'packaging'. Again, with the same concern which I have already expressed, how can scholarship enter decision-making? Because we have to look for that. I can see two very urgent demands in your packaging. First of all, in your list, what I see as closest to the crisis management of decision-making today which can be influenced by knowledge about the future, is what you call 'the emergence of new human cultures'. Exploiting and exploring a much more demographic base is something which UNESCO has looked at, not as demographers, but trying to extract from demographic trends the knowledge of the population about culture contained in these trends and in these figures, and this includes youth cultures. If we could come up with identifiable trends in terms, not only of demographic variables, but population movements and their cultural impact, that is something the international community is looking at to make a component of a development strategy. This is very promising because you can observe trends and you can look into the future on the basis of data-sense. The second very attractive idea on the list is : How do cultures survive, how do threatened cultures survive? And there, I think, what we would be looking for is: Why do some institutional cultures survive and others do not? Why, under the impact of structural adjustment of the World Bank, do certain training institutions flourish and others disappear? What is it in the organizational culture of some learning institutions that survives structural adjustment, and why do others not? This is a management issue.

MRS. MASINI: Actually we have a certain amount of knowledge about the new cultures which are emerging from demographic, migration trends. We can detect where the trends are going and what might happen in the future; what we do not yet know, and we should research this, is whether really new cultures are emerging by this, or if they are simply reinforcing old cultures. For example, with regard to the Turkish migration to West Germany: here are two cultures that have had practically no influence on one another. We do not yet know enough about this kind of thing. At the European level, this is going to be extremely important in the next few years, with migrations coming from the South, the East. What we do not know is at the cultural level and this is where research should be done.

MR. SASSON: What I would like to see is how today, in some areas of the world, there are cultures which can be defined, according to any kind of definition you want to use for culture, seeing them evolve and at the same time resisting and surviving, with hope for survival, i.e. we start with the assumption that this process is going to last. If we are dealing with a dying process, it's like doing archaeology, doing a post-mortem. We would like to see if this is future-oriented and with lessons to be drawn, because it can be useful for others to know that there are processes, ways and means to confront difficult situations.

MR. SOGOLO: I don't want Mr. Goulet to get away with his last remark. I usually find his remarks illuminating, but I was rather disturbed when he said that it does not make the slightest difference whether people know one another or not. I am not so sure that in Ireland, in Palestine or in Lebanon the conflict is between communities who know each other very well. It is accepted that the conflict has nothing to do with the people; it is being manipulated by other forces. I must also say I like Mr Sasson's idea of concentrating on one region, because, as you said, it has many advantages. In the Gulf area, for example, after the oil boom, there is now a reflective mood and I think people are beginning to consider what they have lost and what they have gained. You also have a situation where there was a feverish attempt at so-called modernization, an area which is linked with Africa, with Europe, with Iran and Central Asia. I find this rather an attractive idea.

MR. SASSON: On the basis of the last proposal it seems that there is a consensus; to adopt those four packages or within each of them see what would be the best choice. I am keeping in mind the fact that the regional or subregional approach is attractive. The aspect of 'how cultures survive' is one interesting thing and the 'alternative futures of culture' is another one. This, as you said, is the range of scenarios, of possibilities to be borne in mind.

2.

POSITION PAPERS PRESENTED AT THE WORKING GROUP

CULTURE AND ECONOMY

by Antonio Alonso-Concheiro
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Culture is a seashell where we hear voices of what we are, what we were, what we forget, and what we can be.

Carlos Fuentes

Culture is a much used term. Yet, no universally accepted definition is available. In loose terms, culture includes knowledge, beliefs, arts, morals, laws, habits, and any other capacities or customs acquired by individuals as members of a society (Edward B. Tyler, 1871). It is the set of forms of behaviours (explicit or implicit), acquired and transmitted by symbols, which singles out human groups (A. L. Kroeber, C. Kluckhohn). It includes traditional ideas (historically generated and selected) and in particular the values linked to them. The main disagreement between authors seems to be whether or not it includes the instruments and objects produced by a society. On the other hand, economics is the social science concerned with the economy, i.e. the production, distribution and consumption of wealth. Microeconomics deals with the economic behaviour of individual consumers, firms, traders, or farmers. Macroeconomics focusses on economic aggregates (total unemployment, flow of investment, or global income). The many possible links between culture and the economy and their numerous possible mutual interactions should be clear from the above (is the economy in its totality only a part of culture?). A. Beals distinguishes "cultural systems" from "culture". According to him, a cultural system is the union of all processes, events or activities in which a group of individuals customarily engages. Within the system there is a material culture (things), a society (the people), a culture (traditions), and the necessary activities. Outside are all of those which do not belong to the cultural system. Thus, culture is a subsystem of the cultural system, whereas the economy would be more closely related to the material culture and the necessary activities. If any one subsystem of a cultural system changes, the other subsystems tend to change. (How many times have working attitudes and economic activity in the USA or Britain been linked to their adoption of basic Protestant values?)

Culture has also been attributed a much more restrictive meaning: as knowledge, or the set of products of learned people. Or even more, as that which belongs or is related to the arts, to the exclusion of scientific endeavours (C.P. Snow, "The two cultures").

Much economic activity depends on innovations derived from technical and scientific knowledge. The wealth of nations rests not on their resources but on their minds (R.A. Ayres). Between 40% to 80% of post-war economic growth has been attributed to innovations in science and technology. In a beautiful essay, J. Bronowsky (*A sense of the future*) discusses the need for certain values to prevail in a society (truth, honesty, independence, originality, dissent, freedom, respect, honour, dignity, tolerance) if science and technology are to be practiced with any possibility of generalized success in that society. A recent comparative study of the work-related attitudes and values of managers in a large set of countries makes interesting suggestions on the effect of values on economic organizations and their achievements (G. Hofstede, "Culture's Consequences"). During the 1960's the concept of "corporate strategies" was substituted by that of "management by objectives". During the 1980's the latter has gradually been replaced by the concept of "corporate cultures", a clear recognition that economic success depends not just on efficiency and good management practices or technology, but also on values and traditions. According to some, during the 1990's and beyond, "corporate cultures" will give way to a search for a "sense of reality" (R.F.W. Nelson). The links between culture and the economy are thus multidimensional.

When speaking of future economic changes it is frequent to point at certain characteristics considered to be (not always with good reason) global trends. Among these: the globalization or internationalization of the world economy; the so-called tertiarization of economies (towards service or knowledge societies); the unlinking of different markets (i.e. the independence of flows of raw materials and goods in the past and of goods and capital in recent years); the increased importance of the Pacific Basin; the new-found economic multipolarity or heterogeneity; and the emergence of a new kind of corporativism. Dominant economic powers have historically affected and changed the values and culture of those in their sphere of influence. Thus, during this century, features of the "American way of life" have been adopted on a world scale. However, if in the future, as seems likely, the American economic hegemony ends, will its cultural influence diminish? Will Japanese and German values gain international presence?

In some countries (and maybe even on a global scale), financial matters seem to have been gaining prevalence over production matters (finance versus the real economy). Financial flows seem to be particularly dominant in economies with high inflation rates, with volatile money markets, with non-uniform rates of return for investments. In some countries this has altered the power structures (giving more power to emerging financial groups and reducing that of traditional impresarios). Even within companies, the values of financial managers have replaced those of production managers. Medium to long-term productive investments are becoming less popular. Speculation seems to be gaining the upper hand, aggravating trends towards uncertainty which contribute to increased volatility. For some countries economic changes have meant a switch from expectations of growth to hopes of survival. Vulnerability to external economic forces (external debt, for example), has meant a loss of independence and even self-esteem. Productivity, value added and technological innovations have suffered from the blows dealt by external (and internal) shocks. In countries where these conditions prevail, culture and traditional values have been under fire.

The reduction of productive investments and, consequently, the insufficient creation of jobs in the formal economy, together with other factors (such as bureaucratic obstacles, the search for independence, tax evasion, very low minimum wages, etc.) have created a very rapid expansion of the informal or underground economies, which in some cases may represent today as much as half the formal economy. In the future, at least in most developing countries, it seems unlikely that a trend reversal will occur (though the phenomenon of an important informal economy is not exclusive of developing countries). This may, in turn, among other things, bring about less governable societies (an increasing amount of activities occur outside controlled channels) and perhaps political instability. This, together with many other economic and cultural changes, point to future changes in the way jobs, formal employment and working places will be perceived. Forty hours a week full employment may be something of the past. Increases in productivity will be needed and are likely to occur. Free or leisure time will almost certainly increase for most people; however, it may or may not be used to improve the quality of life. More opportunities for "do it yourself" activities (self-reliance) will be available. Informal continuing education kits and programmes could expand their markets. Extended holiday periods may modify travel and tourism. Labour unions will have to adapt to a new environment.

Changes in the communications and transportation systems and technologies will also certainly modify both economics and culture. Although certainty about commercial success is far from clear, development efforts will probably lead to much faster jumbo cargo planes and Mach 5 passenger planes. Advances towards the integrated service digital networks (ISDN) will hardly be stopped in a growing pattern of integration between communications and computers. The home video entertainment centre is also likely to expand in numbers and options. The potential social and cultural changes induced by all these developments will most likely be deep, but their direction cannot be easily determined. Some point at the possibilities of work at home; some go farther, and imagine as a result a decentralized social system, with a more scattered population (much in the same fashion as late in the last century, when the telephone and automobile were making their appearance; it should be noted, however, that these proved to be essential elements in the expansion of the huge megalopolis of today, rather than working towards a deconcentration of activities).

Some countries have, through different periods of their history, chosen inward-looking approaches for their development (for example, China or Japan in the 16th and 17th centuries and again at other times during their history). Although it is not easy to explain fully why this has been so, it seems that cultural character has had a great influence. Today, as mentioned earlier, integration and internationalization seem to be the predominant trends. However, in parallel, a resurgence of local values and communities can also be perceived. The state is becoming too small as an economic unit, but too large to represent local citizens' interests. If internationalization proceeds, those economies which have been relatively isolated from international flows will have to make strong adjustments to reposition themselves in the world economy. Consumption patterns, subsidies' policies and commercial practices will have to change. Clientelist practices will have to be transformed into competitive policies. In a more tightly intertwined world economy, nationalism will have to be reinterpreted. However, if

local national interests are sufficiently affected, a return to protectionism, a reduction of trade flows, and a brake on the general internationalization process cannot be discarded. What would happen to this process if a deep depression were to hit the American economy?

Cyclic behaviour patterns have been proposed by many authors, not only in economics (Kondratiev cycles), but also in social and cultural responses in general. The roaring twenties and the "free" sixties and seventies, and all they implied culturally, have been linked with peaks of economic expansion. Social tension, expressing itself sometimes as internal conflict and sometimes as external confrontation, has been associated with peaks and troughs of economic waves (R. C. Beckman, for example, among many others). Even the political orientation of societies, it has been suggested, is correlated to the prevailing economic conditions. How far and how seriously one may take such theories, particularly as guides to future developments, is still debatable. However, biologically and socially it is a fact that generations do succeed one another every 20 to 30 years, and that they influence culture and economic behaviour. Thus, there may be more than mere coincidence or accommodated interpretation in long wave theories.

The "modernization" of economic structures is a common objective of many countries. "Reindustrialization" was tackled by some industrialized countries in the 1970's. Some less developed countries are still striving towards it. Trends in this direction are likely to continue in the future. Is it possible to successfully "modernize" the economy but not, at the same time, other sectors of a country (say, for example, the political system)? How far can modernization proceed without a cultural shakeout?

We all search for meaning in our activities (who we are, our values, myths and legends). We permanently (although mostly unconsciously) search for ties with an aim of a superior order. The study of corporate cultures has explicitly recognized this and has begun to explore the way culture relates to economic activities. How different can a corporate culture be from the culture of the host country? How far in its environment can or should a corporation try to extend its values to the communities surrounding it (be it its suppliers and clients, or its workers' families and communities)?

"Progress" does not necessarily have to mean only "economic progress" (material progress). If it has been so interpreted, it is because the predominant culture suggested it. Cultural changes, past and present, seem to propose that happiness and welfare require more than material satisfaction (although this is not to say that the latter is not important). The economic indicators used today are no doubt a cultural product. They tend to emphasize material growth, but not its distribution. Further, emerging global and systemic views are pointing ever more clearly to the far-reaching consequences of economic progress that were previously largely ignored, e.g. environmental issues. The combination of these factors is pressing for the development of a new kind of economic theory based on a different set of indicators. Part of the same (or a parallel) trend is the apparent disgust with our "wasteful" societies. Recycling is thus gaining credibility as an activity which makes sense. Can this be accommodated

within the values of Western cultures, or will cultural changes be needed if the trend is to become strongly entrenched in the future?

Cultural and economic changes do not necessarily proceed at the same pace. Some even perceive culture as a means whereby a social system protects itself against abrupt or rapid changes (culture as traditions that work). Culture would be equal to social resistance against change. Yet, it is commonly accepted that we are living in a world of accelerated change. Technology and its economic consequences seem to move faster than ever before. Are old cultures being defeated and substituted by emerging cultures that are being largely ignored? Is a culture where change is a fundamental value a conceptual and practical possibility? When does a culture adapting to change cease to be itself and become another culture?

Urbanization and the economic developments it entails are a further trend to be considered when analyzing possible future cultural changes, particularly in developing countries (in industrialized countries "rurbanization" has been proposed as the dominant trend). Given the rapid pace of urbanization in the less developed countries, aggravated by an extensive migration from rural areas to big cities, "rurban" cultures (rural-urban) are emerging, with mixed characters and less than adequate living conditions. Urban economic activities and technologies are by and large foreign to the newcomers. They live with "rural time" in communities ruled by "urban-industrial time". How much do second or third generation urban dwellers have a culture of their own? How much will urbanization contribute to a greater uniformity of cultures?

One final remark of great importance. In every country women have been increasing their active participation in the economy, and it is likely that this trend will continue in the foreseeable future. Its consequences will most likely be far-reaching. Two-income couples have different limitations of subsistence: they have more freedom to choose their jobs (this is even more true when the income of either is roughly equal to family expenses). Women who earn an income are less dependent economically on their husbands and this has apparently increased the instability of the family, particularly in cultures dominated by male values. Above all, women who work spend less time with their children. Their rôle as culture transmitters is being radically modified and this could, in the long term, have lasting and profound cultural effects. Who (or what institutions) will take over their rôle of preserving values? Will mass communications assume greater importance in this respect?

INITIAL THOUGHTS ON THE FUTURES OF CULTURE AND COMMUNICATION

by Jim Dator
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The following are some fragmented ideas about our project made in the absence of any discussion with any member of the project planning group. Thus, they are strictly tentative, showing some of the alternative directions the project might take, according to my initial, and isolated, understanding of the project. They are also based on the assumption that I am particularly responsible for organizing some thoughts around the topic "the futures of culture and communication".

I am sure I will have a completely different understanding upon the completion of our initial planning session! Therefore please take the following as just my brief thoughts aimed at getting the ball rolling without any presumption on my part that I even know the game, much less the rules of the game, we are playing with the ball!

1. In many ways, "culture" and "communication" (or at least "expression" if not actually "communication") are one and the same thing. "Cultures" result from the way we humans attempt to give meaning to the environment around us. This attempt always involves individual and social "expression" and/or "communication" (in some set of modes or other).
2. At the present time, most discussions of the futures of culture and communication centre on the futures of print-based and/or AV-based communication technologies, and their probable individual-social consequences. This is proper, and I imagine this will be our (my?) main focus. But communication takes many, many other forms whose "futures" might be focussed on as well, or instead.
3. For example, speech. Thus the futures of the spoken languages of selected cultures might be studied. Or the futures of a single world language (or several world languages, either "natural" languages, such as English, or "artificial" languages, such as Esperanto, or some other) might be examined. Or the futures of lectures and conferences - even of conversations.
4. But "cultural communication" is also found in architecture and urban design. We might, for example, want to study the "communication" implied in certain contrasting cities, such as Brasilia and Pyongyang vs. Las Vegas and Hong Kong, or the future of architecture per se (Clem Bezold and the Institute of Alternative Futures have recently done an excellent study on this for the American Institute of Architects).

A related theme would be the original future-oriented meanings of historical constructions like the Pyramids, Stonehenge, and the Easter Island faces vs. architecture in the style of Stalin, Hitler, and Mussolini vs. the architectural styles of the World Fairs, from the Crystal Palace, through the 1939-40 New York World Fairs to Disneyland, etc. and their futures.

5. Another facet might be food as cultural communication. I am reminded of how Simon Nicholson used food in this way as a part of the UNESCO workshop on "Forms of Presentation" (FoP Shop) meeting in Oxford a decade ago. But Coca Colonization and the omnipresence of Macdonalds and Kentucky Fried Chicken, as well as the rapid global emergence of pre-eating hot towels and sushi bars, is another aspect. The probable spread of vegetarianism and "health" and/or "ethics" related eating is another.

The history of preserving and packaging food (salted and eventually tinned foods, Japanese "bentos", vacuum packing, freeze drying, and the eventual emergence of entirely "artificial food") is another. (Emerging issue: "It will be illegal in the future to waste precious land by growing food on it.")

6. A completely different slant would look at communication in certain social groups (or "subcultures"), for example, the family, the formal educational system, the political system, bureaucracies, the economic system, religious and other belief systems.

What is "said" in these "cultures" would be contrasted with who says it and how it is said vs. what is actually done, by whom and how, and their probable future developments assessed.

The futures of these subcultures as dominant modes of communication within the larger culture, vs. the rise of new ones, might also be our topic.

7. We are also reminded that there are different "body languages" in different cultures (e.g. the different meaning in different cultures of how close or how far apart people stand from each other, the different meaning of touching, etc.).

8. And what about humour - satire, irony, the absurd?

9. And, God forbid that UNESCO should fund such a project, sex (and non-sex: flirtation, harassment, rape) as communication, and their alternative futures.

10. And the future of the "right to communicate" vs. things that are forbidden to be communicated, and other political aspects of communication and its futures in different cultures.

11. Then there is the matter of cultural change and persistence. It might be said that in traditional and even most agricultural societies, a culture and its modes of communication tended not to change - or at least they seemed not to change: because of the necessary over-reliance on speech, cultures changed without it being possible to notice and/or be sure of the

change, given the technical inability to “document” that change had occurred -indeed, to document accurately what was even “said” - as any participant in a heated oral argument will attest.

Cultures thus tended to persist relatively unchanged, or to change only slowly or imperceptibly, except when precipitated by natural disasters and/or conquest by other cultures (the latter of which arguably became the dominant mode of significant cultural change after the emergence of “civilization” and writing).

12. At the present time, change in cultural communication occurs in two main ways, sometimes separately, often jointly: political-ideological will and new technology.

13. The former, will, is found in the creation of intentional communities within larger cultural systems (e.g. the emergence of various religious groups in Europe in the late Middle Ages, and in the US in the 19th century and in the 1960's). Indeed, some of the settlements by some of the Europeans in North America and the eventual creation of the United States could be an example of “willful” creation of new cultures. So, certainly, would be the creation of the USSR.

14. If we were to continue on this tack, the recent emergence (or re-emergence) and the future of the following new cultures (and/or others like these) might be the focus of our research:

Islam (Ziauddin Sardar might do this)

Tenri (Japan. Akio Inoue)

Juche (North Korea. Myong-U Kim)

Prout (India. Sohail Inayatullah did his PhD dissertation on this)

15. In a related mode, the evolving cultures of “Peace”, “Gaia”, and “Feminism” might be the focus of our studies. There is a vast number of WFSF and IPSA members who could do the first. Chris Jones wrote his dissertation on Gaia, and there is a global network focussing on “her” as well. Gaia might also be compared and contrasted as an alternative future to the culture of “science”, especially that of the old “positivistic” science, and its handmaiden, the culture of “technology” (which I find so fascinating!).

Persons imagining and/or creating “feminist” cultures are even more numerous.

16. Another related focus would be the futures of a “global culture” vs. the re-emergence of “suppressed cultures” (e.g. Estonians, the Welsh, Catalonians) and the re-emergence of the cultures of “indigenous peoples”, such as the native people in North and South America, in Hawaii, and elsewhere.

17. In contrast, there is ample evidence to support the contention that “new technology creates new culture”. Many studies document the way “literacy” destroyed “preliterate”

cultures historically (e.g. contrast the oral Greek culture of Socrates' time with Plato's, when writing was replacing poetry, music and dancing as the dominant communication modes, and with Aristotle's, when writing - and thus "Aristotelian logic" - became, and to this day remains, supreme). There are also ample case studies of this process in modern times as well.

18. Similarly, Elizabeth Eisenstein, following Marshall McLuhan's pioneering lead, shows how the printing press destroyed the oral/scrabal cultures of the Middle Ages and helped to create "modern" cultures.

19. Which reminds us that we speak of "communicable diseases". Disease is a major destroyer of old, and creator of new, cultures. The Black Plague was a sturdy companion of the printing press, and AIDS may turn the trick in the future. In addition, people are "sick" differently in different cultures.

20. But to continue to focus on technology as a destroyer of old, and creator of new, cultures leads now to the study of the impact of radio, films, TV, video, computers, personal computers, etc. on modernity and the creation of post-modernity.

21. And that then obviously brings me to my own favourite culture(s) of the future - the cultures of artificially intelligent entities - the cultures of robots, and the cultures implied in the rapid emergence of a "wholly artificial world".

22. (Note: I suggest that any research into "new cultures", whether created by "will" or by "technology", should involve teams of at least two persons. At least one person would be "within" and advocating the evolving system, and at least one would be "outside", but not necessarily opposed to or even sceptical of it - though such is a possible alternative.)

23. Assuming I have some kind of continuing involvement in, or perhaps even responsibility for, the future of this project, among the not necessarily mutually exclusive alternatives I have thought of are the futures of:

- Culture and communication generally: all or some of the items 1-22 above
- Cultures of electronic technologies, robots and/or artificial cultures specifically
- Whatever the subject, for the Pacific region only
- Or something else entirely!

CULTURE AND DEVELOPMENT FOR THE FUTURE

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Introduction

Will economic and technological progress destroy cultural diversities which have been a precious heritage since the origins of human history? The meaning systems of all societies - their philosophies, religions, ensemble of symbols and myths - have brought to hundreds of millions of their members till the present a sense of identity, an ultimate explanation of the significance of life and death, and conferred upon them a place and a rôle in the cosmic scheme of things. Will these meaning systems now be reduced to insignificance by the steamroller effects of mass culture characterized by electronic media, consumer gadgets, occupational mobility, and globally transmitted rôle models?

Or, conversely, will the explosive release of ancient ethnic, racial, and linguistic emotions attendant upon political liberations now proceeding apace throughout much of the world destroy all possibilities of genuine development founded on universal solidarity? Will we witness a return of intolerant local chauvinisms breeding wars over boundaries and intercultural discrimination?

Such are the questions which thrust themselves upon those who ponder the futures of culture and development. What, indeed, are the future prospects of culture and development? And how do these two relate one to another: what are the cultural dimensions of development, and the developmental implications of culture? These questions define the vast agenda serving as the topic of our deliberations as we begin planning a programme of research and dialogue on the futures of culture.

I should like to offer one possible outline for dealing with culture and development in the future by presenting in brief, almost telegraphic, form a set of propositions centering on four axes: the state of development today, the state of culture today, ethical visions of the future, and policy directions.

I. THE STATE OF DEVELOPMENT TODAY

1.1 We are reverting to an economic growth paradigm. This is a regression, for after the 1960's specialists moved beyond pure economics or finance in efforts to integrate the political, social, and cultural dimensions of development.

1.2 Boundaries dividing politics and economics are rapidly disappearing. Increasingly politics deals with economic policy (witness Thatcher's programmes, Poland's march towards markets, China's probes with capitalistic incentives), and economics with politics (winning support for an austerity programme or new taxes, tariff and trade debates, etc.).

1.3 The world debt crisis has transformed development strategizing into crisis management. Structural adjustment is a euphemism for avoiding shipwreck in a sea of debt, inflation, and recession.

1.4 The collapse of Marxist regimes gives all Utopian visions a bad name. Therefore, any advocacy of multi-dimensional, integral human development respecting its spiritual, cultural, ecological dimensions is dismissed as Utopian and impractical.

1.5 Nevertheless, a new development paradigm is in gestation. Notwithstanding the hegemony of the economic growth model, new approaches to development are being tested out in the practice of numerous communities and movements. Their priority values are the primacy of needs and human rights over wealth accumulation, participation, ecological sanity, the building of community, and the equitable distribution of benefits arising from economic and technological advances.

II. THE STATE OF CULTURE TODAY

2.1 All cultures and cultural values are assaulted by powerful forces of standardization. These forces homogenize, dilute, and relegate diverse cultures to purely ornamental, vestigial, or marginal positions in society.

2.2 The first standardizing force is technology, especially media technology. Television, film, radio, electronic musical devices, computers and telephones operate, together and cumulatively, as potent vectors of values of individualism, hedonistic self-gratification, consumerism and shallow thinking.

2.3 The second standardizing force is the modern state. The modern state is a political institution which is bureaucratic, centralizing, legalistic, and ever-inclined to assert control over ideas, resources, and "rules of the game" in all spheres of human activity.

2.4 The third standardizing force is the spread of managerial organization as the one best way of making decisions and coordinating actions in all institutions. Increasingly government leaders must function as managers, as must university presidents, foundation directors, airline officials, heads of hospitals and scientific associations.

2.5 The result of these standardizing influences is massive cultural destruction, dilution and assimilation.

2.6 The very pervasiveness of these damaging forces, however, gives rise to growing manifestations of cultural affirmation and resistance.

III. ETHICAL VISIONS OF THE FUTURE OF CULTURE

3.1 Pessimistic scenario. Cultures and authentic cultural values will be, throughout the world, bastardized or reduced to marginal or ornamental rôles in most national societies and regional or local communities. In the United States, for example, traditional Indian pow-wows (community meetings for purposes of making political and economic decisions, ritual dancing, recreation) have become mere recreational appendages for the entertainment of visitors to amusement parks or folklore festivals.

3.2 Optimistic scenario. Humanity advances in global solidarity and practices ecological and economic concertation as responsible steward of the cosmos. Numerous vital and authentic cultures flourish, each proud of its identity while actively rejoicing in differences exhibited by other cultures. Human beings everywhere nurture a sense of possessing several partial and overlapping identities while relativizing each in recognition that their primary allegiance is to the human species. Cultural communities plunge creatively into their roots and find therein new ways of being modern and of contributing, out of their cultural patrimony, precious values to the universal human culture presently in gestation.

3.3 Cultural policy actions should aim at making possible and desirable approximations to the optimistic scenario more likely to result than the pessimistic scenario. Education efforts and policy measures in numerous spheres - linguistic strategy, the teaching of history, literary appreciation, the promotion of arts, rules governing courts, etc. - must be identified and adopted with a view to strengthening the forces of cultural affirmation while countering the standardizing forces described above.

IV. POLICY DIRECTIONS

4.1 Cultural contacts and exchanges should proceed according to a fusion model of interaction. Fusion models of cultural interaction are opposed to two contrasting extremes: violent conquest or assimilation of one culture, and passive surrender of weaker cultures to stronger ones. Fusion in cross-cultural encounters (e.g. the meeting of traditional wisdoms with scientific rationality) presupposes mutual acculturation. The key to success is the elimination of all triumphalism and the acceptance of reciprocity. This approach has vast implications at two levels: the epistemological stance adopted in trans-cultural dialogue and practice, and rules governing practical decision-making. In short, partners to cultural exchanges must come together as equals having a common purpose.

4.2 Accordingly, pluralistic development strategies are called for, domestically within nations and in international arenas. Economic growth IS a legitimate development objective;

so are distributional equity, the guaranteed institutionalization of human rights, the pursuit of ecological wisdom, and the active fostering of authentic cultural diversity. This is why, in all societies, planned policies, programmes, and projects must negotiate some optimal mix of these diverse (and sometimes conflicting) development objectives, no single one of which can be absolutized or permitted to exercise reductionist authority over the others.

4.3 A new model of decision-making is required, one which integrates, by joint negotiation, three distinct rationalities: the technical, the political, and the ethical. Each of these three rationalities obeys its own proper logic, poses its own goals, and adopts a preferred *modus operandi*. Problems arise (resulting in flawed decisions) because each tends to reduce the other two to its preferred vision of ends and procedures. This it does in vertical fashion. Such vertical triumphalism ought to give way to circular co-negotiation in a new pattern of decision-making.

V. CONCLUSION

A humane future for culture and development is possible. It is possible, however, only if present powerful trends are vigorously combatted and reversed, and if appropriate creative and corrective policies are successfully adopted.

CULTURE AND DEVELOPMENT : CULTURAL IDENTITY IN A MULTICULTURAL SOCIETY

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I. Cultural Development

The basis of development is culture, hence development is always part of a specific cultural, socio-economic and natural context. Differentiated priorities are established on the basis of the culture and the historical processes, according to which people live, behave, make choices and decisions. Hence, development always has its roots in a specific culture, which cannot be disregarded. The relationship between the various types of development, based on differentiated cultural foundations, with differentiated priorities, is what the present (and indeed the future) crisis is all about. It is only by understanding the current global crisis at this level that there may be some chance of solving it.

In turn, cultural development cannot be discussed alone, but must be seen in its overall context. This is also true at the level of understanding the limits, changes or non changes in culture, which may occur for reasons of continuity or changing needs.

It is extremely important to recognize that the cultural aspect is a crucial part of development which is not only economic or technological.

When China moved from a subsistence economy to a profit-oriented one, this was not simply an economic move, or the result of a decision, based on a political choice, but a cultural change of great relevance, ensuing from an understanding of a world process. Whether this move could be absorbed, or not absorbed, was another matter.

Culture, in fact, dictates choices, actions and negotiations and, as such, may develop in a process of change, whether complete or not. Some basic elements may indeed remain: for example, the individualistic European drive, which is still present even in the very recent events in Eastern Europe and in profit-oriented Western Europe. Japan's community drive continues to be part of the economic, profit-oriented society, even though a cultural characteristic. Islamic solidarity is part of Indonesia's profit-oriented economy, as a basic cultural character.

II. Cultural identity

Where cultural identity starts and finishes is a basic issue. What is the limit beyond which a culture changes? What elements are important for a culture to survive, and what elements are less important, meaning that if they were lost, the culture would remain the same?

In a changing society of increasingly rapid communication, in which the impact of science and technology is becoming increasingly strong and less controllable by principles, this is a crucial issue which will indicate where to admit and where to stop cultural change (an ethical issue).

The next important issue is what kind of process takes place when different cultures come together. To what degree is the new culture accepted by the carriers of the existing culture? To what degree can they maintain their own culture or accept the new one? To what extent can a culture be imposed, or possibly exploited for political or economic reasons, through the imposition of values, the development of behaviours or even through imposed actions?

For example, was the consumer society, which has been so much part of Western society for the last forty years, accepted by China simply to sell more, or was it accepted in the desire to become a part of global society, despite the fact that Chinese society is based on a very different culture in which frugality and respect for the aged is far more important than profit?

Finally, in the context of the debate on where cultural identity starts and where it ends, what are the time dimensions of cultural change? A preliminary answer is that cultural changes require much more time than technological or economic change. The former may take a generation, the latter from a few days (the Stock Exchange) to a few years (changes in computer generations). How long does it take for a culture to change in its most basic elements, which are not related to clothing and eating etc., but to birth, love and death?

III. The Multicultural Society

The third part of this brief essay deals with emerging multicultural societies, on which we currently have more information than we do on the issues mentioned above. The data we have are quantitative and qualitative. The issues raised in this context may possibly be fewer, but no less important than the previous ones.

While the melting pot concept has been considered useful in past decades, in the long term the different cultural roots inevitably reemerge in the effort to find a cultural identity. This is the case of the Italian communities in the USA and Canada, which have retained some family values through one or two generations, as empirical research has shown. The same can be said of the Irish or North European communities which still maintain their traditions in different states of the USA.

As cultures which are very different come into contact (for example, the Hispanic cultures in the USA or Canada in recent decades), family and religious values emerge in their differences in search of identity, thus influencing behaviour and actions, and hence politics and economics. The same kind of dynamics can be detected in Australia, where Indonesian migrants bring with them their Hindu or Islamic values, or in West Germany, where Turkish immigrants bring their own family and religious values.

Indeed, Europe is at present moving very rapidly towards a multicultural society in which, as recent events show, different religions have great difficulty in blending and even coexisting. A series of multicultural societies will emerge from the vast migrations produced by a changing population world structure: a small, old population in the North and a large, young population in the South, the former needing workers, the latter needing work. What are the consequences for both parts of the world? What reactions will the receivers and the received have now and in the future? How should we all prepare for this trend which is already under way? How can we avoid conflicts and enhance coexistence?

A similar issue, though with different elements, can be foreseen as a result of the opening between Western and Eastern Europe. The creation of a "Common Home" of people who have been living in different cultures, with different systems of values and of behaviour for one or two generations, will not be as easy as political and economic negotiations.

Another important issue is the rôle of women in the continuity and change of culture. Could they be considered, as in the Arabic saying, as those who move at a slower pace and set the pace for others? This is a question which shows its basis in empirical terms: technological changes indeed precede behavioural changes at the cultural level. This is the case, for example, in the family in developing countries.

Conclusions

The indication which emerges from such a rapid analysis is one of a difference in the pace of change of technological and economic changes on the one hand, and of cultural changes on the other. For UNESCO, this implies very different strategic indications in its fields of competence. The following may be considered:

- an analysis of emerging multicultural societies at the regional level, maybe starting with Europe, at present undergoing rapid change
- a description of the possible outcomes as alternative scenarios emerging from an analysis of negotiations, conflicts, coexistences, forms of integration
- possible strategies for UNESCO in the fields of education and communication.

THE FUTURE OF CULTURES

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Culture, the new buzz word of the 1990's, has many meanings. About thirty years ago Lifton, in a textbook of anthropology, listed roughly fifty definitions of the concept, and in the 1960's, when Clyde Kluckhohn and Henry Murray published a well-known collection of papers on culture and personality, their introduction dealt with more than twenty-five definitions of culture. Even though, over the years, the range of meanings might have declined, the idea of culture still connotes different things to different people.

The two meanings which have become central to the dominant, global consciousness are culture-as-an-artifact-or-consumable and culture-as-a-way-of-life. The first meaning sees culture as something which can be put on the stage, sold over shop counters (as antiques, artisanal skills, and other self-expressive works of art), museumized, and even put in a reservation for tourists to see and applaud. I am not here dealing with a related and now slightly old-fashioned meaning of culture, in which "culture" is an indicator of higher social status.

The second meaning sees culture as something which anthropologists study. It connotes a way of life not fully congruent with modern institutions (if it were fully congruent, it would become an object of study for sociologists, not anthropologists). So, for the sake of development or modernization or progress, culture must be evaluated, its retrogressive elements excised, and its progressive elements retained or nurtured.

There is a third meaning of culture which is only now emerging as a significant force in the global order and which can be seen only at the edges of the dominant global consciousness. According to this meaning, culture is a form of resistance against modern institutions and processes which have become oppressive (for those who do not share the dominant global consciousness or are trying to break away from it).

No theory of human emancipation, secular or sacred, remains emancipatory for ever. Over the last fifty years we have seen how once-emancipatory theories of society have become new instruments of violence and oppression. This new meaning of culture represents a recognition that some of the major modern ideologies, which once looked so liberative to the "civilized world", have become justifications of new forms of dominance and exploitation. Among these institutions are the Enlightenment's concepts of science, progress (particularly development) and the nation state. The concept of culture as resistance provides the base

line of criticism for these new justifications for oppression in our times. It is a concept which recognizes that in the long run human ingenuity is perfectly capable of converting any means of social criticism into a new justification for domination.

It is this concept of culture as resistance which prompts me to propose a bifocal study which will concentrate: (1) on the contours of the present global consciousness, especially as it constitutes a new popular culture in the third world, and (2) on the attempts at cultural survival being made by communities in the backwaters of the civilized world while facing the loving embrace of modernity.

Under the first heading, we should concentrate on elements of mass culture which have created a new range of needs the world over. These needs are apparently non-substitutable (e.g. for much of the world, Coca Cola is substitutable only by Pepsi Cola and similar competing cola drinks; a world without cola drinks is no longer conceivable). Included under this heading could also be forms of entertainments ("universalist" substitutes for traditional theatre, dance forms, traditional music etc.) and even things like habit-forming drugs and new food habits.

Under the second heading, we could concentrate on scattered movements for the recovery of such traditional and new cultural forms which are re-emerging or are being created in response to movements for survival and resistance (e.g. songs composed by Raturi for the Chipko movement in India and the plays and songs composed as parts of the spontaneous resistance to the location of the missile testing site at Baliapal in Eastern India).

The future of culture, if we use the word "culture" in the singular, is bright indeed. The future of cultures, in the plural, is bleak. We are living in a world where cultural pluralism is acceptable and valid only when the cultures we have in mind can be viewed as exotic deviations from what we are accustomed to. Cultures, when they seek to live by categories alien to us, look like throw-backs to the past which must be resisted at all cost and observed only as subjects of scholarly study in ethnomuseology, ethnomusicology, the ethnic arts, etc. The ultimate question for those interested in the ongoing politics of cultures is: to what extent can the debate on culture cease to be a dialogue among the mere well-wishers of cultures and begin to grant adequate political space and democratic rights, not only to the subjects of domination but also to the categories and to the philosophy of life of those who live with and in the cultures being marginalized the world over.

CULTURE AND SCIENCE

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SUMMARY

In this paper, I briefly discuss culture and the predicament of Third World nations in the wake of modern science and technology. The dilemma is in two parts.(1) The products of modern science are already showing dangers which ought to be a note of caution to cultures now eager to develop in that direction. Yet, the utility and proven superiority of modern science over available alternatives carry irresistible attractions.(2) Developing nations seeking the way of science encounter major obstacles. One is that they are severely handicapped by inadequate material resources. More importantly, these cultures contain elements that are antithetical to the basic principles of science and therefore retard the evolution of a scientific tradition. As a solution, I propose a development model which, in the context and needs of Third World nations, integrates those cultural elements that are compatible with the basic principles of science. This mode is a departure from the mystical approach dominant in these cultures and yet a step behind the high sophistication of Western science and technology.

CULTURE AND SCIENCE

Broadly conceived, culture embraces the totality of a people's way of life, incorporating its social institutions, customs, moral values, religious beliefs, language, political practices and economic modes of production. These various cultural items are usually subsumed under a wider theoretical outlook referred to as the people's world-view. The intellectual structure of such an outlook varies according to the peculiar historical context in which people confront the challenges of survival posed by the environment in which they find themselves. It is, however, a historical fact that before the variations that now exist in cultural perceptions of the universe, every human society was once infested with metaphysical and mythological speculations, superstitious and religious generalizations about nature and natural processes. So it was with Europe before the scientific revolution that ushered in higher levels of theoretical generalizations, involving natural laws derived from empirical evidence.(1)

Today, the scientific revolution has reached maturity with greater emphasis on scientific methodology, experimentation and the accumulation of scientific facts, the application of which has led to the modern era of high technology. The evolution in Western science was accompanied by the growth of a corresponding outlook in which daily activities are conducted on beliefs based on empirical experience. Of course, Western history is only part

of the history of mankind. Several other human societies, Third World nations, particularly African cultures, have not been fully exposed to the way of science. To some extent, every culture has some form of science and technology, no matter how rudimentary. In fact, no human group can survive for any length of time if it does not operate on beliefs derived from evidence. Also, every human culture has an explanatory mode of creating order and regularity out of its confused world of commonsense. The difference is that some cultures apply the explanatory paradigms of science while others draw on the supernatural; the technology of some is theoretically based while others are not.(2) In comparison, therefore, we may say that unlike the scientific cultures of the Western world, most Third World nations are still dominated by non-scientific tendencies in which mystical speculations form the explanation of natural phenomena. It is against this bifurcation between a scientific culture and a non- scientific culture that we need to project the direction of future development of each culture.

First, it has to be considered that insofar as the explanation, prediction and control of nature are concerned, the superiority of science over alternative approaches is no longer an issue of debate. So also must we accept, unfortunately, the dangers of the products of modern science and technology. Already, the Western world is facing problems of global environmental pollution, waste management, the "greenhouse" effect and threat to the ozone layer, the proliferation of nuclear weapons, etc. The ugly sides of modern science ought to be a warning to Third World nations now eager to copy the Western pattern. Somehow, the cautionary signs appear to be ignored, presumably because of what these nations consider the overriding enhancement which modern science has brought by way of improving the quality of life. No doubt the attractions are too great to resist.

However, the will to acquire modern science and technology is greatly handicapped by a variety of forces. The increasing debt burden faced by Third World nations means that they will have to be preoccupied with the struggle for basic survival needs, food, clothing, shelter. Such a situation is not conducive to the takeoff of a scientific development of the Western type which requires the investment of huge resources. Material disadvantages aside, the application of modern science requires a corresponding intellectual milieu, the orientation of which is absent in most Third World nations. As in every pre- scientific culture, the mode of thought in these societies is still dominated by a mystical interpretation of nature and natural phenomena in which events are believed to be under the control of supernatural forces beyond human comprehension. Using the Nigerian example, F.M.A. Ukoli describes this intellectual mode as follows:

The Nigerian in the traditional society admits of a certain helplessness before nature. He is incapable of, or is reluctant to subject such occurrences as ill-fortune in business, crop failure, ravages of diseases, death ..., to rational thought. Rather, he "emotionalizes and spiritualizes" them, invoking the powers of witchcraft or juju as explanation. Clearly, the cosmology of the average Nigerian is antithetical to the scientific culture of the Western world.(3)

This supernatural mode pervades even modern activities such as sports, examinations, the quest for promotion at work, matters of illness, infertility, soldiers seeking immunity against bullets, corrupt politicians wanting to escape justice, etc., where rational explanations easily offer themselves. With supernatural forces at the forefront, such a world-view discourages all speculations of a rational character. The scientific outlook, on the other hand, is marked by intellectual openness and a critical attitude in the search for an explanation in terms of the observable forces of nature. The scientific spirit is, therefore, not dogmatic because it places a high premium on the possibility of alternative explanations.

The dogmatic character of Third World patterns of thought apart, their world-view contains certain features that impede the practice of modern science. Modern science, for instance, is characterized by exactitude and precision, which is why the various branches are called the exact sciences. This quality of exactitude in measurement and specificity in numerical count is lacking in these cultures. Measurements, whether of weight, volume, time, etc. are given only in the vaguest approximations. In the Nigerian culture, for instance, it is taboo to count members of the family and this belief has great implications for such necessities as census counts. Although John Mbiti is wrong in claiming that the concept of time in Africa is "a two-dimensional phenomenon with a long **past**, a **present** and virtually no **future**"(4), he is near the truth about the absence of exactness in the African conception of time.

A related point which appears to impede the growth of a scientific attitude is the contrast in Africa which, according to Robin Horton, stands against C.P. Snow's dictum that "all scientists have the future in their bones". According to Horton, the outlook of the future is always better than the past in a scientific society, whereas in a non-scientific culture the past tends to be seen as better than whatever the future can offer. As a result, such cultures try to annul the passage of time against the spirit of science as a forward-looking enterprise.(5)

Although certain elements of the supernatural world-view are logically compatible with scientific principles, some of them are so mutually exclusive that they cannot be held jointly without absurdity. Again, the consequences are a great impediment to the growth of modern scientific practice in Third World cultures. The most obvious instances are in the African conception of health and disease. The African admits the physical causes of illness. Yet, he also believes in supernatural causes of the same affliction. As a cure, he adopts a dual approach of applying drugs whose pharmacological efficacy he believes in, while simultaneously appealing to supernatural forces. Although I have elsewhere (6) argued for the compatibility of these two levels of "causal" explanations, the intellectual climate produced by their combination is not conducive to the growth of modern science.

The approach adopted by Third World cultures in their attempt to appropriate Western science has tended to ignore the above constraints, and the results have been disastrous. In the face of financial constraints, most countries have, in E.B. Castle's words, tried to "run through the industrial revolution in double-quick time" by grafting imported science and technology onto settings with no appropriate knowledge and without the corresponding spirit. Most of these borrowed patterns of Western science and technology are being abandoned as

uncompleted projects. High technology is expensive and in their current situations most Third World nations cannot afford it, nor does it constitute a priority. For instance, in a society where millions of people are dying of preventable parasitic diseases such as malaria, guineaworm, schistosomiasis, etc. which call for the provision of clean, transportable water, it makes no sense to invest in research on the development of organ implants or transplants now in vogue in Western medical practice. E.F. Schumacher has long suggested intermediate technology for most Third World nations.(7) It is not merely a preferable option; it is what these cultures can afford.

Of course, going small does not provide a solution to the antithesis between the world-views of Third World cultures and the principles of science. After all, the rudimentary principles of science are the same, whether in its earlier form or at its present level of sophistication. Yet, these principles cannot be borrowed in isolation of the scientific outlook that is an integral part. Third World nations must, therefore, embark on a long-term process of integrating science into their cultures. On the theoretical plane, the apparent contradictions that exist between the supernatural approach and the scientific method can be resolved by discarding those elements that fail to stand up to the empirical test. Or, like modern science and Western religion, they can be held side by side with the understanding that they perform different explanatory rôles. The evolution of a scientific outlook is a major prerequisite without which Third World cultures cannot apply modern science successfully. For a scientific culture to grow, people must think scientifically, apply scientific paradigms and perceive nature as an object that is controllable by man, not as a controller of human destiny.

Notes and References

1. Lois N. Magner, *A History of the Life Sciences*, Marcel Dekker Inc., New York, 1979, pp. 91-136
2. Robin Horton, "African Traditional Thought and Western Science", in *Africa*, Vol. 37, 1967, Parts I & II, (pp. 50- 71 and 155-187)
3. F.M.A. Ukoli, "Sciencing: The Nigerian Scientists' Perspective", *Proceedings of the 26th Annual Conference of Science Teachers' Association of Nigeria*, 1985, p. 18
4. John Mbiti, *African Religions and Philosophy*, Heinemann, London, 1969, pp. 16-17
5. Robin Horton, Op. cit., pp. 176-177
6. "On a Socio-cultural Conception of Health and Disease in Africa", *AFRICA: Rivista trimestrale di studi e documentazione dell'Istituto Italo-Africano*, Vol. XLI, No. 3, pp. 390-404
7. *Small is Beautiful*, Abacus, London, 1974

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